

September 2003

THE PSYCHOLOGY MAJOR AT YALE

A

SURVIVAL GUIDE

FOR

UNDERGRADUATES

**Department of Psychology
Kirtland Hall, Room 109
Hillhouse Avenue**

INTRODUCTION

This document is intended as a source of information, supplementary to the Yale College Programs of Study, about the undergraduate major in Psychology at Yale. It provides information on: (a) number and types of courses offered; (b) requirements of the major; (c) suggested course sequences; and (d) faculty interests. The pamphlet was originally assembled by the Director of Undergraduate Studies (DUS) in conjunction with the Student-Faculty Curriculum Committee on the Psychology Major. QUESTIONS OR SUGGESTIONS ABOUT THE MAJOR SHOULD BE ADDRESSED TO THE DUS, Woo-kyoung Ahn, BY EMAIL AT PsychDUS@yale.edu.

THE ADVISING SYSTEM

Effective Fall, 2001, the Psychology Department started a new system for advising, with the goal of establishing more contact between students and faculty. All psychology majors have been assigned a faculty advisor. (This is different from the "advisor" for your senior project, who may or may not be the same person). You should contact your faculty advisor at the start of the semester, and discuss with him or her your schedule and your future plans and goals. Your faculty advisor signs your schedule -- you do not need to get a signature from the DUS.

If you are a psychology major and do not have an advisor, you should contact the Psychology registrar, Laretta Olivi (laretta.olivi@yale.edu).

You should consult the DUS, Woo-kyoung Ahn, for any situation that cannot be handled through your faculty advisor. This includes if you wish to change your faculty advisor, and if you wish to get credit for courses taken outside of Yale, or if you need advice for any exceptional circumstance."

TYPES OF COURSES OFFERED

The Psychology Department offers the following eight kinds of courses:

(a) Introductory Psychology (110a or 110b). This is a one-term prerequisite for most other courses in the department. It is normally offered in large lecture format.

(b) General Survey courses which do not require prior completion of Psychology 110, or are ordinarily required for other courses in the department. These courses, numbered 121-149, are intended not only for psychology majors but non-majors as well, therefore they are quite general and frequently emphasize the relevance of psychology to other disciplines.

(c) Survey courses intended for students wishing to elaborate upon contents covered more briefly in Psychology 110. These courses, numbered 140-199, provide additional background for the more advanced courses in the department. They are often taken in the sophomore and junior years.

(d) Statistics and methodology courses. Psychology 200a, or Psychology 201a/Statistics 104a, or the equivalent, is required for the major.

(e) Courses involving the collection and analysis of data. These courses, numbered 210-299, are organized around specific content areas but, in addition, they emphasize training in laboratory methods and offer an opportunity for original research.

(f) Advanced lecture courses, numbered 300-399, which can have other courses beyond Psychology 110 as prerequisites.

(g) Senior seminars (numbered 400-489). Limited in enrollment, these seminars give priority to interested seniors majoring in Psychology.

(h) Individual tutorials (numbered 490-493). These tutorials may involve either original empirical research or other advanced individual study, such as library research. Permission to take tutorials involves the completion of a special form on which the advisor's signature appears. This form must be completed and signed prior to final registration for the term in which the tutorial is to be taken. Forms are available in the wall pockets *outside K 109*. Because of the greater flexibility of these courses in the type of work required and the schedule of meetings with the advisor, it is important for the student to develop a clear understanding with the advisor regarding the time table and content of the course.

REQUIREMENTS OF THE STANDARD MAJOR

The major in Psychology is fulfilled by the completion of 12 term courses beyond Psychology 110a or 110b, as well as a Senior Project. Those 12 courses must be chosen within the following constraints:

(a) To ensure some breadth of familiarity with psychology generally, every student is required to take at least two courses from the social science point of view in psychology (List A) and at least two from the natural science point of view (List B). For lists, see *Yale College Programs of Study*. Students are expected to take at least one course for each list as early as possible, normally within two terms after declaring the major.

(b) Because statistical techniques and the mode of reasoning they employ are fundamental in psychology, a course in statistics (Psychology 200a, Psychology 201a/Statistics 104a, or the equivalent) is required, preferably prior to the Senior year. A student may substitute an examination arranged with the instructor of Psychology 200a for this requirement.

(c) To assure some direct experience in collecting and analyzing data, the student must elect at least one course, preferably prior to the Senior year, in which research is planned and carried out. Courses numbered between 210 and 299 fulfill this requirement. (The same course may satisfy both this and the first requirement.)

(d) To encourage a consideration of the relationship between psychology and other disciplines, as many as three term courses in other departments that are relevant to psychology (including College Seminars) may be counted toward the completion of the Psychology major. That is, only nine of the twelve courses fulfilling the major need be taken within the Psychology department itself. Relevant courses may be found in most other social science and biology departments; however, not all courses in those departments may be relevant to the Psychology major and selected courses in humanities and other natural science departments may also qualify. Students are advised to consult with the DUS about which courses are eligible, when composing their course schedules.

(e) Students are encouraged, but not required, to take at least one seminar in the 400 series.

(f) Students interested in pursuing independent research with a faculty member should consider enrolling in a tutorial (490-493).

SENIOR PROJECT IN PSYCHOLOGY

GENERAL PURPOSE. All psychology majors must complete a Senior Project in their final year at Yale. The intention of this project is to allow students to broaden their understanding of psychology beyond that acquired in individual courses. For some students this broadening takes the form of integrating disparate bits of information gained from individual courses. For others it involves deeper study of a topic of individual interest not fully developed in existing courses. Often this means the collection of original data. But whatever its particular form, the Senior Project is an opportunity for students to work relatively independently and in an advanced manner, on a topic of special interest to them. It is the department's hope that students will find this a rewarding experience which can cap their work in psychology and indeed at Yale generally.

STUDENT RESPONSIBILITIES. Students are encouraged to maximize the educational rewards of the senior project by beginning to think about topics for the Senior Project well in advance of the senior year. They are required to announce to the department their intentions by the end of October of the senior year. In planning their projects, students may find the following guidelines useful: (a) Students commit different amounts of time to the Senior Project, but seniors ordinarily make an effort comparable to that of at least a one term course. For this reason many students do their Senior Project in conjunction with an independent study course (Psychology 490a, 491b, 492a, and 493b) elected for one term. Of course some students wish to make a greater effort and spend a full year working on their project. (Others make a smaller effort, expanding work already done in conjunction with a course or seminar. The department leaves this range of efforts open as options to students with different interests; (b) About half the Senior Projects in psychology involve the collection of original data and about half involve scholarly efforts of other sorts;

(c) The topic of the project is left to the individual student, but is best formalized after consultation with the faculty advisor. Students are especially encouraged to seek faculty advice early in the development of their projects; faculty members expect students to begin their discussion with less than completely formalized ideas about their projects; (d) **Completed Senior Projects are due in Kirtland Hall, Room 109 one week before the final day of classes in the Spring term.** The student should submit the completed project signed by his or her senior project advisor. The copy should be without comment. Subsequently, a second reader will be appointed by the department and will consult with the primary advisor about a final grade; (e) Students are encouraged to discuss with their advisor the Angier Prize, awarded to the best senior project on a psychological topic or the Crowder Award, awarded to the student who has completed an especially novel research project during his or her college years and who contributed to the quality of undergraduate life in the Department of Psychology through his or her generosity, service, and/or willingness to share learning and knowledge with other students." Each advisor may nominate no more than one project for each award.

CHOOSING AN ADVISOR FOR YOUR SENIOR PROJECT. The main eligibility criteria for advising senior projects and tutorial work in psychology should be (1) that the advisor is a psychologist and (2) that the advisor is qualified in the subject matter and methodology undertaken by the student. Both points seem too obvious for words, but note the following: Occasionally, members of other departments whose disciplines overlap with psychology, may be eligible as advisors. A student should, in the case of such a potential advisor, obtain, *in advance*, the approval of the DUS. Agreement on a topic is not only a matter of shopping for an advisor whose interests match a student's agenda. The student may also need to compromise or adjust an original interest in order to make it conform to what psychologists here, as broadly defined, are prepared to undertake.

Within these objectives the following priorities should influence selection of an advisor:

1. Full-or part-time members of the Psychology Department faculty are by far the most suitable advisors.
2. Faculty members from related departments (Molecular, Cellular and Developmental Biology, Ecology and Evolutionary Biology, Sociology, Linguistics, among several others) can be equally suitable for some topics, provided they are willing to take on the student and are familiar with Yale College procedures.
3. Psychology graduate students who have been advanced to candidacy for the Ph.D. are eligible, provided the graduate student's supervisor countersigns, in advance, the Senior Project Form initiating the activity. The graduate student and the student's faculty supervisor, together, will serve as the primary reader evaluating the completed project. As usual, a secondary reader will then be appointed from the department to act as an independent outside evaluator. The faculty supervisor would be expected to coordinate this process and inform the DUS of the outcome.

4. In individual cases, people outside these categories might make sense as advisors. Approval of such arrangements by the DUS, in advance of the activity, is important in these cases.

SAMPLE PROJECTS. Students are often puzzled by what topics might constitute an acceptable senior project. To give a feeling for some past projects, a few titles are listed below:

The effects of modality-specific inference on high and low imagery paired associate learning.

The deprivation-depression hypothesis.

Medical patient decision making: A preliminary investigation of the conflict model of decision making.

Is the psychology of women different from traditional psychology?

TYPICAL TIMETABLE FOR SENIOR PROJECT (*DUE APRIL 19, 2004*)

Spring Term of Junior Year: Consider potential topics and begin initial conversations with faculty members. This allows you to consider your general area of work and to begin some initial reading during the summer. Note: If you are interested in getting the maximum exposure to research, you may begin as early as your sophomore year.

September & October of Senior Year: Pick an advisor and work out specific project plans in discussion with that advisor. Before the last week in October, submit the Senior Project Form with a description of your intended project, and with your advisor's signature, to the K109. You can obtain the Senior Project Form from the Department Registrar in K109. Decide on a work schedule that fits your project and set up a schedule of regular meetings with your advisor. If your project involves research using human subjects, submit it for approval to the FAS Committee on Research with Human Subjects (Institutional Review Board). Your advisor will tell you how to do this.

Early Spring: Hand in several drafts of your project to your advisor during the semester and well before the departmental due date. Set a time for a meeting at which he or she will give you feedback on each draft.

THE *FINAL VERSION OF THE SENIOR PROJECT, APPROVED AND SIGNED BY YOUR ADVISOR, IS DUE ONE WEEK BEFORE THE LAST DAY OF CLASSES*, SPRING SEMESTER. DELIVER ONE SIGNED COPY TO K109.

The DUS will arrange for a second reader to evaluate the project, but you and the advisor may recommend a reader.

Funding for Senior Project

Most of the cost incurred in doing research for the senior project is absorbed by the faculty advisor, or by the student. The department also has a small fund for the purpose of assisting students in paying for incremental minor costs. Individual requests, approved and signed by the DUS, may be made through the registrar's office, K109.

SPECIALIZED TRACKS IN PSYCHOLOGY

The Psychology Department has organized several specialized tracks of study for interested subgroups of students. These entail requirements above those stipulated for the Standard Major. Such tracks are internal to department records and do not appear on Yale College transcripts.

BEHAVIORAL NEUROSCIENCE TRACK

Advisor: Karyn Frick, DL 210, 432-4673, karyn.frick@yale.edu

Students with a major interest in the neuroscientific aspects of psychology may wish to elect the behavioral neuroscience track. Such students are considered Psychology majors for whom the requirements have been modified to accommodate their interests, and to reflect the multidisciplinary nature of modern neuroscience.

Requirements for the behavioral neuroscience track are *the same as for the standard major, with the following exceptions:*

1. The student must take three introductory courses, Psychology 110a or b, MCDB 120a and E&EB 122b. Students eligible for placement in an advanced course in biology who have had an equivalent course may be exempted from MCDB 120a and E&EB122b at the discretion of the major advisor for the behavioral neuroscience track.

2. The student is expected to complete twelve term courses, including Psychology 170b and a data collection course, Psychology 240a or 270b. (MCDB 360a may substitute for the Psychology 170b requirement, or MCDB 360a and 361L may substitute for the 270b requirement, but not both.) At least six must be in the Psychology department, with at least two being from the Psychology List A. At least four courses must be chosen from the following: Ecology and Evolutionary Biology and Molecular, Cellular, and Developmental Biology department courses numbered 200 and above that deal with human and/or animal biology; Computer Science 477a; MB&B 300a, 301b, and 400a; Mathematics 222a or b, 225a or b, and 230; and Statistics 241a. In addition to these courses, others may be selected in consultation with the behavioral neuroscience track advisor. Students should note that many of these courses have prerequisites which must be taken first. Students are encouraged to take accompanying laboratories where they exist.

3. The faculty advisor for the senior project may be a faculty member in another related department. The appropriate courses for those wishing course credit are Psychology 490a and 491b, 492a and 493b, regardless of whether the faculty advisor is in Psychology or another department. Such independent study courses require prior permission of the faculty advisor and the major advisor for the behavioral neuroscience track. Students are encouraged to discuss their plans for the senior project with the behavioral neuroscience track advisor by the spring term of their junior year. Students interested in behavioral neuroscience should consult the listings of the neurobiology track offered by the Molecular, Cellular, and Developmental Biology department for an alternative method of satisfying these interests.

PHILOSOPHY TRACK

Advisor: Laurie Santos, DL 318, 432-4524, laurie.santos@yale.edu

Students with interests lying between philosophy and psychology may wish to elect the philosophy track. Those in this track are considered Psychology majors for whom the requirements have been modified to accommodate their interests in philosophy.

Requirements for the philosophy track are the same as for the standard major in Psychology except that seven of the courses required beyond Psychology 110a or b must be taken in the Psychology department and five in the Philosophy department. The advisor for the senior project may be chosen from either the Psychology or the Philosophy department. The student is advised to consider the following aims in selecting courses in philosophy: (1) to obtain a background through an introductory or historical course in philosophy; (2) to obtain breadth by taking at least one course in each major area defined in the description of the Philosophy major; (3) to include courses addressing problems especially pertinent to psychology.

Students with these interests are also urged to consult the description of the Psychology Track offered by the Philosophy department for an alternative method of satisfying their interests.

COMBINED MAJOR IN COMPUTER SCIENCE AND PSYCHOLOGY

Directors of Undergraduate Studies: James Aspnes (Computer Science), 401 AKW, 432-1246; james.aspnes@yale.edu; Woo-kyoung Ahn, PsychDUS@yale.edu, 310 SSS.

Computer Science and Psychology is an interdepartmental major designed for students interested in integrating work in these two fields. Each area provides tools and theories that can be applied to problems in the other area. Examples of this interaction include cognitive science, artificial intelligence, and neural modes of computation and biological perception.

The prerequisite for the major is Psychology 110a or b. Beyond the prerequisite, the major requires fourteen term courses as well as a senior project. Of the fourteen courses, eight must be in computer science: Computer Science 201a or b, 202a, 223b, 323a, 365b, and three advanced computer science courses in artificial intelligence or neural computing. Computer Science 480a may not be counted as one of these courses. In psychology, the major requires six courses, one of which must be Psychology 200a or Psychology 201a/Statistics 104a, with the other five including at least one from Psychology 210-299, at least two from List A in the *Yale College Programs of Study*, and at least one from courses especially relevant to the combined major (130a, 170b, 319a, 322b, 407a)

Senior requirement. The senior project must be approved by the Director of Undergraduate Studies of both departments. If taken for Directed Research/Reading/Special Projects course credit in Computer Science or Psychology, the senior project course is in addition to the fourteen required courses.

TYPICAL PROGRAMS

Students differ widely in their reasons for taking a Psychology Major. Some will look forward to graduate training within Psychology. But many intend either to take no further training or to enter a different professional school. The requirements of the major have been established to provide a reasonable grounding in Psychology in the context of a general liberal arts education for students with any of these goals. However, individual programs will vary, and it may be helpful to indicate a typical set of programs.

For most students Psychology 110 will be taken in either the Freshman or Sophomore year. For those students intending to major in Psychology it is recommended that Psychology 110 be completed in one of the first three terms of residence at Yale. That provides an opportunity for the student to take at least one General Survey course by the end of the Sophomore year. However, the major is flexible enough to permit students who take Psychology 110 as late as the first semester of the Junior year to become Psychology majors.

After completing one or two general survey courses, the student is best advised to complete the statistics and data collection requirements. These may be taken concurrently, most frequently in the Junior year, although they are often taken in the Sophomore year. These courses must be completed prior to the Senior year. Although the department requires only one data collection course, it is recommended that students take at least two such courses to provide a range of experiences. Students intending to go to Graduate School in any area of Psychology should take no fewer than two such courses.

Over the course of the Junior and Senior years students should expect to fill out their course requirements by taking specialized courses and seminars relevant to their interest. However, students are urged to attend to the breadth of their education within psychology and to avoid overspecializing.

Almost all students will take an individual tutorial course, normally in the Senior Year. These courses are typically taken in conjunction with the Senior project.

A typical schedule is indicated below:

Freshman Year

Psychology 110a or 110b
1 100 level lecture course

Sophomore Year

Statistics (Psyc. 200b or Psyc. 201a/Statistics 104a)
1 Data collection course
1 A-list and 1 B-list course

Junior Year

Data collection course
1 A-List and 1 B-list course
2 or more electives (at any level)

Senior Year

Second data collection course, if not already taken
Senior Project (may be in conjunction with Directed Tutorial work from among Psychology 490-493)
2 or more electives (at any level)

OTHER RELEVANT INFORMATION

STUDENT-FACULTY CURRICULUM ADVISORY COMMITTEE. Each year the department forms a committee of about 4 faculty members and 8 undergraduates who meet several times during the year to discuss matters pertaining to the undergraduate program in psychology. Nominations of the students for this committee take place at the beginning of the Fall term. This committee often brings suggestions for changes in the undergraduate program to the faculty of the psychology department for discussions and possible adoption.

OFFICE OF THE DUS.. The current DUS is Woo-kyoung Ahn and she can be reached by email at PsycDUS@yale.edu. Her office hours during 2003-2004 academic year are Tuesdays 3-5 and her office is located at SSS 319.

NEWSLETTER. The Psychology Department sends out a weekly e-newsletter to all people affiliated with the Department including declared majors. The function of this newsletter is to keep you posted on various events in the department as well as job or volunteer opportunities. Once the student has declared Psychology as a major s/he will receive electronic copies of the newsletter.

DEPARTMENT INFORMAL DISCUSSION GROUPS. Every major program in the Psychology department has an ongoing noon-time seminar which meets once a week. These meetings are primarily for graduate students and faculty members; however, advanced undergraduates are encouraged to attend the meetings when topics of special interest to them are being discussed. Announcements of these meetings are posted on the bulletin board in Kirtland Hall outside room 109 and listed in the weekly Psychology Newsletter. There is also a Colloquium series normally given by distinguished scholars visiting the University. These Colloquia are usually held on Wednesdays, beginning at 3:30 p.m. in the auditorium in Dunham Laboratory Room 220. These Colloquia are frequently of considerable value to undergraduate majors since they provide exposure to the best of ongoing psychological research.