

Bowdoin College  
Department of Psychology

HANDBOOK FOR  
MAJORS & MINORS  
IN  
PSYCHOLOGY

2010 – 2011

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## I. Purpose of the Handbook

Students frequently have questions about courses, independent research, honors projects, careers, and graduate study. This handbook provides answers to the more frequently asked questions. It is not meant to substitute for contact with the faculty of the Department. Use this handbook to familiarize yourself with our department so that you can plan effectively while you are at Bowdoin.

## II. Goals and Requirements of the Psychology Curriculum at Bowdoin

The curriculum of the Psychology Department is designed to acquaint students both with the contemporary facts of the discipline and with the scientific analysis of behavior and mental processes. These objectives are accomplished by exposure to basic questions that are asked by professionals in the discipline, by learning the basic principles of research design and statistics, and by reasonable mastery of the theories and research evidence in specific areas of the discipline.

Students who wish exposure to behavioral neuroscience, cognitive, clinical, organizational, social, developmental, and personality psychology should pursue the Psychology major. Students especially interested in behavioral neuroscience and the biological basis of behavior may want to elect an interdisciplinary major in neuroscience, sponsored jointly by the Psychology and Biology Departments (for information on the Neuroscience major consult the College Course Catalogue).

### Requirements for the Major in Psychology

The psychology major comprises ten courses. These courses are selected by students with their advisors and are subject to departmental review. Each student must take three core courses: an introductory course, **Psychology 101**, which will serve as a prerequisite to further study in the major; **Psychology 251** and **252**. These core courses should be completed before the junior year. Students must take three electives numbered **200** or higher. Finally, students must take laboratory and advanced courses. Students have the option of taking either (a) two laboratory courses numbered **260-279** and two advanced (300-level) courses, or (b) three laboratory courses numbered **260-279** and one advanced (300-level) course. Note that either **Psychology 275** or **276**, but not both, may count toward the two- or three-course-laboratory requirement options. Similarly, either **Psychology 320** or **321**, but not both, may count toward the two-advanced-course requirement option; and no more than one course from among **Psychology 315, 316, 318** (same as **Biology 318**), and **319** may count toward the two-advanced-course requirement option. Independent study courses at any level count as electives, but do not count toward the laboratory requirement or the advanced-course requirement. Majors are encouraged to consider an independent study course on a library, laboratory, or field research project during the senior year.

Students who are considering a major in psychology are encouraged to enroll in **Psychology 101** during their first year at Bowdoin and to enroll in **Psychology 251** and **Psychology 252** during their second year. Psychology majors must take **Psychology 251** before **252**. **Psychology 252** must be completed before taking **270** or any 300-level course other than **309**, and **252** must be taken prior to, or concurrent with, **274, 275, 276, and 277**. If possible, students should begin their laboratory work no later than the fall of their junior year. Those who

plan to study away from campus for one or both semesters of their junior year should complete at least one laboratory course before leaving for their off-campus experience and plan their courses so that they can complete the major after returning to campus. Students should speak with members of the department in planning their off-campus study program and speak to the chair of the department regarding their off-campus study plans and transfer of credit toward the major. Laboratory or 300-level courses taken elsewhere are not ordinarily counted toward the major.

### **Requirements for the Minor in Psychology**

The psychology minor comprises six courses, including **Psychology 101, 251, 252**, and one laboratory course.

### **Grade Requirements**

To fulfill a major (or minor) requirement in psychology, or to serve as a prerequisite for another psychology course, a grade of C- or better must be earned in a course. There is one exception: **Psychology 101** may be taken on a Credit/D/Fail basis, and it will count toward the major (or minor) and serve as a prerequisite for other psychology courses if Credit (CR) is earned in the course.

### **AP/IB Policy**

Students who receive an AP score of 4 or higher on the psychology exam receive one AP credit, are considered to have met the prerequisite for courses requiring **Psychology 101**. This credit also counts toward the major or minor. Students who receive an IB score (higher level) of 5 or higher on the psychology exam receive one IB credit, are considered to have met the prerequisite for courses requiring **Psychology 101**. This credit also counts toward the major or minor. No AP or IB credit for psychology is awarded if a student takes **Psychology 101**. Students do not receive duplicate credit for AP and IB exams in psychology.

### **III. Independent Study (Psychology 291/292 or 401/402)**

(See the Bowdoin College Course Catalogue for further guidelines.)

Independent study courses offer the student the opportunity to design and carry out a specific project on his/her own under the supervision of a professor. These projects involve conducting experiments (Psychology 401/402) or writing extensive literature review papers (Psychology 291/292). Field investigations may also be conducted.

An independent study should be undertaken to use and extend information gained from previous academic experience. Recent research projects have examined children's language development, metacognitive benefits of strategy training procedures, mediating factors of word recognition, recovering repressed memories, and postmodern and hermeneutic theory analyses. Sophomore, junior, and senior majors are eligible for consideration for independent study, which is distinct from senior honors projects. Eligibility criteria for the Honors Program are described in Section IV.

It is important that independent study include an original contribution by the student. Pure replications or book reports are unacceptable for independent study, but partial extended replications can be very appropriate. Off-campus independent studies will be acceptable only if

evidence for independent work is clear and if the project has obvious relevance to psychology. Merely learning a technique or working in a laboratory in a technical capacity is not sufficient to warrant independent study credit.

To pursue an independent study project, you should first find a faculty member who has the willingness, expertise, and time to sponsor it. Because the number of independent study projects that any faculty member can supervise is limited, it is advantageous to discuss potential projects as early as possible. Students are advised to contact the faculty during the previous semester to arrange subsequent independent study.

The final report of the independent study project is to be submitted to the advisor of the project by the last day of classes in the term. It is wise to turn in a rough draft at least two weeks prior to that time. The Department strives for the highest standards of clarity and precision in written work. Please refer to the American Psychological Association Publication Manual (a copy of which is in the library and in the Psychology Department Library, (Kanbar 200), and can be purchased at the Smith Union Bookstore.

All research performed under the auspices of the Department of Psychology must be in accordance with the ethical principles outlined by the American Psychological Association. These principles are presented in Sections XIII and XIV of this handbook, and students must be familiar with them before beginning their research.

#### **IV. Honors in Psychology (Psychology 401/402)**

The Honors Program in Psychology allows qualified senior psychology majors to participate in year long, original empirical research. Working on an honors project with a faculty member is a privilege normally accorded to students with a record of strong performance in the major. Each professor has his or her own criteria for accepting a student for Honors research (see Section IIA below); students should therefore determine from direct conversation with each faculty member whether they qualify for selection.

- I. An honors project is unusual in many ways.
  - A. It spans both semesters of the senior year (Psychology 401 and Psychology 402).
  - B. Each project involves original empirical research on one current topic in psychology, conducted by one student and supervised by one professor.
  - C. Each topic is chosen to be of mutual interest to the student and his or her advisor.
- II. Specific procedures and prerequisites for senior honors projects vary among the academic departments. In Psychology:
  - A. Any qualified major may approach any professor to explore the possibility of working together on a project. Each professor has his or her own criteria for determining a student's qualification for participation in the Honors Program. These criteria may include performance in the major as demonstrated by grades, performance in the professor's courses, a written proposal for an honors project,

or other indications of a student's capability and a well developed research interest. Students should approach each professor they are interested in working with to determine his or her own criteria for selecting a student for Honors research.

- B. The decision to work with any particular student is made by each professor. There is no fixed calendar for these decisions, but they all begin with direct discussions between interested qualified students and appropriate faculty members. Qualified students should contact professors with whom they would like to work during the spring semester of their junior year to begin the discussion process. (Professors who are on leave should be contacted the first week of the semester or prior to that by email). Any contact a student initiates does not guarantee acceptance into the Honors Program.
- III. The specific activities and schedule of an honors project depend on the topic, the advisor, and the interests and resources of the student. However, some common steps are taken by all honors students. Typically, each student meets weekly with his or her advisor throughout the year. In addition, attending various department events is considered to be an integral component of Honors work during the year. Some events (i.e., the September, October, December, March, and May Honors meetings described below) are mandatory. Attendance at other events such as Department-sponsored talks and presentations are not mandatory, but it is expected that Honors students will make every effort to attend these events.
- A. All honors candidates and Psychology faculty meet together in September and again in October, to discuss each student's emerging interests.
  - B. Each student forms his or her ideas into a formal written research prospectus (proposal) by the end of the semester. This prospectus takes the form of the "Introduction" and "Method" sections of a psychological research article and is distributed to all Department faculty and made available to the honors students.
  - C. Then, all honors candidates present their research prospectus to the other honors candidates and the Psychology faculty in the form of a formal oral presentation. The projects are discussed and possible improvements are suggested.
  - D. Occasionally, the student, the advisor, or the Department as a whole decides that it is not advisable for the student to continue to pursue honors. In such cases, the project becomes a regular, one-term independent study course that is not considered for Departmental Honors.
- IV. During the spring semester, honors projects include the following common steps:
- A. Students arrange facilities, develop materials, recruit participants, collect data, and perform statistical analyses. They then prepare a complete written project report in the form of an APA-style research article.

- B. At the end of the spring semester, all honors candidates present their research (especially its findings and implications) to the other honors candidates and the Psychology faculty in the form of a formal oral presentation.
  - C. Projects receive a normal (A/B/C/D/F) course grade at the end of the year, which becomes the course grade for both the Psychology 401 and Psychology 402 independent study courses.
  - D. Projects are evaluated for Departmental Honors which are awarded at Commencement.
- V. In summary, the *initiation of honors projects* involves conversations between interested, qualified students and individual faculty members. The *execution of honors projects* involves close collaboration between each student and his or her advisor, supplemented by regular events designed to share the project with the full Department as it develops. The evaluation of honors projects involves the full Department faculty for the determination of Departmental Honors and the supervisor for the determination of the course (401-402) grade.

What next? If you are interested in senior honors research next year, take the following steps:

- \* *Think* about topics, areas, issues, and theories that interest you. Consider whether they might be feasible areas for a year's dedicated research effort on your part.
- \* *Converse* with appropriate Department faculty to determine if you qualify for honors research according to each professor's own criteria and to determine whether your interests are compatible with those of particular faculty.

In order to have an appropriately sophisticated background in a topic area, students who are considering pursuing honors should elect advanced courses during their junior year.

Recent honors theses include such topics as investigating decision making styles and their relation to subjective well-being outcomes, examining the interpretation of connectives *and* or, exploring the role of rationality and agency in the conceptualization of delusion, investigating empathy and prosocial behavior in shy children's regulation of negative emotion, the relationship between false-belief understanding and social competence, sustained silent reading programs and students' attitudes toward reading, the development of children's understanding of psychogenic reactions, examining the impact of early locomotor experience on the development of fear, testing the connection between passion and perceived physical attractiveness in romantic relationships, searching for negative vs. positive aspects of a future career, inferencing during text processing, an investigation into the process by which children differentiate comprehension and memory, and children's understanding of truths and falsehoods.

### **Schedule of Dates for Honors Projects**

#### **First Semester:**

- \*Meeting with faculty and other senior honors candidates on Friday, September 10, 4:00 p.m.
- \*Mid-semester meeting on Friday, October 29, 3:30 p.m.
- \*Written prospectus due on Monday, December 6, 4:00 p.m.

\*Presentations on Friday, December 10, 2:00 -5:00 p.m.

### **Second Semester:**

\*Mid-semester meeting on Friday, March 4, 3:30 p.m.

\*Honors paper due to each Psychology department member on Monday, May 9, 4:00 p.m.

\*Final oral presentation of honors to Department on Thursday, May 12, 2:00 – 5:00 p.m

All honors papers must be deposited in the Library. The paper deposited in the Library will be considered to be the final draft of your honors paper and will include any and all changes requested by Department members during your oral presentation (in consultation with your honors advisor). Your honors advisor should also receive a final copy of your paper as well as the coordinator in the department.

## **V. Undergraduate Research Grants**

The college offers a number of grants to students to help assist with the cost of conducting research. These awards enable the student, under the supervision of a faculty member, to conduct an empirical research project that attempts to advance our knowledge in some particular area. These awards are in the form of stipends; that is, direct payments to the awardees that are to free them from other work responsibilities so that they can concentrate on their research projects. The awards most commonly received by students working with Psychology faculty are briefly described below. Please see the college website, <http://www.bowdoin.edu/academics/students/fellowships/stfwps.shtml>, for more complete information about the award and the application process (including application deadlines).

Surdna Foundation Undergraduate Research Fellowships are awarded annually to qualified seniors. You typically apply in February of your junior year. The application is written by the student, with supporting documents supplied by the faculty member who is supervising the project. The stipend can be used to cover part-time research during the academic year or full-time research during the summer (8 weeks) preceding your senior year. Recent recipients in Psychology include Sean Turley '05, Alexa Ogata '06, Tasha Naka-Blackstone '08, and Caitlin Seifert '08 who all worked with Professor Putnam, and Rachel Vanderkruik who worked with Professor Lovett. Sean used his Surdna to fund his Honors project on the relationship between parenting, peer pressure, and conformity. Alexa conducted research that examined the relations between parental responses to child behavior and child age, gender, and temperament; and initiated research exploring the implications of crawling for emotional development. Tasha spent her summer examining the connection between toddler temperament and early scholastic ability. Caitlin used her Surdna to fund summer work on her Honors project that examined the role of intrinsic motivation in successful second grade free reading programs. Rachel's Surdna allowed her to spend a summer examining children's beliefs about the mental life of animals and whether those beliefs are related to their knowledge about animal physiology.

Justin Keivits '06, a Neuroscience major in Professor Thompson's laboratory, used his Surdna to study the effects of isotocin on the social behavior of goldfish. Claire Discenze '05, a Neuroscience major in Professor Ramus' laboratory, used her Surdna to study the interactions between the hippocampus and the neocortex in the storage of long-term sequence memories.

Edward E. Langbein, Sr., Summer Research Grant is awarded annually to one graduating

senior to enable him/her to participate in summer research that is directed toward his/her major field or lifework. As with the Surdna, the application is written by the student, with supporting documents supplied by the supervising professor, and it is typically due in February of your senior year.

Kelly Dakin '02, a neuroscience major, received a Langbein to conduct research jointly with Professor's Thompson and Dickinson on the role of the neuropeptide vasotocin in regulating the reproductive behavior of male rough skinned newts.

Howard Hughes Summer Fellowships are awarded annually to qualified students to work with science faculty during the summer. You typically apply in February. Again the application is written by the student, with supporting documents supplied by the supervising faculty member. The stipend can be used to cover full-time research during the summer (10 weeks).

Recent recipients have included Terrance Pleasant '09 and Khristianna Jones '10 who worked on a study to determine the role of the hippocampus in episodic-like memory in Professor Ramus' laboratory in summer 2008; Hande Ozergin '08 who worked in Professor Thompson's laboratory investigating the effects of subliminal perception of facial expressions in summer 2008; Vanessa Lind '06 who worked with Professor Thompson on research relating vasotocin gene activity to social behavior in goldfish; Rachel Donahue '08, Khristiana Jones '10, Kristen Lee '08, and Charles Parrish '08 who worked in Professor Ramus' rat laboratory in summer 2007. Rachel examined hippocampal-cortical interactions in a declarative memory task. Khristianna explored the use of taste-aversion to measure episodic-like memory. Rob studied the interaction of the orbito-frontal cortex and parahippocampal region during an odor recognition memory task.

Paller Summer Fellowships are awarded to students under the discretion of the neuroscience faculty. The fellowship supports ten-week summer neuroscience research projects. See college catalogue or a professor for information about how to apply. Recent recipients include Matt Ginther who did work in Professor Ramus' lab characterizing the firing of hippocampal neurons of rats during the learning of an odor sequence task and Nicholas Simon who also did work in Professor Ramus' lab looking at interactions between the parahippocampal region and the orbitofrontal cortex of rats during long-term memory formation.

The Koelln Research Fund was established to support student research topics that go beyond traditional disciplinary boundaries. Applications must be completed early in the fall semester of the academic year in which the money will be used. Past recipients include Amy Helbig '09 who received funds for conference travel to present advanced statistical analyses of psychological questionnaires.

The Davis Fund was established to foster undergraduate interest in international affairs. Application must be completed early in the fall semester of the academic year in which the money will be used. Becca Maller '09 received an award from this fund for conference travel to present research on cross-cultural differences in toddler temperament.

Psychology conferences. The psychology department will financially support students who attend professional psychology conferences and award up to \$300 toward travel, lodging, and registration. These awards will be granted to the degree that the department funds allow.

Students must submit a letter of application that includes a budget and priority will be given to students who present research at the conference. Students are encouraged to apply for relevant college funds and to arrange to transfer their board monies to cover meal expenses.

## **VI. Psychology Department Award**

Frederic Peter Amstutz Memorial Prize Fund was established in memory of Frederic Peter Amstutz '85 by members of his family. This prize is awarded to a graduating senior major in recognition of the achievement of distinction in the major, including honors. This past year, Jamie Lynn Paul received this award.

## **VII. Research and Teaching Assistantships in Psychology**

In a variety of courses in the Psychology Department (e.g., Introductory Psychology, Data Analysis, Personality) it is possible to work for the instructor as the leader of weekly review sessions or as a study-group facilitator. Not only do these positions allow you the opportunity to earn some extra money but they also provide you with valuable teaching experience and the opportunity to review/enhance your understanding of the course material. For example, assisting in Data Analysis or Introductory Psychology would be a good way to review for the Advanced GRE in Psychology. Additionally, such experiences are often viewed favorably by graduate schools and enhance your resume.

The department also hires a number of students during the school year and during the summer as Research Assistants. Such individuals may be involved in data collection (i.e., serving as experimenters for research projects), data analyses, and library research. If you are interested in these opportunities, email to speak with Donna Trout and/or express your interest to some member of the faculty. As with teaching assistantships, research assistantships can enhance your chances of being admitted into a graduate school program or being hired in many different fields.

## **VIII. Graduate Study in Psychology**

Professional work as a psychologist usually requires a degree in psychology or a related field. In recent years, jobs in academia have tended to be scarcer than jobs in human services or business organizations, but with the decreased number of people going to graduate school in recent years, it has been predicted that there will be a shortage of capable research and academic psychologists in the future.

Openings in social psychology are more plentiful than those in experimental psychology. But if you are interested in pursuing a doctoral degree in clinical or organizational psychology, you should be aware that admission is extremely competitive (more so than for medical school). Each spring the Department meets with interested students to discuss graduate study in psychology.

**Preparing for graduate school or ways to increase the chances that you will be admitted into a good program.** Although graduate schools vary with respect to the kinds of skills, experiences, and training they expect their admitted students to have had, there are some

general consistencies. Below is a list of the kinds of courses and experiences that often interest graduate school admissions committees.

1) **Courses to take for graduate school.** Graduate programs usually are more interested in the pattern of courses you have taken than in the total number of psychology courses, or the number of courses directly related to your intended area of graduate study. In general, they will look for the following kinds of courses on your transcript, for the following reasons:

- a) an introductory course which demonstrates that you are oriented to the breadth of the field
- b) a statistics course which demonstrates your ability to master statistical tools for research
- c) one or two laboratory courses - these demonstrate your understanding of the general empirical research process, and your ability to engage in research
- d) one course related to your area of intended graduate study - which demonstrates that your interest in studying that topic is based on an informed understanding of its concerns and methods.
- e) an independent study or honors project which demonstrates your ability to organize and execute self-directed inquiry (sometimes including original empirical research) in a topic. The topic of your project need not be related to your area of interest for graduate study. Much more important is that your project demonstrates that you understand, can execute, and truly enjoy this kind of scholarly activity.

2) **Research experience.** Graduate schools that provide training for a Ph.D. frequently favor students with research experience obtained in independent study, honors, research assistantships, or otherwise. Additionally, it will give you the opportunity to ask someone very familiar with your research and writing skills (i.e., your research advisor) to write you a letter of recommendation.

3) **Clinical experience.** Students who wish to pursue a graduate degree in clinical or counseling psychology are advised to obtain some field or clinical experience before they apply to graduate school. Some schools will look favorably upon this experience when they review your application, and it will give you the opportunity to ask someone familiar with your clinical skills (i.e., your supervisor) to write you a letter of recommendation. It will also allow you to begin to assess your own ability to handle the stresses of engaging in clinical/counseling psychology.

**Choosing a field, program, and graduate school.** Graduate schools vary greatly in quality and it is certainly in your best interest to make the choice of graduate school with care. Also, admission standards in the different fields of psychology vary greatly. You also need to consider the kind of program to which you will apply. If you have excellent overall grades, high GRE scores, and research experience, you should consider a doctoral (Ph.D.) program. But if your grades and/or GRE scores are not quite so high, you should consider a master's program, MSW programs, counseling degrees, and so on. Sometimes it is worthwhile to apply to doctoral programs after first obtaining a master's level degree. If you are planning to continue your education in psychology, do the following things in your junior year:

- 1) Regardless of your area of interest, read the American Psychological Association

publication entitled, Preparing for Graduate Study in Psychotherapy: NOT for Seniors Only.

2) In addition, read the American Psychological Association publication entitled Graduate Study in Psychology. The Department and the Library both have copies of the publication, and it can be purchased from the American Psychological Association at <http://www.apa.org>. This publication, which costs about \$25, lists all of the graduate schools in North America and information about the programs offered at each school. Additional details such as GRE scores and the number of recently admitted students receiving financial assistance also are included.

3) If you are particularly interested in graduate school in clinical psychology, you should also read Mayne and Sayette's Insider's Guide to Graduate Programs in Clinical Psychology.

4) If you are particularly interested in graduate school in neuroscience, you should consult the Society for Neuroscience publication entitled Neuroscience Training Programs or their webpage on Careers in Neuroscience which can be found under the "For Students and Teachers" link on their Public Resources page, <http://apu.sfn.org/Template.cfm?Section=PublicResources>.

5) If you are interested in graduate study in organizational psychology, industrial psychology, or organizational behavior, you should read Graduate Training Programs in Industrial-Organizational Psychology and Related Fields, a publication of the Society for Industrial and Organizational Psychology (SIOP). Copies of this publication are no longer available in print. However, please visit the SIOP website (<http://www.siop.org/gtp/Default.htm>) to view the 2000 online version.

6) Check out the American Psychological Association web page at <http://www.apa.org> and the American Psychological Society web page at <http://www.psychologicalscience.org>.

**Constructing a list of possible graduate schools.** Now that you have examined all your options (and, hopefully, discussed them with a member of the psychology faculty), generate a preliminary list of possible schools and programs in your field of interest. In generating this list, you should consider your qualifications, your preferences for geographical location, each school's reputation, and each school's financial aid policy. You should generate this list early in the fall of your senior year. Then to help you narrow down your list:

1) Discuss your list with some faculty members, particularly those in the area that you wish to pursue. They probably can give you additional information about schools that you have included or omitted from your list. Also, specifically discuss with them your chances of being admitted to the programs/schools on your list. You want to include schools that may be long shots given your qualifications as well as some that seem well-matched to your qualifications.

2) Send away requests for more information from the schools on your list. Information can often be found on the school's website.

3) You may also want to consult the numerous publications rating different graduate programs in the country. Keep in mind that graduate environments can change very rapidly, however, and thus the ratings provided in these publications have limited utility. These

publications can be found in most bookstores or in the library.

**Applying to graduate school.** Now that you have decided which schools/programs you are going to apply to, apply to them. Make sure you get copies of their application forms early in the fall, some take quite a considerable amount of time to fill out (i.e., require essays and financial statements from you and your parents) and some are due in November. Also, make sure you ask your recommenders for letters of recommendation well in advance of the application deadline. Finally, many clinical programs ask applicants to come to the school for an interview. If you get such a call, make sure that you brush up on your interview skills and go prepared.

Most graduate schools require that both the Advanced and Aptitude portions of the Graduate Record Examinations (GRE) be taken. The Miller Analogies Test is also occasionally required. The Career Planning Center has application forms and test dates for these tests. Some people take the Advanced and Aptitude GRE's on different dates to eliminate the stress of taking both tests on one day (each test takes 3 hours).

Students should prepare for the examinations by studying tests of comparable format. Sometimes it is also advisable to take the GRE for practice in one's junior year. A good, comprehensive introductory psychology text is good to use in reviewing for the Advanced GRE.

**Deciding which school/programs to attend.** Now that you have been admitted to a few schools/programs, ask various faculty members of the Psychology department for their advice about which school/program you should attend. If you can, visit the school. If you cannot visit the school, at least get the names of some current graduate students to contact. Make sure you consider the program's status, its ability to place their students in full-time jobs, its financial aid offer (and where the money comes from), the extent to which you are expected to work as someone's research or teaching assistant, and the length of time it typically takes students in the program to receive their degrees.

## **IX. Recommendations**

*Are you asking faculty/staff for recommendations?* Please keep the following in mind:

1. Always ask, in person, if the individual is willing to write you a reference letter. No one is *required* to write a letter on your behalf.
2. Allow **2-3 weeks, minimum**, for the individual to complete the letter. Have courtesy and sensitivity to the recommender's schedule.
3. Provide **stamped, addressed envelope(s)** for the recommender to use to mail the letter to your desired organization/school.
4. Please **consult with CPC** about how to maintain your letters of recommendation in a credential file.
5. It is **your responsibility** to ensure that letters are written and on file in the psychology or

CPC office.

6. Always thank the recommender. A nice hand-written thank-you letter that acknowledges that their time and effort will always be appreciated.

## **X. Careers in Psychology**

A background in the analysis of behavior is a useful one for a broad variety of occupations, many of which are not obviously related to Psychology. Business (including market research and advertising), medical, and legal professions look favorably upon good students with backgrounds in Psychology. In addition, Psychology majors who graduate from liberal arts institutions often do well in fields entirely unrelated to the discipline.

Within the field of psychology, occupations range from college teaching and research to applied areas like clinical, industrial, and educational psychology. A Psychology major is also useful for related health service fields such as hospital administration, social work, physical therapy, and sports medicine. The following provide some useful information concerning careers in Psychology; many of which are located in the Library or in the Psychology Department Office:

Psychology: Scientific Problem Solvers--Careers for the Twenty-First Century. (2003.) Washington, DC: American Psychological Association.

(This publication is also available for online viewing at <http://apa.org/students/brochure/brochurenew.pdf>, as well as the video format at <http://www.apa.org/videos/4313065.html>.)

DeGalan, J. & Lambert, S. (2001). Great Jobs for Psychology Majors. Chicago, IL: VGM Career Books.

Sternberg, R. (1997). Career Paths in Psychology: Where your degree can take you. Washington, D.C.: American Psychological Association.

Woods, P.J. (1976) Career Opportunities for Psychologists. Washington, DC: American Psychological Association.

Career Encounters Psychology. Videotape. American Psychological Association, 1991.

Also, check out the American Psychological Association web page at <http://www.apa.org/>, its site for undergraduate psychology students at <http://www.apa.org/students/homepage.html>, and the American Psychological Society at <http://www.psychologicalscience.org/>. These sites contain a tremendous amount of useful information.

Each fall the Department meets with interested students to discuss careers in Psychology.

## **XI. Postgraduate Activities of Recent Bowdoin Graduates**

Each year a few graduates go on to advanced studies in Psychology. Recent Bowdoin graduates in Psychology have pursued doctoral degrees at Columbia, Cornell, Michigan State, Pennsylvania State, Stanford, and the Universities of Chicago, Denver, Illinois, Maine, Massachusetts, North Carolina, Pittsburgh, and Purdue.

Psychology majors also undertake graduate study in related fields such as medicine, education, business, social work, or law. Often, students will work for a year or two before entering graduate programs. Their interim activities take them to the Peace Corps, residential treatment centers for emotionally disturbed children, schools, university or medical center research programs, and private businesses.

## **XII. The History of Psychology at Bowdoin College**

The recognition of psychology as an independent discipline and academic department at Bowdoin was the result of approximately 80 years of evolution which began with the appointment in 1824 of Thomas Cogswell Upham as Professor of Metaphysics and Ethics, a title which was changed in time to Professor of Mental and Moral Philosophy. In 1827, Upham published the first American textbook in mental philosophy, "Elements of Intellectual Philosophy"; and broadened its subject matter to define this new discipline to include many topics and phenomena relevant to the study of the mind and its operations. Upham's text was in print, published by Harper's, until 1888 when it was succeeded on the Harper's list by John Dewey's "Psychology". All texts in psychology were effectively replaced by William James' "Psychology" in 1891, but it was Upham's text which was termed "the classic American textbook in psychology" prior to James' work.

Psychology continued to be represented in the teaching of philosophy following Upham's retirement in 1867; perhaps the best known professor, to subsequent generations of psychologists at least, was George Trumball Ladd who taught at Bowdoin from 1879-1881. Ladd left Bowdoin to accept an appointment at Yale, where he published a text in the new physiological (experimental) psychology, based on the reading and teaching which he had begun at Bowdoin; his prominence as a psychologist is evidenced by his election as the second president of the American Psychological Association, following G. Stanley Hall and preceding William James. (Students at Bowdoin were, however, less impressed with Ladd: the Orient referred to him as "Dr. Dryasdust").

Modern psychology emerged from philosophy in the last quarter of the nineteenth century. The department of psychology formally began in 1905 when Charles T. Burnett, an instructor in philosophy, had his title changed to Instructor in Psychology. Prior to his appointment to the new department, Burnett had assisted President Hyde, Professor of Mental and Moral Philosophy, in teaching philosophy and modern psychology. The establishment of a formal Department of Psychology as early as 1905 was unusual; at Harvard, for example, the teaching of Psychology was not formally separated from the Department of Philosophy until the 1930's.

The establishment of psychology as a department separate from philosophy at Bowdoin and elsewhere early in the twentieth century also marked the effective change in the discipline from a philosophical and broadly empirical science to an experimental science. Laboratory work was introduced and the subject matter in courses rapidly came to reflect the growing range of

topics in psychology as the discipline began to define itself as a modern scientific discipline.

Charles Burnett, known affectionately by his students as “Psycho,” retired from the college in 1944, having served for most of that time as the sole faculty member in the department. He was succeeded in 1946 by Norman Munn, author of a successful introductory text which dominated the market in the late 1940’s and in the 1950’s. Professor Munn, who came to be called “normal Norman” by his students (in contrast to “Psycho” Burnett) was a comparative psychologist, whose “Handbook of Psychological Research on the Rat” was a standard and influential text on research which explored the sensory, perceptual, motivational, and learning capacities of the white rat, a dominant research subject for psychologists from the 1920’s through the 1950’s.

Professor Munn retired to his native Australia in 1962; in that year, Alfred H. Fuchs was appointed to teach in Professor Munn’s place, and he assumed the Chair of the department in 1965, a position in which he served until 1975 when he became Dean of the Faculty. In 1975, Melinda Y. Small, a member of the Bowdoin Faculty since 1972, assumed the Chair. Department members now take turns serving as Chair. The department has grown to its present size from three full-time members in 1962; its members represent the broad range of specializations within psychology and offer courses in clinical, cognitive, developmental, social psychology, organizational, and neuroscience as part of a changing and evolving scientific discipline.

The newest and most exciting change for the Department is their recent move to Kanbar Hall. Kanbar Hall was made possible by a lead gift of The Kanbar Charitable Trust in honor of Elliott Kanbar, Bowdoin Class of 1956, and supplemented by significant gifts from various trusts, foundations, and generous donors. The building was designed by Cambridge Seven Associates, Inc. of Cambridge, Massachusetts and constructed by Payton Maine Corporation of Saco, Maine. Kanbar opened at the end of August 2004 and was dedicated October 22, 2005. The basement floor houses the psychology/neuroscience research and teaching laboratories. The second floor contains faculty offices, the Department main office, and a library. The third floor contains an observation suite, an auditory research suite, and a multi-purpose research suite. As you will see, our space is spectacular!

### **XIII. Ethical Principles in Psychological Research Involving Humans**

A campus ethics committee exists for the purpose of supervising research involving human participants. The guidelines (developed by the American Psychological Association) are strictly observed in any research and teaching involving humans sponsored by the Department of Psychology.

Students intending to undertake research involving humans are required to submit a proposal to the Research Oversight Committee for review well before the research is to be conducted. Human subjects approval forms are available on the College website. They will require the signature of the supervising faculty member and should be sent to the current chair of the committee. This committee must approve the proposal before the research can be conducted.

The following references provide clarifications and revisions of these principles and are available in the Psychology Office or through the Library:

Nagy, T.F. (1999). Ethics in Plain English: An illustrative casebook for Psychologists. Washington, D.C.: American Psychological Association.

American Psychological Association Staff. (1987). Casebook on Ethical Standards of Psychologists. Washington, D.C.: American Psychological Association.

The most recent "Ethical Principles of Psychologists and Code of Conduct" can be viewed online at <http://www.apa.org/ethics/code/index.aspx>.

#### **XIV. Ethical Principles in Psychological Research Involving Animals**

A campus committee exists to review the care and use of animals at Bowdoin College, and the College vivarium is routinely inspected by the Department of Health of the State of Maine. The guidelines (developed by the American Psychological Association) are strictly observed in any research and teaching involving animals sponsored by the Department of Psychology.

Students intending to undertake research involving animals are required to submit a proposal to the Research Oversight Committee for review well before the research is to be conducted. Animal subjects approval forms are available on the College website. They will require the signature of your faculty supervisor and should be sent to the current chair of the committee. This committee must approve the proposal before the research can be conducted.

#### **XV. Psychology Faculty & Staff**

**Nancy J. Curtis**, laboratory instructor of Biology and Psychology, B.A., M.S. (University of Maine, Orono) teach and assist in Introduction to Neuroscience, Laboratory in Behavioral Neuroscience (learning and memory), Laboratory in Behavioral Neuroscience (social behavior) and Molecular Neuroscience. Teaching interests are to develop interdisciplinary curricula merging behavioral psychology and traditional biological methods of inquiry. Recent publications include: Johnson, E, Ringo, J., **Bray (Curtis) N.**, and Dowse, H. (1998) Genetic and Pharmacological Identification of Ion Channels Central to the *Drosophila* Cardiac Pacemaker. *J. Neurogenetics* 12(1):1-24. **Curtis, N.J.**, Ringo, J.M., and Dowse, H.B. (1999) Morphology of the Pupal Heart, Adult Heart, and Associated Tissues in the Fruit Fly, *Drosophila melanogaster*. *J. Morphol.* 240:225-235. **Curtis, N. J.**, Groden, E., Dowse, H., Meyers, D., and Tracewski, K. (1999) Biology: the Living Science (a Laboratory Manual) pp 1- 96. Published by University of Maine Printing Services

**Alfred H. Fuchs**, professor of psychology, emeritus. A.B. (Rutgers), A.M. (Ohio U.), Ph.D. (Ohio State U.) taught courses in experimental psychology and in the history of psychology from 1962 to 1998 and served the College as Dean of Faculty from 1975 until 1991. He was President of Division 26 (History of Psychology) of the American Psychological Association in 1998-1999. Publications on the history of psychology concern the transition from mental philosophy to psychological science in the nineteenth century: Fuchs, Alfred H. (2000) The contributions of American mental philosophers to psychology in the United States. History of Psychology, 3, 3-19; Fuchs, Alfred H. (2000) The psychology of Thomas C. Upham. In

Gregory Kimble and Michael Wertheimer, (eds.) Portraits of Pioneers in Psychology, IV. Washington, D.C.: American Psychological Association. Other recent publications include Fuchs, Alfred H. (2000) Teaching the introductory course, ca. 1900. American Psychologist, 55, 492-495; Fuchs, Alfred H. (1998) Psychology and the "Babe". Journal of the History of the Behavioral Sciences, 34, 2, 153-165 and Fuchs, Alfred H. (1997) Ebbinghaus's contributions to psychology after 1885. American Journal of Psychology, 110, 4, 621-633.

**Barbara S. Held**, Barry N. Wish Professor of Psychology and Social Studies, A.B. (Douglass), Ph.D. (Nebraska), specializes in clinical psychology and theoretical/philosophical psychology. She teaches courses in introductory psychology, personality, abnormal psychology, and psychotherapy/clinical psychology. Her research interests include the philosophies (of being and knowing) that inform systems of psychotherapy and approaches to psychological science. She also studies the impact of our culture of "positivity" on psychological functioning and disciplinary psychology, for which she has received world-wide media coverage, including features in The New York Times and Smithsonian Magazine, and appearances on NPR, BBC, CBC, ABC News and NBC News. She was elected President of the Society for Theoretical and Philosophical Psychology of the American Psychological Association for 2008-2009, and has published three books: Held, B. S. (2007). Psychology's Interpretive Turn: The Search for Truth and Agency in Theoretical and Philosophical Psychology. Washington, DC: American Psychological Association; Held, B. (2001). Stop Smiling, Start Kvetching: A 5-Step Guide to Creative Complaining. New York: St. Martin's Griffin; Held, B.S. (1995). Back to Reality: A Critique of Postmodern Theory in Psychotherapy. New York: W.W. Norton. Other selected publications include: Held, B. S. (2010). Why there is universality in rationality. Journal of Theoretical and Philosophical Psychology, 30, 1-16 [Presidential Address]; Held, B. S. (2009). The logic of case-study methodology. Pragmatic Case Studies in Psychotherapy, Vol 5, Article 8 [<http://pcsp.libraries.rutgers.edu>]; Held, B. S. (2009). Psychological kinds and "discourse dependence." Theory & Psychology, 19, 123-129; Held, B. S. (2008). Problematizing the "problem" of consciousness (a review of Consciousness and Mental Life), PsycCRITIQUES [online]; Held, B. S. (2006). Does case-study knowledge need a new epistemology? Pragmatic Case Studies in Psychotherapy, Vol 2, Article 2 [<http://pcsp.libraries.rutgers.edu>]; Held, B.S. (2005). The "virtues" of positive psychology. Journal of Theoretical and Philosophical Psychology, 25, 1-34; Held, B.S. (2004). The negative side of positive psychology. Journal of Humanistic Psychology, 44, 9-46; Held, B.S. (2002). The tyranny of the positive attitude in America. Journal of Clinical Psychology, 58, 961-964; Held, B.S. (2002). What follows? Mind dependence, fallibility, and transcendence according to (strong) constructionism's realist and quasi-realist critics. Theory and Psychology, 12, 651-669; Held, B.S. (2001). The postmodern turn: What it means for psychotherapy and what it doesn't. In B.D. Slife, R.N. Williams, & S.H. Barlow (Eds.), Critical issues in psychotherapy: Translating new ideas into practice. Thousand Oaks, CA: Sage; Held, B.S. (2001). Anti-scientific attitudes within psychotherapy: Concluding comments. Journal of Clinical Psychology, 57, 53-62; Held, B.S. (2000). General systems theory and philosophy. In A.E. Kazdin (ed.), Encyclopedia of Psychology. Washington, DC: American Psychological Association and Oxford University Press; Held, B.S. (1998). The many truths of postmodernist discourse. Journal of Theoretical and Philosophical Psychology, 18, 193-217; Held, B.S. (1998). The antisystematic impact of postmodern philosophy. Clinical Psychology: Science and Practice, 5, 264-273; Held, B.S. (1996). Constructivism in psychotherapy: Truth and consequences. Annals of the New York Academy of Sciences, 775, 198-206.

**Suzanne Lovett**, associate professor of psychology and Faculty Liaison for Advising, A.B. (Bowdoin), Ph.D. (Stanford), specializes in cognitive development. She teaches courses in cognitive development, child development, introduction to psychology, and statistics. Her research interests include (1) children's theories of mind and biology, especially their ability to explain interpersonal behavior, their understanding of the mind-body interaction, and their ability to distinguish between various mental processes (e.g., comprehension and memory), and (2) how students experience college especially the factors that lead to success and engagement. Recent publications and presentations: Starr, E., & Lovett, S. B. (2000). Development of the ability to distinguish between comprehension and memory: Failing to succeed. *Journal of Educational Psychology*, 92, 761-771; Pillow, B. H., Lovett, S. B., & Hill, V. (2008). Children's, adolescents', and adults' explanations of interpersonal actions. *Infant and Child Development*, 17, 471-489; Lovett, S. B., & Pillow, B.H., (2010). Age-related changes in children's and adults' explanations of interpersonal actions. *Journal of Genetic Psychology*, 171(2), 139-167; Jennings, N., Lovett, S., Bates, C., Cuba, L., & Lindkvist, H. (2009, April). How did it go? Students' perceptions of success in the first year of college. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA; Bates, C., Cuba, L., Jennings, N., Lovett, S., & Lindkvist, H. (2010, January). From grades to ideas: Assessing academic engagement in the first three years of college. Paper presented at the annual meeting of the Association of American Colleges and Universities, Washington, D.C.

**Samuel Putnam**, assistant professor of psychology, B.S. (University of Iowa), Ph.D. (Pennsylvania State University), specializes in social and emotional development. He teaches courses in infant and child development, social development, and research methods in developmental psychology. His research interests involve interactions between child temperament, culture, and parenting in the prediction of normal and problem behaviors in infants and children. Recent publications include: Putnam, S. P., Gartstein, M. A., & Rothbart, M. K. (2006). Measurement of fine-grained aspects of toddler temperament: The Early Childhood Behavior Questionnaire. *Infant Behavior and Development*, 29 (3), 386-401. Putnam, S. P., & Stifter, C. A. (2005). Behavioral approach-inhibition in toddlers: Prediction from infancy, positive and negative affective components, and relations with behavior problems. *Child Development*, 76 (1), 212-226. Putnam, S. P., Rothbart, M. K., & Gartstein, M. A. (2008). Homotypic and heterotypic continuity of fine-grained temperament during infancy, toddlerhood, and early childhood. *Infant and Child Development*, 17, 387-405. Putnam, S. P. & Stifter, C. A. (2008). Reactivity and Regulation: The impact of Mary Rothbart on the study of temperament. *Infant and Child Development*, 17, 311-320. Putnam, S. P. (2008). Temperament. In W. A. Darity (Ed. In Chief) *International Encyclopedia of the Social Sciences*, 2<sup>nd</sup> Edition (pp. 321-322). Detroit, MI: Macmillan Reference USA.

**Seth J. Ramus**, assistant professor of Psychology and Neuroscience, B.S. (University of California, Berkeley), M.S., Ph.D. (University of California, San Diego), specializes in comparative psychology and cognitive neuroscience. He teaches courses in data analysis, neurobiology of learning and memory, neuropsychology, and comparative cognition. His research interests lie generally in the neurobiology of learning and memory in mammals, and particularly in understanding how different brain regions interact to store long-term, declarative memories. Recent publications include: Ramus S.J., Eichenbaum H.B. (2000). Neural correlates of olfactory recognition memory in the rat orbitofrontal cortex. *Journal of Neuroscience*, 20(21): 8199-8208. Buffalo, E.A., Ramus, S.J., Squire, L.R., Zola, S.M. (2000).

Perception and recognition memory following perirhinal cortex lesions in the monkey. Learning and Memory, 7(6): 375-382. Eichenbaum, H., Alvarez, P., Ramus, S.J. (2000). Animal models of amnesia. In: L Cermak (Ed.), Handbook of Neuropsychology: Memory Disorders. Ramus, S.J., Eichenbaum, H. (In Press). A brain system for declarative memory. In: J. Pomerantz (Ed.), Neurobiology of Perception and Communication: From Synapse to Society. Ramus, S.J., Schoenbaum, G. (In Press). From single units to systems.

**Desdamona Rios**, Consortium for Faculty Diversity Post-Doctoral Fellow and Lecturer in Psychology and Gender and Women's Studies, B.A. (California State University, Northridge), Ph.D. (University of Michigan) specializes in socialization in academic contexts. She teaches courses in the psychology of women, women's studies, and political psychology. Her research examines diversity in educational contexts and the impact of socialization processes on underrepresented groups in different roles in the academy and how these processes shape a person's beliefs about possible career opportunities and their sense of fit within an academic and professional context. Recent publications include: Rios, D., Stewart, A.J., & Winter, D.G. (in press). "Thinking she could be the next president": Why identifying with the curriculum matters. Psychology of Women Quarterly. Shapiro, D., Rios, D. & Stewart, A.J. (in press). Conceptualizing lesbian sexual identity development: Narrative accounts of socializing structures and individual choices. Psychology and Feminism.

**Paul Schaffner**, associate professor of psychology, A.B. (Oberlin), Ph.D. (Cornell), specializes in social, organizational behavior, personality, and political psychology. He teaches courses in organizational psychology, social psychology, and statistics. His research interests are the structure of political ideology, the patterning of work-related affect, and micro-level theory development in organizational behavior. Recent publication: Stone, W.F. & Schaffner, P.E. (1988). The Psychology of Politics. New York: Springer-Verlag.

**Louisa Slowiaczek**, professor of psychology, B.S. (University of Massachusetts--Amherst), Ph.D. (Indiana) specializes in cognitive psychology, with an emphasis on language processing. She teaches research design in psychology, cognitive psychology, lab in cognition and an advanced seminar on the psychology of language. Her research interests concern the influence of linguistic information on the organization of memory and the processing of spoken words. Most recently she has begun to examine the lateralization of language processing in the brain, and the influence of emotional tone of voice on word processing. Some of her papers include: Slowiaczek, L.M., McQueen, J.M., Soltano, E.G., & Lynch, M. (2000). Phonological representations in prelexical speech processing: Evidence from form-based priming. Journal of Memory and Language, 43, 530-560. Slowiaczek, L.M. (2000). Hesitations and clarifications on a model to abandon feedback. Behavioral and Brain Sciences, 23, 347. Slowiaczek, L.M., Soltano, E.G., Wieting, S.J., & Bishop, K.L. (2003). An investigation of phonology and orthography in spoken word recognition. Quarterly Journal of Experimental Psychology, 56, 233-262. Slowiaczek, L.M., Soltano, E.G., & Bernstein, H.L. (2006). Lexical and metrical stress in word recognition: Lexical or pre-lexical influences? Journal of Psycholinguistic Research, 35, 491-512. Arciuli, J., & Slowiaczek, L.M. (2007). The where and when of linguistic word-level prosody. Neuropsychologia, 45 (11), 2638-2642

**Richmond Thompson**, associate professor, B.S. (Furman), Ph.D. (Cornell), specializes in biopsychology / behavioral neuroscience. He teaches introductory psychology, physiological psychology, comparative neuroanatomy, hormones and behavior, and behavioral neuroscience.

His research interests are in the neuroendocrine mechanisms that regulate social behavior in vertebrate animals. Recent publications include: Walton JC, Waxman B\*, Hoffbuhr K, Kennedy M\*, Beth E\*, Scangos J\*, Thompson RR. (2010) Behavioral effects of hindbrain vasotocin in goldfish are seasonally variable but not sexually dimorphic. *Neuropharmacology* **58(1)** 126-134: Lord, LD\*, Bond, J.\*, Thompson, RR. (2009) Rapid steroid influences on visually-guided sexual behavior in goldfish. *Hormones and Behavior* **56(5)** 519-526: Thompson, RR & Walton, JC (2009) Vasotocin immunoreactivity in goldfish brains: characterizing primitive circuits associated with social regulation. *Brain Behavior and Evolution*, **73(3)** 153-164: Searcy, B., Walthers, EA, Heppner, BL, Thompson, RR, Moore, FL. (2009) Identification of mesotocin and vasotocin nucleotide sequences in two species of urodele amphibian. *General and Comparative Endocrinology*, **160(2):111-6**: Thompson, RR, Dickinson, PS, Rose, JL, Dakin, K\*, Civiello, G\*, Segerdahl, A\*, and Bartlett, R\*. (2008) Pheromones enhance somatosensory processing in newt brains through a vasotocin-dependent mechanism. *Proceedings of the Royal Society, Biological Sciences, UK*, **275(1643); 1685-169**: Thompson, RR, Walton, JC, Bhalla, R,\* George, KC,\* Beth, EC.\* (2008) A primitive social circuit: vasotocin-substance P interactions in the hindbrain influence social behavior through a peripheral feedback mechanism. *European Journal of Neuroscience*, **27(9); 2285-2293**: Thompson R.R., George K, Walton JC, Orr SP, Benson J.. 2006. Sex-specific influences of vasopressin on human social communication. *Proceedings of the National Academy of Sciences U S A*. 2006 May 16;**103(20):7889-94**: Thompson, R.R., George, K.,\* Dempsey, J.,\* & Walton, J.C. 2004. Visual sex discrimination in goldfish: seasonal, sexual and androgenic influences. *Hormones and Behavior*, **46, 646-654**: Thompson, R.R. & Walton, J.C. 2004. Peptide effects on social behavior: the effects of vasotocin and isotocin on social approach behavior in male goldfish. *Behavioral Neuroscience*, **118(3), 620-626**; Thompson, R.R., Gupta, S.,\* Miller, K., Mills, S., & Orr, S. 2004. Vasopressin effects on facial responses related to social communication in human males. *Psychoneuroendocrinology*, **29, 35-48**. (\*indicates Bowdoin student co-authors)

**Donna Trout**, academic department coordinator, B.S. (University of Southern Maine) with a major in management and organizational studies. Donna has worked in the Psychology Department since 1988.

## **XVI. Concluding Remarks**

Psychology is an exciting and challenging field that addresses issues of both practical and theoretical interest. These are the characteristics that have drawn the members of the Psychology faculty to the discipline. The Department's most important tasks are to convey this excitement and transmit the intellectual skills used in psychology to our students. We believe the resources and intellectual atmosphere of Bowdoin College are very nearly optimum for this. If you leave Bowdoin with enthusiasm for psychological questions, and well-developed intellectual tools for dealing with them, we will have accomplished our goals. We wish you the very best success in your education in psychology and in later pursuits, so that both will be enriching and rewarding experiences.

## **APPENDIX A**

### **Psychology-Related Websites**

#### General Psychology Sites

American Psychological Association  
<http://www.apa.org>

American Psychological Society  
<http://www.psychologicalscience.org>

Encyclopedia of Psychology and Psychology Websites  
<http://www.psychology.org>

Psi Chi  
<http://www.psichi.org>

Psychology Professional Societies Link  
<http://www.vl-site.org/psychology/index.html>

#### Business/Industrial Organizational Psychology

Society for Industrial Organizational Psychology  
<http://www.siop.org>

SIOP's University I-O Program Links  
<http://www.siop.org/ioprograms.aspx>

Society for Human Resource Management  
<http://www.shrm.org>

#### Clinical Psychology

American Board of Examiners in Clinical Social Work  
<http://www.abecsw.org>

#### Ecopsychology

Ecopsychology Home Page  
<http://www.spiritmoving.com/EcoPsych/ecopsychology.html>

#### Forensic Psychology

American Board of Forensic Psychology  
<http://www.abfp.com>

## Social Psychology

Social Psychology Network

<http://www.socialpsychology.org>

Society for Personality and Social Psychology

<http://www.spsp.org>

George Warren Brown School of Social Work Links

<http://gwbweb.wustl.edu/Pages/Home.aspx>

Society for Research in Child Development

<http://www.srcd.org>

**APPENDIX B:**  
**APA Monitor Article on Career Prospects of Psychology Majors**  
<http://www.apa.org/monitor/jun02/goodnews.html>

**Good news for bachelor's grads**

**Psychology training opens doors for recent graduates.**

BY BRIDGET MURRAY

Monitor staff

The ebbing recession is making the job-hunt a little tougher on this year's college graduates, but despite the downturn, psychology majors should find jobs with relative ease across a range of fields. They owe that continued demand to the major's emphasis on wide-ranging, flexible skills, market watchers say.

If this year's 73,000 to 75,000 psychology graduates follow the pattern of their predecessors--as found in surveys by APA's Research Office--most will join the work force immediately, though some will also attend graduate school part time, and others will earn a higher degree later.

To be sure, the recent economic downturn means jobs will be scarcer for this year's graduates, according to the National Association of Colleges and Employers (NACE). The association predicts new hiring will be down 20 percent.

Still, as in years past, most majors can expect to find entry-level jobs in everything from education and social services to business, government and health care, NACE data indicate. Starting salaries across these areas span \$18,000 to \$45,000, depending on the job type and location.

Of course, those entering business earn considerably higher salaries than those entering social services and nonprofit areas, says Barney Beins, PhD, APA's director for precollege and undergraduate programs. But he notes that, across all areas, salaries increase as students gain higher administrative positions or earn higher degrees.

As for how majors land jobs, it takes strong knowledge of their own interests and skills, adeptness at fitting those interests and skills to employers' needs and plenty of contacts inside and outside academe, say Beins and other career advisers. Such preparation, they add, will be handier than ever in this spring's tight job market.

"When employers ask, 'Why should I hire you?' they want to hear about outstanding characteristics," says Drew Appleby, PhD, director of undergraduate psychology studies at Indiana University Purdue University Indianapolis. "They're not looking so much for what you know as what you can do--social and interpersonal skills, critical thinking, working collaboratively on teams, showing persistence and initiative, oral and writing skills."

**What's hot**

Psychology teaches all those skills in its undergraduate curriculum, notes Appleby, giving its majors a leg up on many other job seekers. Such "soft skills," together with the quantitative strategies students learn through research, prepare students for jobs as diverse as real estate agents, accountants and kindergarten teachers.

However, starting salaries are typically lower for psychology than for other more applied or professionally oriented areas. NACE, for example, pegs the average salary for psychology majors at \$29,952 for 2001-02--though that number seems inflated to career analyst Betsy Morgan, PhD, a psychology professor at the University of Wisconsin- La Crosse. She notes that the Bureau of Labor Statistics quotes a salary range of \$21,900 to \$27,200 for 2001 psychology majors. And the National Science Foundation lists an average starting salary of \$25,000 for 1999 psychology majors.

Also, in 2001, psychology majors received the most offers in the areas of management (\$30,488), teaching (\$25,378), counseling (\$24,724), social work (\$26,988) and sales (\$34,451), according to NACE.

More generally, APA and NACE list the most common psychology employment areas and salaries as:

\* **Health care and social services, \$20,000 to \$25,000.** Job tasks include counseling, administration and research.

\* **Education, \$17,000 to \$25,000.** Job responsibilities include teaching, research and provision of student services. Child care pays the lowest salaries--typically below \$20,000.

\* **Management and business, \$25,000 to \$40,000.** Such work includes employee development and training, consulting, merchandising, banking, customer service and office work. Banking and consulting earn the highest salaries and customer service and office work the lowest.

\* **Federal, state and local government, \$20,000 to \$29,000.** Duties include law enforcement, legislative support and administrative work.

### **How to land the job**

Perhaps because majors find such a variety of jobs, a large number of them consider their work unrelated to psychology, says Morgan. In alumni surveys of her department's majors, for example, three-quarters say their postcollege jobs are not related well, or are only somewhat related, to psychology.

That finding bothers Morgan, who thinks many students underestimate psychology's relationship to their work. Appleby agrees, again pointing to the useful "soft" and quantitative skills that psychology majors gain--"those learning-how-to-learn skills you apply in any job."

Understanding and communicating those strengths is key to landing a first job, psychology faculty say. Other job-search tips they share with students include:

\* **Know yourself and your career goals.** Start with your strengths and interests, then match

potential jobs accordingly, Creighton University professor Mark Ware, PhD, advises students. Many students approach job searching the opposite way, pursuing high-pay, high-demand jobs based on statistics. "But that's putting the cart before the horse," says Ware. "The plethora of computer jobs available doesn't do most psychology majors a bit of good."

\* **Get more comfortable with business and finance.** Many psychology majors count out careers in business because they consider it unrelated to their skills and "people" interests. But, not only do their skills apply in business jobs, says Ware, but financial skills prove important in human services areas as well--indeed in every area of work and life.

\* **Pitch yourself to employers.** Make a case for what you offer that other majors don't, says Margaret Lloyd, PhD, an APA Board of Educational Affairs member who's compiled a career resources web page (<http://www.psywww.com/careers>). What, for example does a psychology major offer that a business major doesn't? For one thing, interpersonal skills and understanding, says R. Eric Landrum, PhD, who teaches a career course at Boise State University.

\* **View the first job as a testing ground.** Consider it a steppingstone to the next project. "You're going to have to start at the bottom of something," says Landrum. "Unless your name is Gates, you will need to work your way up."

\* **Join in extracurricular activities and tap job resources.** Sign up for student clubs, honors and research programs, and career services, advises Appleby. Besides taking the career classes many departments offer, get to work early on career networking and planning, he says.

Doing so paid-off for one of his 2001 graduates, Veronica Bannon, 22. Her involvement in Psi Chi, student council, peer advising and practicum led to contacts that not only landed her a job helping providers deliver integrated services to people with serious mental illness but also doing paid service-learning research for a former professor.

"And I didn't have to knock on any doors," says Bannon. "Through the connections I'd made, jobs were already open to me."

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For more information on psychology careers and market trends, check out the online Occupational Outlook Handbook from the Bureau of Labor Statistics at [www.bls.gov/oco/ocos056.htm](http://www.bls.gov/oco/ocos056.htm).