

**GUIDE TO THE REQUIREMENTS
FOR THE DOCTOR OF PHILOSOPHY DEGREE
IN HUMAN FACTORS PSYCHOLOGY**

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Introduction

The Doctor of Philosophy (Ph.D.) is the highest degree offered by Old Dominion University. Programs leading to the Ph.D. degree are designed to help superior students become creative leaders in their chosen fields. The Ph.D. degree is awarded upon mastery of relevant subject areas, development of appropriate research skills, and a concentration of knowledge in the field of study.

It is important to recognize that, unlike achievement of the undergraduate degree, attainment of the Ph.D. degree is not merely a matter of accumulating course credits and satisfying requirements, even though such minimum requirements are set forth by the university. **The final basis for granting the Ph.D. degree shall be the candidate's knowledge of the field of study and the demonstrated ability of the candidate to do independent, original, scholarly research.**

Historically, the psychology Ph.D. program at Old Dominion University was designed as a general psychology program with a specialization in I/O psychology and further concentration areas in Personnel Psychology, Organizational Psychology, and Human Factors Psychology. This structure remained in place for approximately 30 years. In 2004, the department restructured the Ph.D. program to offer three specializations: Applied Experimental psychology, I/O psychology (still with concentrations in Personnel Psychology and Organizational Psychology, and Human Factors Psychology). The earned degree is still officially a Ph.D. in Psychology, though students now have the choice of three unique programs. The academic requirements for each program are unique.

The purpose of this Guide is to describe the requirements and procedures necessary to obtain the Ph.D. in psychology with a human factors concentration at Old Dominion University. The requirements cited here are consistent with general university policy regarding graduate education. Use of this Guide differs somewhat for students who enter the program with a bachelor's degree or a master's degree in psychology or a related field. Students entering with a bachelor's degree are referred to the University Catalog. The Catalog describes the requirements for completion of the Master of Science degree, all of which must be satisfied by those entering the program at the pre-master's level. Students entering with a Master's degree should also note the course requirements for the Master of Science degree. Because these courses must be completed successfully by all Ph.D. students, those entering the graduate program with graduate work completed at another university must demonstrate competency in each of the subjects covered by these courses. Moreover, students entering the graduate program with graduate work completed at another university may be asked to take a diagnostic examination (use Form #10 - DIAGNOSTIC EXAMINATION) to measure readiness for graduate study in the HF psychology program; transfer of graduate credits previously received is decided on a case-by-case basis. (Note: Appendix A contains a checklist of all requirements and forms for the program).

General Philosophy

The Ph.D. program was originally designed to adhere to the scientist-practitioner model as endorsed by the Society for Industrial and Organizational Psychology of the American Psychological

Association (Division 14). This model requires educational experiences that provide (a) broad doctoral training firmly based on psychological theory and basic behavioral science, (b) greater depth of knowledge broadly spread over the fundamental areas of HF psychology, and (c) concentration in further depth in one of the areas of HF psychology. Consistent with the objectives of this model, the general philosophy and plan of the HF psychology program at Old Dominion University is to provide graduate training consisting of four phases: (1) a core of basic psychology, acquired primarily at the master's level, (2) broad training in the area of HF psychology with a greater degree of concentration in at least one area, (3) research and practical experience in HF psychology, and (4) completion of a dissertation representing a significant contribution to HF psychology.

Committees Providing Student Guidance

It is the goal of the faculty in the HF psychology program to provide personalized guidance to each student. This guidance is provided to all students by the Ph.D. Programs Director (PPD), their assigned mentor (AM), and the Guidance Committee (GC). The assigned mentor (AM) is the individual faculty member who personally invited the student into the program at recruitment time and who continues to work with the student through the student's entire course of study. Often the AM serves as the chairperson for the student's Master's Thesis Committee, GC, and Dissertation Committee. It is important to note, however, that the student, in consultation with the AM and other faculty members, may request to change the chairperson of any of these committees if his or her professional interests change and he or she would be better served by another faculty member. Approval of the request is made by the PPD in consultation with HF psychology faculty members.

After admission to the program, students should consult with the PPD and their AM about initial course work. The AM is the chief source of academic guidance during the first year of graduate study. However, the PPD also serves an important function in providing general administrative guidance for the student.

Master's Thesis Committee. The chair of a student's thesis committee is typically the student's AM. The thesis committee also includes a second faculty member selected by the student and a third member assigned by the Psychology Department. The PPD, the Dean, and the Vice President of Research and Graduate Studies must provide written approval for members of thesis or dissertation committees who are not members of the ODU faculty. This is necessary even if the proposed committee member is an adjunct faculty member.

Guidance Committee. The GC provides guidance and evaluation for the post-master's Plan of Study, research experiences, and Ph.D. candidacy examination. Students entering the HF program with a bachelor's degree are required to form a GC and complete the program of study no later than one semester following the defense of their master's thesis (this corresponds to the fifth semester of enrollment in the program). Students entering the HF program with a master's degree must form the GC and complete their program of study no later than the end of their first full year of study in the program. The initial step in forming the GC is to propose a faculty member for appointment as chairperson of the student's GC. The student should consult with his or her AM and other HF psychology faculty members. Typically, the AM is the chairperson of the GC and represents the

student's major area of interest. In the event the AM is not the proposed chairperson of the GC, the proposed chairperson must be a member of the HF psychology program. The student, in consultation with the chairperson, must select other faculty members to complete the GC. The remainder of the committee consists of one faculty member from the HF area of study and another from the HF area or a non-HF psychology faculty member. In some cases, the experience of professionals outside the university may be sought for the GC. Such specialists holding adjunct faculty rank may be appointed to the GC. However, all members of the GC must be certified by the University for graduate instruction. Each GC functions as a university committee in order to bring university-wide standards to bear upon the Ph.D. degree.

The proposed composition of the GC must be approved by the PPD as well as the Dean of the College of Sciences. The Dean serves as an ex-officio member of all GCs. The Guidance Committee Form (use Form #13 - APPOINTMENT OF GUIDANCE COMMITTEE) is used to request approval of the GC. Once approved, the chairperson of the GC notifies other committee members.

The GC is responsible for approving a Plan of Study and for administering the written and oral parts of the Ph.D. candidacy examination. The GC continues to serve until the Ph.D. candidacy examination has been passed, the dissertation proposal has been approved, and the student has been admitted formally to Ph.D. candidacy. (The student's Dissertation Committee rather than the GC actually approves the dissertation proposal. Upon approval of this proposal, the student is admitted to Ph.D. candidacy.) The GC is also responsible for guiding and directing the academic program of the student during this period and for initiating all academic actions concerning the student. In the case of academic deficiency, the GC initiates recommendations to the PPD and Dean of the College. The GC may insist on more than the minimum scholastic requirements and may take other factors into account in deciding whether the student should continue in the degree program. The GC periodically informs the PPD and Dean of the College of the student's progress. Student progress is formally assessed annually by the chairperson of the GC.

Changes in the membership of the GC may be made only in advance of the Ph.D. candidacy examination. Informal substitutions for either the written or oral parts of the candidacy examination are not permitted. Changes in the GC are permitted only with the approval of the PPD and Dean of the College (use Form #14 - CHANGE IN GUIDANCE COMMITTEE).

Dissertation Committee. After the candidacy examination has been passed, the Dissertation Committee has been formed, and a dissertation topic has been approved by the Dissertation Committee, the GC responsibilities are completed. It is the responsibility of the Dissertation Committee to supervise the dissertation research. Approval of the Dissertation Committee is requested by Form #16 - APPOINTMENT OF DISSERTATION COMMITTEE.

The Dissertation Committee must contain at least three members from the Department of Psychology and one member from outside the Department. The chairperson of the GC may become the chairperson of the Dissertation Committee, although this is not necessary. The chairperson of the Dissertation Committee must be certified for graduate instruction and be an authority in the subject area of the proposed dissertation. ODU and the College of Sciences allow an outside person to serve as a co-director, but not sole director of a dissertation committee. Thus, a dissertation committee must

have as director a member of the ODU faculty. This director need not be a member of the HF program or psychology department. All directors must be certified by the University for graduate level 1 instruction and must be an authority in the field of specialization of the proposed dissertation. Membership on the Dissertation Committee may be extended to a non-university person with special knowledge of the dissertation subject area. Voting privileges can be provided to such specialists upon the recommendation of the chairperson and approval by the PPD and College Dean. The PPD, the Dean, and the Vice President of Research and Graduate Studies must approve members of thesis or dissertation committees who are not members of the ODU faculty in writing. This is necessary even if the committee member is an adjunct faculty member. The Associate Vice President for Research and Graduate Studies and the College Dean are ex-officio members of all dissertation committees. Form #17 - CHANGE IN PH.D. DISSERTATION COMMITTEE is required for any changes in committee membership.

Requirements

According to the University Catalog, the Ph.D. degree requires at least 78 semester hours of coursework. This includes 30 hours at the master's level (24 of coursework and 6 of thesis) and 48 at the post-master's level, including the dissertation. To meet the departmental requirements for a Ph.D. in human factors psychology, students entering the program with a bachelor's degree must complete the first phase of the program by meeting the requirements for the master's degree in general psychology. All students are required to complete successfully a core of master's level courses including the following: Psychology 827 and 828 (Analysis of Variance/Research Design and Regression/Correlational Design), Psychology 813 and 814 (Research Project I and II), Psychology 831 (Learning and Cognition) or Psychology 841 (Perception), and Psychology 651 (Developmental Psychology) or Psychology 849 (Advanced Social Psychology). Students must maintain a minimum Quality Point Average (QPA) of 3.0 in all course work in order to remain in good academic standing. If the QPA falls below 3.0 the student may be placed on probation or suspended from graduate study as specified in the Continuance Regulations given in the University Catalog.

Master's Thesis Completion

Students entering the doctoral program directly from the completion of an undergraduate degree and Master's level students who have not previously completed an empirically-based thesis are expected to complete a scholarly master's thesis within two years of admission. Good standing in the program and the availability of financial support are contingent upon the completion of the master's thesis prior to the fall semester of the third year. Determination of standing and financial support shall be decided on a case-by-case basis.

Under exceptional circumstances, a student may be allowed an extension to complete the master's thesis. In order to receive an extension, the student, in collaboration with the director of the master's thesis committee, must submit a letter requesting an extension to the PPD. The letter must include a clear and concise statement of the reasons the student has not been able to complete the thesis on time and a detailed timeline for completion. With approval of the PPD, the student may continue to take courses, but continued financial support will depend on the availability of departmental funds to support pre-master's students.

A thesis or dissertation must conform in format to the Guidelines established by Old Dominion University. A thesis or dissertation is also expected to follow the format established by the *Publication Manual* of the American Psychological Association. When the ODU Guidelines and the *Publication Manual* are in conflict, the ODU Guidelines take precedence. The director of the thesis or dissertation may also impose additional style requirements. Example styles include (1) a traditional style that involves an in-depth literature review and extensive appendixes, (2) a journal-ready manuscript, and (3) a traditional style that includes a journal-ready manuscript as an appendix.

Plan of Study

Following the appointment of the GC, the student must prepare a Plan of Study with the aid and approval of the GC. Before drawing up and approving the plan, the GC chairperson verifies that there is on file a set of transcripts of all undergraduate and graduate work the student has taken. Failure to present the Plan of Study on time may prolong the period of study for the Ph.D. degree. After being approved by the GC, the Plan of Study should also be submitted to the PPD and the Dean of the College for their approval. The approved plan is filed in the Department of Psychology and the Office of Student Records.

A Plan of Study reflects the following basic areas of concentration in the HF psychology program. The general scope of the HF program is the application of psychological principles to the design and use of human-machine systems and interactions. Specific topics include human-computer interactions, human performance, design of controls and displays, and models and simulations. In creating the Plan of Study, the student chooses courses that provide broad coverage of each of these areas. This broad coverage expands upon content provided by Human Factors Psychology (Psychology 870). Students ordinarily take this course during the first semester of their second year of graduate study.

The Plan of Study must contain at least 48 semester hours of graduate work beyond the minimum of 30 hours required for the master's degree. Of the 48 semester hours, a minimum of 30 hours must be taken in post-master's course work and research. Course work beyond the master's level taken at other universities is accepted as part of the 48-hour requirement only rarely and may not exceed twelve (12) semester hours; course work taken at another university must be approved by the student's GC.

The Plan of Study must designate research methods courses that the student is required to take (PSYC 727/827, PSYC 728/828, and PSYC 723/823). The successful completion of all work indicated in the approved Plan of Study is a fundamental prerequisite to the granting of the Ph.D. degree. A template for a Plan of Study is included as Appendix C.

Minimum requirements for the Ph.D. degree that must be considered in preparing the Plan of Study include:

- (a) satisfactory completion of all master's degree requirements in psychology. At a minimum, this consists of 24 semester hours for course work and 6 hours for master's thesis research (Note that these minimums are typically exceeded);

- (b) satisfactory completion of at least 48 semester hours beyond the master's degree. No more than 24 of these hours can be allocated to dissertation research. A minimum of 30 hours is required in post-master's course work and research;
- (c) demonstrated competency in research skills;
- (d) passing the Ph.D. candidacy examination at the end of the program of course work, as well as completion of the application and publication requirements;
- (e) completion of an approved practical experience in the area of the student's major or minor area of interest;
- (f) completion of a dissertation representing independent original research worthy of publication in a refereed, scholarly journal; and
- (g) successful oral defense of the dissertation before the student's Dissertation Committee.

Sample Course Schedule

A sample course schedule for majors in Human Factors Psychology is provided in Appendix B. Please note that this is only a sample and should serve only to guide the student in planning course work. The sample course schedule provides suggestions as to what might be taken each semester in order to meet all program requirements as quickly as possible. Finally, there is also a list of courses by classification at the end of Appendix B.

Residence Requirement

As suggested by the sample course schedules, students who enter the HF psychology program should be prepared to devote the equivalent of four to five years of full-time study (three years beyond the master's level). An essential feature of the Ph.D. degree is total concentration on the field of study for significant periods of time.

The residency requirements for the program are those of the university. Any exceptions to these requirements must be approved by the PPD, College Dean, and Associate Vice President for Research and Graduate studies. See the University Catalog for further explanation of the residency requirement.

Special waivers of the residency requirements may be obtained for dissertation research being performed at approved off-campus facilities. That is, upon recommendation of the Dissertation Committee and approval of the PPD and College Dean, a student may be permitted to carry on work in connection with the dissertation in absentia.

Research Skills

University regulations require Ph.D. degree students to demonstrate competency in one or more significant research skills distinct from the dissertation but fundamental to doctoral and post-doctoral research (see the University Catalog). To meet the research skill requirement in the HF psychology program, it is strongly recommended that students enroll in a technical programming course, offered either by the psychology department or computer science department (e.g., Visual Basic, C++, etc.). In special instances, the research requirement may be satisfied by proficiency in a foreign language. Request for the foreign language option must be presented to the GC and the PPD.

Graduate Student Teaching

Teaching a course is an experience that is worthwhile regardless of the eventual career role(s) that a student envisions, and the experience should be taken seriously for its professional value. Benefits associated with teaching a course include expanding and solidifying knowledge about general and HF psychology, polishing communication skills, and establishing professional identification. Although there are other ways to acquire these experiences (e.g., presentations at conferences, consulting experiences, organizing and conducting workshops), teaching a course systematically builds these experiences into a student's Plan of Study. Moreover, any student who plans an academic career should teach one or more courses in preparation for that career.

The student should also recognize that during the course of graduate training, financial support is often provided by the psychology department from graduate teaching assistant or adjunct teaching funds. This type of financial support almost always requires that the student be partially or fully responsible for teaching a course. The student should be prepared for an eventual obligation to teach a psychology course by enrolling in the Teaching of Psychology 815.

Research Experience

A major objective of the HF psychology program is to provide students with substantial experience in planning, designing, conducting, and reporting results of independent research. Toward this end, students are expected to engage in a variety of research activities. This expectation is reflected in the program's "rule of thumb" that roughly one-third of the required 78 semester hours should consist of research courses (e.g., Thesis, Individual Study [Research], and Dissertation). However, students are expected to acquire research experiences that go well beyond formal course requirements. These research experiences may take a variety of forms and occur in a variety of settings. For example, students are encouraged to engage in both laboratory and field research, to conduct research in multiple areas of HF psychology, and to serve as a member of a larger research team (perhaps serving as a graduate research assistant on an externally-sponsored contract) as well as engaging in independent non-sponsored research. In addition, students are encouraged to seek opportunities to conduct research projects (including grants and contracts funded by external funding agencies on their own and in collaboration with faculty members. The accumulation of these research experiences is expected to be evidenced by the presentation of papers at professional meetings, the publication of manuscripts in refereed journals, the publication

of technical reports, the submission of contract proposals, etc. Finally, it is expected that the results of these experiences are evident to the student's GC by an increase in the student's understanding of, appreciation for, and competency in conducting research. The GC must be satisfied with the student's research competency before it recommends the student for admission to Ph.D. candidacy.

Graduate Stipends and Tuition

Students accepted into the program are provided a graduate stipend to offset the costs of their graduate education. Stipends may come from a variety of sources including departmental funds, external grants and contracts and graduate research programs. Departmental stipends are currently (2006-2007 academic year) \$12,000 per year with full tuition waivers. The departmental stipends are generally limited to a time frame consisting of 8 semesters for students entering with a bachelor's degree and 4-6 semesters for those entering with a master's degree. Students failing to complete required coursework and program requirements in a timely fashion may be ineligible for departmental funding.

As an alternative to the departmental stipends, students may be funded on an external grant or contract awarded to a faculty member of the HF program. These stipends vary in amount, but are generally at a rate meeting or exceeding the departmental stipend. Tuition is also waived when a student is funded on an external grant or contract.

Practical Experience Requirement

The student must obtain practical experiences during the course of graduate training. Such experiences are necessary to adhere to the scientist-practitioner model. An internship is one way to meet this requirement, because it can provide relevant on-the-job training and practice in an organizational setting. However, the student can also meet the requirement by participating in several applied research projects or consulting activities under the direct supervision of Ph.D. psychologists. Criteria for meeting this requirement and the adequacy of experiences are established by the student's GC.

Students opting to complete a formal internship are strongly encouraged to adhere to the following guidelines:

1. Students should schedule the internship to avoid disruption toward the completion of the doctoral degree. Ideally, students should not seek an internship until they have passed their qualifying exam.
2. The internship must last for at least one semester, but no longer than one year.
3. Students should discuss any internship plans with their guidance committee for advice and approval prior to registering for internship credit.

It is expected that the student will be paid for full-time professional employment by the employing organization for the full duration of the internship (at a rate that is consistent with the

student's professional training and experience). It is required that the student be supervised by a professional psychologist with a Ph.D. This will generally be a member of the employing organization; however, if such a person is unavailable, a member of the faculty of the HF psychology program may serve as a supervisor for this experience. Details of the internship assignment (e.g., salary, duration, and work requirements) should be negotiated between the student and the employing organization with guidance and assistance from the student's GC. Final arrangements for the assignment must be approved by the GC.

During the period of the internship, the student must be enrolled in Psychology 891 during the first semester, and Psychology 897 for any successive semesters. Upon completion of the internship assignment, the student must submit a written report to the GC describing and evaluating the work experience. This report is to be accompanied by copies of the student's work products (e.g., reports written during the internship) insofar as they are available. Acceptance and approval of the written report by the student's GC constitutes completion of the requirements for Psychology 891. The grade for Psychology 891 is provided the GC chairperson once the student's report has been approved by the Committee.

In situations where an internship lasts longer than one semester, then the student should enroll in Psychology 897 for a minimum of three (3) semester credit hours each semester until the internship is completed.

Students are also encouraged to share their experiences with peers in the HF psychology program through an informal presentation. It is the responsibility of the student and GC chairperson to see that such experiences are shared with others in the program.

Ph.D. Candidacy Requirements

Candidacy is achieved by fulfilling three requirements: A formal examination, demonstrated research/scholarly publication success, and completion of a project demonstrating the application of HF principles. The candidacy examination for the Ph.D. degree is comprehensive in nature, with written and oral parts. The examination is designed to test the student's fitness to undertake independent research and professional practice. Through the Ph.D. candidacy examination, the student's GC should be satisfied that the student has demonstrated competency in (a) the subject matter of all areas of the student's selected program, and (b) designing, conducting, and reporting scholarly research.

Before taking the qualifying examination, the student must meet all departmental and university requirements and must have the recommendation of the GC. Research skills requirements should be met well in advance. The candidacy examination is usually taken immediately after the semester in which the last formal courses listed in the Plan of Study have been completed. Three formal times are available for administration of the candidacy exam: January, May and September.

In order to be eligible to take the candidacy examination, students must have achieved a QPA of at least 3.0 in all course work. This average must be based on all graduate courses taken at Old Dominion University as well as in all transferred credits.

When the student and GC have determined that the examination should be taken, the student must complete Form #15 - REQUEST FOR PERMISSION TO TAKE THE PH.D. CANDIDACY EXAMINATION. The student should secure the signatures of GC members and submit the form to the PPD and College Dean who will verify that the student meets the prerequisites for the candidacy examination no later than two weeks before the date of the examination. The examination must be taken during the semester for which permission is granted. The written part of the examination is scheduled as necessary near the beginning of each semester (i.e., September, January, and May). The oral part of the examination must be completed within one month of the written part. Once the guidance committee has granted permission for the examination to occur, postponement of the candidacy examination must have the approval of the guidance committee and the PPD. A student must be registered for at least one course during the semester in which the examination is taken.

The written part of the examination is prepared and read by the GC. The candidate is examined in broad areas of the major field as well as in the area of concentration approved by the GC.

Students are required to provide a reference list for the citations they made in their qualification exams. So as not to burden a student with developing the reference list while writing responses, the list should be developed and submitted to the HF Program secretary within one week of completing the written exams.

Upon passing the written part of the examination, the oral part of the examination is scheduled. The oral part covers the material contained in the written part and possible additional materials.

In addition to the written examination, the student must demonstrate scholarly publication and research capability. Scholarly publication is demonstrated by documentation that the student has submitted at least one 1st authored publication to a scholarly journal (this can be either an empirical article or a review article). The submitted manuscript must have met the prior approval of the student's Guidance Committee chair in consultation with the full GC. HF Application demonstration is achieved by completion of a physical product, application, or simulation approved by the AM and GC. Evidence of meeting the publication and application requirements must be presented to the GC at the time the written qualifying exam is taken.

A student must pass both the written and oral parts, and have demonstrated scholarly publication and HF application capability in order to pass the candidacy examination. The examination may not be reported as passed if there is more than one dissenting vote. A candidacy examination cannot be passed conditionally. A pass on the examination cannot be made contingent upon other factors such as the completion of additional course work, the preparation of extra research projects, etc. If the candidacy examination is failed, the GC may permit the student to take it once more at a time mutually satisfactory but within a time span of 6 to 12 months from the date

of the first examination. If the written part is failed, the student must retake the entire exam. If only the oral part is failed, the student may be allowed to retake only the oral part, upon approval by the GC. Failed oral exams must be retaken prior to the end of the next semester.

The chairperson of the student's GC submits Form #10 - RESULT OF PH.D. CANDIDACY EXAMINATION, which serves to report the results of the candidacy examination to the PPD and College Dean.

After the required written and oral parts of the candidacy examination for the Ph.D. degree have been passed, all remaining requirements for the degree must be completed within five calendar years; if not, the student is required to repeat the candidacy examination.

Admission to Candidacy

Admission to candidacy is a formal step that occurs after the student has (1) completed formal course work, (2) passed all parts of the Ph.D. candidacy examination, and (3) filed a dissertation proposal approved by the Dissertation Committee. The student must be admitted to candidacy at least 12 months before the degree is received. Admission to candidacy is usually not possible until completion of one-and-a-half years of post-master's graduate work. Admission to candidacy is requested through the submission of Form HF #1 - ADMISSION TO CANDIDACY.

Dissertation Preparation

The dissertation must represent an achievement in research and a significant contribution to scientific knowledge. It cannot contribute more than 24 semester hours of credit to be counted as fulfillment for the Ph.D. degree, although more than 24 semester hours may be taken.

General regulations and procedures governing the submission of a dissertation are given in the Old Dominion University Thesis Guide. Additional information, including detailed procedures and qualifications for undertaking a dissertation, are provided by the student's Dissertation Committee. The dissertation and the final oral defense of the dissertation must have the majority approval of the Dissertation Committee.

A thesis or dissertation must conform in format to the Guidelines established by Old Dominion University. A thesis or dissertation is also expected to follow the format established by the *Publication Manual* of the American Psychological Association. When the ODU Guidelines and the *Publication Manual* are in conflict, the ODU Guidelines take precedence. The director of the thesis or dissertation may also impose additional style requirements. Example styles include (1) a traditional style that involves an in-depth literature review and extensive appendixes, (2) a journal-ready manuscript, and (3) a traditional style that includes a journal-ready manuscript as an appendix.

Dissertation Load Registration

As described in the University Catalog, a student must be engaged in dissertation research for no less than 12 months and be registered for at least 1 credit of dissertation research each semester. Further, a student must be registered for 1 credit during the semester of graduation.

A candidate who finds it necessary to be excused from registration for a semester must report formally, before the beginning of the semester, to the PPD and the College Dean and request a leave of absence by petition. During a leave of absence the candidate is not entitled to assistance from the Dissertation Committee or to the use of university facilities. Granting a leave of absence does not change the candidate's responsibility for meeting the deadline for the completion of degree requirements (i.e., eight years) from the time of admission to the university. Leave will be granted only under exceptional circumstances.

Oral Dissertation Defense

An oral examination in defense of the dissertation must be held. Copies of the dissertation must be delivered to the Dissertation Committee at least one week prior to the oral examination.

The time and place of the oral dissertation defense is established by agreement with the Dissertation Committee. It is the responsibility of the student to submit a written memorandum to notify the PPD, College Dean, and Associate Vice-President for Research and Graduate Studies of the time and place of the oral defense at least two weeks prior to the scheduled time of defense. It is also the student's responsibility (working through the program administrative assistant) to ensure that this announcement is published in an email to the program faculty and students. The oral dissertation defense is open to the entire university community; all interested members are encouraged to attend the defense.

The format of the defense is determined by the Dissertation Committee with the approval of the PPD. The defense is chaired by the chairperson of the Dissertation Committee. The chairperson acts as moderator, ruling on questions of procedures and protocol that may arise during the defense. The chairperson represents the College Dean, to whom he or she makes a complete and prompt report on the defense through the use of Form #10 - RESULT OF ORAL DISSERTATION DEFENSE.

The aim of the defense is to explore with the candidate the methodological and substantive contributions of the completed dissertation. In this way, the candidate and the Dissertation Committee reach a more extensive understanding of the candidate's research area. Majority approval by the Dissertation Committee members constitutes successful completion of the dissertation and is so reported by the chairperson to the College Dean. In case of failure, the Dissertation Committee may recommend the candidate be dropped from the graduate program or be allowed to reschedule the defense.

Satisfactory performance on the oral defense and adherence to all regulations outlined above complete the requirements for the Ph.D. degree in HF psychology at Old Dominion University.

Dissertation Processing

Following the oral defense and approval of the dissertation by the Dissertation Committee, the candidate must submit the finished, original copy of the manuscript for final approval by the Dean of the College. Upon final approval, the candidate must arrange for the reproduction of four additional copies (for a total of five) for submission to the Office of Student Records for binding. Students are also required to copy and bind additional copies for the Dissertation Committee members. This courtesy recognizes their contribution to completion of the dissertation. Submission of copies to Student Records should be accompanied by a validated receipt, issued by the Office of Finance, where the student pays the binding fee. Simultaneously and in addition, Form #6 - DISSERTATION ACCEPTANCE AND PROCESSING FORM and Form #11 - DISSERTATION DELIVERY must also be submitted.

Program Documentation Requirements

Each student is responsible to see that the Graduate Program secretary receives a copy of all documentation for filing in the student's personnel folder. The documentation includes all graduate forms and the Plan of Study. Faculty mentors will remind their students of this responsibility. A checklist of fulfilled requirements is maintained by the Program secretary, and this checklist may be reviewed by the student to determine his or her current status.

Graduation Procedures

All requirements for the Ph.D. degree must be completed within eight calendar years from the date of initial entry into the HF psychology program. During the semester in which the student completes all degree requirements, he or she must file an Application for Graduation in the Office of Student Records. This application must be accompanied by a Graduation Fee and must be filed by dates specified in the Graduate Catalogue and on the Registration for Diploma. All applications are available in the Office of Student Records. The Diploma Option Form should also be submitted to the Office of Student Records during the student's final semester.

APPENDIX A

CHECKLIST OF REQUIREMENTS FOR THE Ph.D. DEGREE IN HF PSYCHOLOGY

<u>Date Completed</u>		<u>Guide Reference Page(s)</u>	<u>Use Form No.</u>
_____	Diagnostic Examination (if necessary)	1	10
_____	Passed		
_____	Waived		
_____	Appointment of Guidance Committee	2	13
_____	Minimum of 3 Members		
_____	2 Representatives from HF Psychology		
_____	1 Representative from Non- HF Area of Psychology		
_____	Change in Guidance Committee	3	14
_____	Plan of Study Approved	5	N/A
_____	General Psychology Courses (approximately 30 hours)		
_____	HF Psychology Courses (approximately 30 hours)		
_____	Research Courses (approximately 18 hours)		
	Plan Filed:		
_____	Psychology Department		
_____	Office of Student Records		
_____	Residence Requirement	7	N/A
_____	Research Skills	7	10
_____	Computer Proficiency		
_____	Research Experience	8	N/A
_____	Practical Experience Requirement	8	N/A
_____	Prerequisites to Ph.D. Candidacy Examination	10	N/A
_____	Coursework Completed		
_____	QPA of 3.0 on Coursework		
_____	Internship or Applied Experience Completed		

<u>Date Completed</u>		<u>Guide Reference Page(s)</u>	<u>Use Form No.</u>
			15
_____	Ph.D. Request for Permission to Take Ph.D. Candidacy Examination	10	15
_____	Result of Ph.D. Candidacy Examination	10	10
_____	Written Part		
_____	Oral Part		
_____	Application		
_____	Scholarly publication		
_____	Admission to Ph.D. Candidacy	11	1
_____	Completed Formal Coursework		
_____	Passed Ph.D. Candidacy Examination		
_____	Filed Approved Dissertation Proposal		
_____	Appointment of Dissertation Committee	3	16
_____	Minimum of 3 Members		
_____	One member from outside Psychology		
_____	Non-university member (optional; requires special permission)		
_____	Change in Ph.D. Dissertation Committee	4	17
_____	Dissertation Preparation	11	N/A
_____	Dissertation Load Registration	11	N/A
_____	Preparation for Oral Dissertation Defense	12	
_____	2 Week Lead Time for Scheduling		N/A
_____	1 Week Lead Time for Committee Delivery		N/A
_____	Result of Oral Dissertation Defense	12	10
_____	Dissertation Processing	12	
_____	Dean's Review of Dissertation		N/A
_____	Binding Fee		N/A
_____	Acceptance and Processing Form		6
_____	Dissertation Delivery		11
_____	Complimentary Copies to Committee Members		N/A
_____	Graduation Procedures	13	
_____	Application for Diploma Form		N/A
_____	Diploma Option Form		N/A

APPENDIX B – SAMPLE HF COURSE SCHEDULE

FIRST YEAR

FALL		SPRING		SUMMER	
827 ANOVA/Res Design	41	828 Regression/Cor Design	4	698 Thesis	3
813 Research Proj I	3	814 Research Proj II	2		
XXX MS Req.		XXX MS Req.	3		
		XXX HF Core	3		
Total	8 (8)	Total	12 (20)	Total	3 (23)

SECOND YEAR

FALL		SPRING		SUMMER	
823 Adv Meas, LVA	3	XXX HF Core	3	XXX HF Elective	3
XXX HF Core	3	XXX HF Elective	3	898 Research	3
XXX HF Core	3	699 Thesis	3		
Total	9 (32)	Total	9 (41)	Total	6 (47)

THIRD YEAR

FALL		SPRING		SUMMER	
XXX HF Core	3	XXX HF Elective	3	898 Research	3
XXX HF Elective	3	898 Research	3		
898 Research	3		3		
815 Teach Psych	1				
Total	10 (58)	Total	9 (67)	Total	3 (70)

FOURTH YEAR (Quals in May; Internship in Summer)

FALL		SPRING		SUMMER	
898 Research	3	898 Research	3	891 Internship	1
XXX HF Elective	3	XXX HF Elective	3		
Total	9 (79)	Total	9 (88)	Total	1 (89)

FIFTH YEAR

FALL		SPRING		SUMMER	
899 Dissertation	3 ^b	899 Dissertation	3 ^b	899 Dissertation	3 ^b
Total	3 (92)	Total	3 (95)	Total	3 (98)

List of Courses by Classification

M.S. Requirements

PSYC 651: Developmental Psychology
PSYC 713/813: Research Project I
PSYC 714/814: Research Project II
PSYC 727/827: Analysis of Variance and Research Design
PSYC 728/828: Regression and Correlational Design
PSYC 731/831: Human Cognition
PSYC 741/841: Sensation and Perception
PSYC 749/849: Advanced Social Psychology

Human Factors Major Courses

PSYC 662: Human Computer Interface Design
PSYC 672: Advanced Physiological Psychology
PSYC 696: Topics (Safety)
PSYC 723/823: Advanced Measurement and Latent Variable Analysis (Quant III)
PSYC 770/870: Human Factors Psychology
PSYC 771/871: Ergonomics
PSYC 867: Human Performance Assessment
PSYC 872: Methods, Measures, Techniques and Tools in Human Factors

Human Factors Elective Courses

PSYC 763/863: Personnel Psychology
PSYC 750/850: Organizational Psychology
PSYC 815: Teaching Psychology
PSYC 878: Advanced Cognition and Information Processing
PSYC 896: Topics (Aviation Psychology)
PSYC 896: Topics (Perception in Real and Virtual Environments)
PSYC 896: Topics (Advanced Human Factors)
PSYC 896: Topics (Structural Equation Modeling)
PSYC 896: Topics (Hierarchical Linear Modeling)

Note: Students may also take elective courses outside the department, pending approval from their guidance committee.

APPENDIX C

SAMPLE PROGRAM OF STUDY

**Joe Student
Ph.D. Program of Study**

Major: Human Factors Psychology
Minor: Organizational Psychology
Expected Graduation: May 20XX

Chronological Listing of Coursework

I. Courses Taken:

Semester	Course #	Course Title	Credit	Grade
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II. Courses Remaining:

Semester	Course #	Course Title	Credit
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Content Listing of Coursework

III. Master's Requirements

A. Required Core Master's Level Courses

Course #	Course Title	Credit	Semester	Grade
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Have Taken:

Total: XX.0

B. Additional Courses

Course #	Course Title	Credit	Semester	Grade
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Have Taken:

Total: XX.0

Note: Master's Degree [to be] Awarded Fall 20XX.

IV. Doctoral Requirements

A. Personnel Major Content Courses (XX hours)

Course #	Course Title	Credit	Semester	Grade
Have Taken:				

Total: XX.0

Remaining:

Total: XX.0

B. Organizational Minor Content Courses (XX hours)

Course #	Course Title	Credit	Semester	Grade
Have Taken:				

Total: XX.0

Remaining:

Total: XX.0

C. General Psychology Electives (XX hours)

Course #	Course Title	Credit	Semester	Grade
Have Taken:				

Total: XX.0

Remaining:

Total: XX.0

D. Research and Dissertation Courses (XX hours)

	Course #	Course Title	Credit	Semester	Grade
Have Taken:					

Total: XX.0

Remaining:

Total: XX.0

Note: Quals to be taken [insert date].

V. Professional Experience

- Teaching Assistant in [insert class, date]
- Research Assistant for [insert project name, date, funding agency]
- Etc.

VI. Membership in Professional Associations

- Human Factors and Ergonomics Society
- International Ergonomics Association
- Etc.

VII. Presentations

- Student, J. (date). My years as a fledgling graduate student. Paper presented at the 1st Annual Meeting of the ODU Graduate Student Association. January 15. Norfolk, VA.
- Etc.

VIII. Publications

- Student, J. (date). How to create programs of study. *Journal of academic paperwork*, 1, 1, 1-10.
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- Etc.

IX. Short-Term Goals / Milestones

- This should include a narrative description of short-term (1-2 years hence) goals, plus a bullet list of accomplishments relevant to your chosen career path.

X. Long Term Goals / Milestones

- A narrative description of your long-term (post 2-year) plans and goals, including your desired employment sector, job responsibilities, etc.

XI. Guidance Committee Members

- | | |
|-------------------|-----------------------|
| • Jane Professor | Academic Mentor |
| • John Professor | Committee Member |
| • Chris Professor | Non-HF faculty member |

XII. Curriculum Vita

APPENDIX D

POLICY CONCERNING CANDIDACY EXAMS

Qualification exams are administered to evaluate a student's achievement and understanding of concepts, theories, practices, and empirical facts about the major and minor areas of concentration. The HF faculty generated this policy statement to clarify the testing procedures for qualification exams. These policies, and this letter, are derived in part from policies that have been in operation since the January 1994 testing period, and were revised in February of 2006. If you need further clarification, please see the PPD.

The HF qualification exam is administered to evaluate a student's achievement and understanding of concepts, theories, practices, and empirical facts about fundamental HF information, as well as information relevant to the student's major area of concentration within HF. The exam is eight hours in duration; four for fundamental HF material, and four for information relevant to the concentration area.

The sites for administration of the exams are located in the Mills Godwin Building and are selected to ensure that testing is done in a quiet and isolated environment that is free of walk-through traffic, telephone interruptions, and other distractions that would interfere with exam performance. Room assignments for exam administration are made by the test administrator. If a student prefers a particular room in the Mills Godwin Building, it is the student's responsibility to communicate preferences and make arrangements with the test administrator. Exceptions to the requirement of Mills Godwin as the administration site can be obtained by permission of the student's Guidance Committee (e.g., due to a physical disability that requires the use of special equipment for exam administration). It is the responsibility of the student to gain exception to the site requirement.

Study and preparation for the exam is the student's responsibility. The nature of the exam depends on the area of concentration. Consultation with faculty members on the student's Guidance Committee about the exam is useful for setting expectations and guiding study efforts. An example of an HF comprehensive exam (questions only) is available in the Psychology Department Office. Students may inspect or copy it to aid in preparation. Students are discouraged from reviewing prior answers from other students who have completed the qualifying exam; furthermore, the Guidance Committee and test administrator do not provide such information.

Exam responses must be typed or printed via word processor to ensure legibility for faculty scorers. If a student wants to generate hand-written responses, it is the student's responsibility to get those responses typed or printed; a copy of the hand-written responses is made and retained by the test administrator before the responses are typed or printed.

The Department of Psychology will provide a computer for each student to use to generate their responses. The computer will be equipped with a word processing program, but will not be connected to the internet, and will have no other functional software. The student is responsible for becoming familiar with the word processing software used and the particular computer configuration to be used for testing. On the day of the exam, the test administrator or a representative will deliver the exam questions to the student on removable storage media. After the exam is completed, the student must submit to the test administrator (or a representative) the storage

media, including the exam questions and the answers generated. Students must make a backup copy of the exam answers on the computer's hard drive. The student is not required to print the files containing his or her responses to the exam questions.

A student may consult published books and articles as well as hand-written, typed, or printed notes during the exams. However, students may not copy material directly from any source, including material written by the student prior to the exam. Students may not use any material that has been entered onto digital media (e.g., word processor files on diskette). The student may not consult any person (e.g., other students or faculty members); the honor code is in operation during the qualification exams.
