Psychology Mission and Goals

From the Psychology Department webpage:

The aim of the Psychology Department is to provide students with an understanding of human behavior that will support their ability to participate as informed members of our society, to help others, and to add to scientific knowledge.

One path to this goal involves mastery of the theoretical concepts psychologists use in describing and understanding behavior; the other involves competence in the use of the scientific methodologies employed in the study of behavior. We emphasize the importance of both concepts and methods across diverse topic areas within psychology, including biological, cognitive, social, and personality.

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From the description above, there are 3 general goals for student learning.

Goal 1: Students will gain a broad understanding of human behavior, from a variety of perspectives.

Strategies for achieving this goal:
A) A common introductory Psychology course that all majors and minors take covers a broad range of perspectives within the discipline. All faculty members in the department teach a section of the course—each member (representing a distinct specialty within the field) contributes a set of readings and concepts to be covered in the class.
B) A breadth requirement in the curriculum requires one course from each of three areas: Biological, Cognitive, Complex Human Behavior

Goal 2: Students will learn to treat questions and claims about behavior rigorously, with an empirical approach.

Strategies for achieving this goal:
A) A required research methods and statistics course, with lab
B) Two additional laboratory methods courses

Goal 3: Students will master the skills to contribute new knowledge in the field

Strategies for achieving this goal:
A) General research training described above
B) Senior capstone experience—two-semester empirical research project, which involves developing an original empirical question, designing a study to address the question, presenting the study and its results on two occasions, collecting data, analyzing data, writing a major thesis.

Assessment Project

Project #1: Assessment of preparedness for senior research experience

Goals and Objectives:

We will focus our assessment efforts on our third learning goal, described above. Our investigation will assess the extent to which our pre-senior laboratory curriculum adequately prepares students for senior research.

All Psychology majors must complete a set of three research courses prior to embarking on the senior thesis. These include Psychology 200: Experimental Methods and Statistics (or its equivalent at Bryn Mawr, Psychology 205), plus two specialized laboratory courses, each taken concurrently with its 200-level topic course.

Psychology 200 is required of all majors, and it must be taken prior to completion of the specialized lab courses described below. Most students take this course during their sophomore or junior years. The course has a required weekly laboratory section, during which students implement the statistical techniques that they learn in class. The laboratory sections also involve study design, and original data collection using both survey instruments and experimental manipulations. This course is intended to prepare students for the area-specific lab courses, ½ credit courses that are taken concurrently with the topic course with which it is associated.

Presently, the curriculum includes 7 such courses, 3 of which are typically offered in a given year:

- Psychology 313: Laboratory in Memory and Cognition
- Psychology 315: Laboratory in Personality Psychology
- Psychology 317: Laboratory in Biological Psychology
- Psychology 320: Laboratory in the Psychology of Time
- Psychology 324: Laboratory in Social Psychology
- Psychology 341: Laboratory in Pain and Pain Inhibition
- Psychology 360: Laboratory in Cognitive Neuroscience

Each course requires students to develop an original research project that is carried out over the course of the semester, perform the data analysis, and write a research paper describing the study and its results. The specific technical skills acquired, and the nature of the study designed (e.g., correlational or experimental), depend entirely on the specific courses that are available over a given 2-3 year period. For those students that are unable to enroll in a lab course prior to the senior year, we also allow students to complete one of their lab credits by working on an
independent study research project with a faculty member. The student must meet weekly with the faculty member and perform all of the same assignments as a student taking a regular laboratory course.

Students with interest in carrying out senior research in a particular area are advised to take the specific lab course in that area. However, this is not always practical, due to leave patterns, study abroad plans, and enrollment pressures. Students rarely have freedom of choice over which particular lab courses they take to satisfy major requirements. Furthermore, although we strongly recommend that students satisfy their lab course requirements by the senior year, occasionally, seniors enroll in a lab course while completing their senior research. The effects of such enrollment patterns on the overall preparation for the senior thesis should be examined.

In sum, the learning objectives of the pre-senior laboratory curriculum:

- Students will be able to:
  - Identify a novel research question that arises from the primary literature.
  - Design a coherent experimental study, with clearly operationalized independent and dependent variables, and appropriate experimental controls.
  - Create a survey instrument with reliable items.
  - Write a proposal for IRB (or IACUC) approval, demonstrating attention to the ethical principles of research involving humans (or animals).
  - Determine the appropriate data analysis technique for a given study design.
  - Analyze data using SPSS, and create graphical representations of results.
  - Produce a write-up of a research study, in APA style, with appropriate components (abstract, introduction, methods, results, discussion).

Assessment

The quality of the senior thesis project itself is considered a primary assessment of how well our students have mastered the learning objectives described above. Given our current evaluative structures, this project includes two key assessment components.

Direct Assessment: Diagnostic Assessment Connected to Student Learning Objectives

Although the Psychology Department maintains a rubric for assigning senior thesis grades, this is an imperfect direct measure of student learning (since they are intimately tied to students’ proficiency as a writer in general and not directly to the learning objectives stated above). A separate diagnostic assessment has been designed, and administered during the Fall semester of the senior year. We will begin to implement this project in Fall 2010. This assessment will critically examine students’ learning and retention of research design and analysis issues. Some critical examination questions from past Psychology 200 tests appear on this assessment, plus a set of questions that are used to practice for the comprehensive Psych GRE have been adapted. Students are presented with scenarios in which they have to design a study to answer a specific research question, designate an appropriate data analysis tool, and comprehend the results
section of hypothetical research study. The items in the diagnostic assessment directly reflect stated learning objectives.

Institutional Support Needed: This project must be implemented by the faculty themselves, most likely guided by the Department Chair (with consultation of all members of the department in design of the assessment). Certainly the administrative assistants will be called upon for certain aspects of the implementation (such as web posting, if an online assessment is used, or photocopying if it is given in paper form). The administration must consider whether activities of this sort are to be expected as part of the faculty member’s regular duties. If so, the Professional Activities Form should be modified to allow for reporting of such activities. If the burden falls primarily on the chair, then this should be reflected in the existing proposals for chair duties and compensation.

Indirect Assessment: Enrollment History and Student Performance Analysis

In addition to the diagnostic assessment we will provide to gauge student learning, we wish to use the assessment above to delve deeper in examining specifically, the following questions:

- Are students adequately prepared for independent research if they have completed Psychology 200 and both lab courses prior to the senior year?
- Does the particular set of courses that students take make a difference in preparation for the thesis in a particular area?
- Does the timing of the courses taken matter? Does completing the labs too early leave students unprepared for senior work? Are students with labs left to complete during the senior year at a disadvantage for senior work?
- Is the independent study format for the thesis an appropriate substitute for one lab course?

We will examine the pattern of lab course enrollment since 2006 (the first year when all of the current lab courses were in existence), the grades that students received in these courses, and students’ subsequent performance on the senior thesis. Our grading rubric for the senior project is attached for reference. Of particular interest is whether students that enrolled in the lab course in the area of study of their senior thesis perform better on the senior thesis than those that take unrelated courses.

We can also examine senior thesis grades among students that took independent study credit as preparation, and those that took their laboratory courses at different times during their academic careers.

Institutional Support Needed: Registrar must provide access to enrollment and grading data. Administrative assistance needed to track and compile data and format it for statistical analysis. Must consult with faculty members to ensure accuracy of data obtained.

Linking Assessment to Planning
Analysis of this evidence will be used in departmental discussions and curricular planning. We may decide to hold “data analysis workshops” or other kinds of refresher training for students during the Fall semester of senior year if we determine that students’ skills are somewhat rusty. The results of our examination may also lead to policy changes regarding the number and type of laboratory courses we require, the timing of such offerings, and our priorities for the lotteries in our courses.

Project #2: Comprehensive impact of the curriculum on student outcomes:

Goals and Objectives:

Evaluate student choices in post-graduate life in relation to one component of the department’s mission, particularly the ability of graduates to add to scientific knowledge and to help others. This includes the development of the interest, disciplinary skills of thought, and mastery of research techniques valuable in a variety of post-graduate settings.

Student will be able to:
- Enter and complete doctoral programs in psychology
- Contribute to the field of Psychology through their life’s work

Direct Measures:
- Collection and tracking of alumni PhD data, placed in a comparative context where possible through NSF Baccalaureate Origins data.
- Study of citations within the psychology literature.

Indirect Measures:

Indeed, for many students that do not continue as scholars of human behavior, the curriculum (and in particular, the senior research project) can have a powerful impact on students’ lives post-graduation. One alumnus, from the class of 2007, recently reported in an e-mail correspondence with her thesis advisor:

"...I want you to know that working on my thesis with you was the best learning experience of my college career. It may seem silly to say this, but you taught me how to think -- how to develop and take ownership of an idea and see it through. I still feel that sense of accomplishment to this day -- you would be amazed to see how often I am able to sneak bits of my thesis and personality psychology into conversations these days! (Last Spring, I even taught an entire staff meeting about Maslow's Hierarchy of Need!). Learning from, and with, you has truly shaped by sense of self and my understanding of those around me..."
We seek to obtain further indirect measures of the impact of the Psychology curriculum in general, and the senior research experience, in particular, from a large set of Haverford Psychology alumni.

- In-house tracking of alumni career activity via surveys and/or focus groups which ask alumni how their plans and goals following graduation were informed by their experience as majors (individual curricular components—mastery of theoretical concepts, competence in the use of scientific methodologies employed in the study of behavior, writing and presentation within the discipline; interactions with faculty; co-curricular experiences).

Linking Assessment to Planning: Analysis of these results will be used in departmental discussions and curricular planning.

_Institutional Support Needed:_ Department assistants would play an important role in helping us track our alumni, by gathering contact information from students before graduation, maintaining databases and sending outreach emails to students periodically to track their movement and employment history. They also would maintain a departmental presence on online social networking sites, like Facebook and LinkedIn.
Psychology Department Senior Thesis Grading Rubric

In grading the first semester paper, the following scale applies:

- **4.0** work for the first semester indicates a paper that has gone above and beyond a summary of the relevant literature in terms of scope, synthesis and integration. In addition to reflecting a nearly flawless paper that provides a coherent rationale for the experiment to be undertaken, this grade can also represent exceptional or original independent contributions, or individual effort that has gone beyond what is normally expected. A grade of 4.0 is not commonly awarded during the first semester.

- **3.7** work for the first semester indicates an extremely thorough, coherently organized, and generally well-written summary of the literature that identifies all of the seminal work that has led up to the current study. In addition, this grade reflects that the rationale for the current study is abundantly clear and the procedures to be used are well-described. There may be improvements that can be made to this paper, but there are no major areas of deficiency.

- A grade of **3.3** for the first semester reflects a good to very good paper that needs improvement in one or more areas. The literature review may need to be more thorough, or the literature better summarized or integrated. The writing may be choppy or difficult to follow in some areas. There may be conceptual gaps that lead to an incomplete rationale for the study to be undertaken.

- **3.0** work for the first semester indicates that although the paper is good, there are several areas in which improvement can be made. For example, the literature review may have been too scant or poorly integrated. That is, the paper may have included summaries of appropriate studies without integrating how those studies support an important point or how they relate to the study that you are undertaking. The literature review may not have been thorough enough or may have relied too heavily on non-primary sources. In general, the reader may have had a difficult time understanding how the literature review culminates in the problem to be addressed in the current study.

- A grade less than **3.0** for the first semester work indicates that the paper is deficient in terms of our expectations for thesis-caliber work.

In grading the second semester paper, we evaluate the extent to which your paper has improved and addressed any problems identified in your first semester thesis, as well as evaluating the scholarship of the Results and Discussion sections.