Learning Goals and Outcomes in Psychology

Overview

Psychology at Carleton offers a systematic approach to the study of behavior and thought examining processes of physiological functioning, human and animal learning, human and animal cognition, cognitive and social development, personality, social influence, psychopathology and the interaction between physical and mental health. The program emphasizes the empirical foundations of the discipline. In concert with the national recommendations (American Psychologist, 2007), our major requirements expose students the breadth of the discipline through midlevel courses, while paving a pathway to greater depth of understanding and independent thinking through upper level courses and independent study. In addition, the program emphasizes communication skills (qualitative and quantitative, oral and written). A capstone captures the integrative structure of the major and developmental nature of student learning.

Areas of Knowledge

I. Students achieve a basic understanding of psychology as a discipline. To that end we
   A. Explain why psychology is a science.
   B. Compare and contrast the assumptions of psychology with other disciplines.
   C. Articulate how psychology contributes to other academic disciplines and more broadly informs society as a whole.

II. Students achieve a breadth of understanding across its various sub-fields identified by the American Psychological Association.
   A. Students become acquainted with
      1. Biological & Behavioral Processes
      2. Cognitive Studies
      3. Social Behavior, Development, & Mental Health
   B. Students gain an appreciation of the various approaches taken across the discipline and thus
      1. Discuss behavior in the contexts ranging from cellular to individual to group to wider culture.
      2. Relate the different sub-fields to identify complementary assumptions and approaches to investigation.
      3. Learn that a variety of approaches can lead to convergent evidence for theoretical conclusions.
C. Students are exposed to overarching themes in the discipline including
1. On-going debates about free will vs. determinism, subjective vs. objective perspectives, variability vs. consistency of response, mind and body, and cross cultural comparisons.
2. A review of the ethical concerns associated with the study and application of psychological principles.
3. Application of psychological principles to real world concerns.
   i. Convey an understanding of psychology’s contributions to global understandings and problem solving.
   ii. Provide students with guidance regarding the application of psychological principles to personal, interpersonal, and inter-group issues.

III. Students attain an in-depth appreciation of more advanced topics across several sub-disciplines as well as an understanding of the mechanisms used to advance psychological principles.

   A. Students acquire tools necessary to advance a scientific discipline and learn to
   1. Describe how theories attempt to explain and predict behavioral outcomes.
   2. Relate observable responses to mental processes.
   3. Consider how investigation distinguishes between competing theoretical positions.
   4. Describe the various research designs employed by psychologists.
   5. Evaluate the merits and issues associated with different research approaches.
   6. Cover the role of statistics in interpreting data.
   7. Perform laboratory studies to acquire an appreciation of the complexity and rigor required for successful research.

   B. Students obtain a more in-depth understanding of sub-disciplines by experiencing
   1. How the practice of research connects and contributes to conceptual understandings.
   2. A range of strategies, data collection, and analysis that link the outcome of investigation to content in a field.
   3. Detailed familiarity with issues currently examined in more specialized seminars.
   4. Independently investigating a specialized topic of interest within a sub-discipline.
Skills

Students acquire skills required to consider, critique, and contribute to the discipline.

I. Information literacy, statistical and computing proficiency. Students receive instruction on

A. Library and internet searches for relevant informative documents.

B. Reading and interpreting primary sources.

C. Evaluation of the appropriateness of sources.

D. Responsible and ethical use of source materials.

D. Appropriate and effective data analysis tools.

E. The variety of quantitative tools available to asses data. (Instructing students in the use of software tools as well).

II. Communication skills.

A. Written Skills. Students learn to
   1. Shape effective writing skills for both short argument and longer literature reviews.
   2. Understand the organization and rules associated with an APA style document.
   3. Explain proper rhetorical structure to frame a cohesive structure.
   4. Clarify the art of formulating scientific argument and its support through evidence.
   5. Emphasize the importance of clarity, precision, coherence, and brevity in putting forth scientific argument.
   6. Understand how to integrate scientific literature in composing a paper.
   7. Consider how to assess critically the source literature.
   8. Appreciate how to understand and formulate quantitative analysis in support of argument.

B. Oral communication skills. Students learn to
   1. Make concise, compelling, and informative presentations to an audience.
2. Understand how to incorporate visual aids effectively in a spoken presentation.
3. Consider how to make an effective poster or slide.
4. Communicate effectively in a collaborative (group) setting.
5. Focus on resolutions in collaborative settings.

Assessment of Learning Outcomes (across the Current Curriculum)

I. We administer a senior survey annually, which informs our decisions regarding curriculum and organization of the major. It also measures our success in such items as capstone experiences, student skill acquisition, confidence in communication and independent thinking, etc.

II. We consider curriculum adjustments to reflect student interests and in response to evolving changes in our discipline. Thus, we periodically review programmatic changes at comparable institutions.

III. In introduction and mid-level courses students are assessed through frequent examination and writing assignments.

IV. As students advance in the major, skills and requirements increase. Thus, in more advanced courses independent literature searches are more frequently required, and students are given more responsibility to organize and lead class discussions.

V. We assess student lab skills in mid-level courses beginning with 200 level courses.

VI. A key course in the curriculum is the methods and statistics course, which is required of all majors. Frequent exams are administered and applications are explored.

VII. As students progress to higher-level courses communication skills are broadened and evaluated. In more advanced courses, students must demonstrate oral as well as writing skills. Many of the lab courses, for example, require poster presentations at the end of the term. Seminar courses typically require multiple student-led discussions.

VIII. About half of our students chose to complete “comps” (the comprehensive exercise) projects that require an extensive library search, exclusively, or a literature review in combination with a fully developed and executed research design. Faculty supervisors are frequently meeting with such students as they refine their literature reviews and/or their research design, execution and data analysis.
IX. Following completion of the project, two department members assess the whether the project (paper) is passing.

X. Other students choose a shorter paper and national comprehensive exam option. Two faculty members evaluate these short papers for passing as well. Students must score at a reasonable level to pass the comprehensive exam.

XI. In cases, where at least one faculty member in each assessment team finds a comps paper (short or long) to be particularly meritorious the paper is passed along to a panel composed of external reviewers from psychology departments at other institutions. This panel of three psychology faculty members independently assesses the merit of each selected paper, and by vote designates a paper as meritorious or not. Those papers deemed meritorious by the panel are awarded “distinction.” In addition, the panel supplies the faculty with a detailed analysis of their impressions, which informs the mentoring process.

XII. In addition, periodically the department examines the record of student acceptance to graduate school, participation in competitive internships, attainment of rewards and prizes, and authorship or co-authorship on published papers and convention presentations.