

11/3/06

**General/Experimental Program Plan for Assessment of Student Learning**  
**F. Richard Ferraro, Ph.D., G/E Program Director**

***A. Mission Statement***

The mission of the University of North Dakota (UND) General/Experimental (G/E) PhD program is to provide quality educational experiences to qualified graduate students that promote critical thinking and creative skills based on the current theory, principles, and methodologies and techniques of experimental psychology. These will be promoted through written as well as oral communication. Graduates of our program will be prepared for careers as academicians at the college and/or university level, researchers in private industry and education, and/or teachers at the college and/or university level and will all show continued evidence of expertise within their various specializations in G/E psychology. G/E students should anticipate and expect broad exposure to a variety of issues and topics in the field of experimental psychology and, as a result, each student is expected to establish a firm theoretical and academic foundation that will support their later pursuit of more specialized academic interests. This will be in evidence via a broad breadth of knowledge appropriate to receiving a MA and/or PhD in General/Experimental Psychology. The G/E faculty have two specific goals in mind for students. These include:

**Student Learning Goal # 1** – Students of the G/E program will demonstrate a base of knowledge regarding the field of experimental psychology which will extend beyond specialized experimental areas.

**Objective 1.1:** Students will have a general understanding of foundational psychological principles in the various courses covered by the G/E program faculty, including Cognitive, Learning, Physiological, Social, Developmental, Sensation & Perception, Statistics & Research Design, and Educational Psychology.

**Objective 1.2:** Students will have a general understanding of foundational psychological methods in the various courses covered by the G/E program faculty, including Cognitive, Learning, Physiological, Social, Developmental, Sensation & Perception, Statistics & Research Design, and Educational Psychology.

**Objective 1.3:** Students will have a general understanding of foundational psychological theories in the various courses covered by the G/E program faculty, including Cognitive, Learning, Physiological, Social, Developmental, Sensation & Perception, Statistics & Research Design, and Educational Psychology.

**Objective 1.4:** Students will demonstrate mastery of topic material, an understanding of various theoretical areas, understand and solve new problems in their specific topic area, understand current trends in their topic area and demonstrate adequate mastery of topic areas covered on the comprehensive examinations

**Student Learning Goal # 2** – Students of the G/E program will demonstrate ability to design, conduct, analyze, and report/disseminate research that advances the scientific study of psychology.

**Objective 2.1:** Students will have a general understanding of advanced experimental design skills and demonstrate proficiency with a range of design skills and techniques to match the specific area of research.

**Objective 2.2:** Students will have a general understanding of advanced experimental methodology skills and demonstrate proficiency with a range of methodological skills and techniques to match their specific area of research.

**Objective 2.3:** Students will have a general understanding of advanced experimental data analysis techniques and demonstrate proficiency with a range of analysis skills and techniques to match their specific area of research.

**Objective 2.4:** Student will have a general understanding of advance experimental report writing/publication and develop a set of writing skills to ensure consistent publication and contribution to match their specific area of research.

**Objective 2.5:** Students will be able to produce a thesis/dissertation that flows logically, is clear and concise with regard to grammar and content, is based on an up-to-date literature review, allows for logical hypothesis testing with accurate and acceptable methodology, uses adequately designed experiments, analyses data correctly and competently, and provides a summary narrative that adequately concludes what the thesis/dissertation will contribute to psychological science but also advances the discipline in future directions.

**Objective 2.6:** Students will be able to adequately and orally defend their thesis/dissertation in a meaningful and logical flow of ideas, produce a logical media presentation using the latest and most up-to-date technology available, convince the committee of appropriate authorship and scholarship of the work presented including adequate proof of their hypotheses, convince the committee that they have achieved expert status with regard to their thesis/dissertation topic, and indicate the likelihood of subsequent professional presentation and publication of the material.

## ***B. Assessment***

### **1. Pre-Graduation**

The above stated goals will be assessed in a number of ways including coursework (required and elective), written work (including thesis/dissertation proposal document and final document), written comprehensive examinations, and oral presentation and publication of thesis/dissertation and other research results. Annual meetings will take place with the Director of the G/E program to ensure that Student

Learning Goals and Objectives are being met in a timely manner. A yearly evaluation of the students will be conducted by the G/E faculty and reported at the Department level (Chairperson and annual student evaluation meeting) and this information will be deposited in the students file. Current students will also evaluate the program annually as a way to ensuring that common Student Learning Goals and Objectives are being met in a timely fashion. Student feedback will be examined and discussed by the G/E faculty.

## **2. Post-Graduation**

Graduates of the G/E program will be assessed in a number of ways including employment history and participation in a Program Evaluation Survey. Since the 1980's approximately 20 students have graduated with an MA and/or PhD in General/Experimental Psychology from UND and there are currently 8 students enrolled in the program as of the date listed above. One student resigned from the program in 2006. A G/E Program Evaluation Survey will also be given to current G/E students as a means of collecting program evaluation data.

### ***C. General/Experimental Ph.D. Program Plan for Assessment of Student Learning***

**1. Student Learning Goals/Objectives:** The 2 goals are listed above.

**2. Educational Experiences:** All G/E students must take PSY 541 – Advanced Univariate Statistics, PSY 543 – Experimental Design and PSY 542 – Test Construction and Multivariate Analysis. Beyond these courses, and because the G/E program is not accredited like the department's Clinical Program, G/E students are free to take courses that fit into their own specific interest levels. For instance, many G/E students may take the following Foundation type courses (PSY 435 – Physiological Psychology, PSY 594 – Psychophysiological Psychology, PSY 560 – Advanced Social Psychology, PSY 505 – History of Psychology, PSY 533 – Theories of Learning, PSY 539 – Cognitive Psychology, PSY 551 – Advanced Developmental Psychology, PSY 521 – Individual & Group Differences, PSY 594 – Psychology of Women, and PSY 594 – Multicultural Psychology. The department also offers a number of on-demand/elective type classes that are typically listed as PSY 599. G/E students have also taken classes in other departments on campus including Teaching classes from the Education College and Neuroscience and Anatomy classes from the Medical School. Some have also taken classes from the Mathematics Department that related to the student's interest in statistics. Furthermore, G/E students are also allowed to take certain courses offered by faculty from the Clinical Program and these have included PSY 570 and PSY 571 (Clinical Assessment I and II), PSY 575 (Behavior Pathology). Other courses may be taken at the discretion and approval of the student's MA and/or Dissertation committee chairperson.

**3. Assessment Methods:** Several assessment methods exist, including traditional course examinations, written works (term papers, projects, research projects), syllabus development (for those students interested in teaching) as well as student course evaluation surveys. Survey data will be collected in semesters when various courses are

made available and analyzed the following semester. Additionally, Assessment Checklists will be incorporated into the MA thesis proposal and defense, the PhD proposal and defense and the comprehensive examinations. Data will be collected from all committee members at the end of said thesis and/or dissertation proposal meetings. For the Comprehensive examination process, data will be collected at the regular meeting of the G/E faculty when discussing a specific student's comprehensive examination performance. The Comprehensive Examination assessment checklist will ask program faculty various questions related to topics including Foundation, Theory, Problem-Solving, Current Trends and Clarity of Answers. The Thesis and Dissertation checklists will include questions about Organization, Clarity of Written and Oral Communication, Adequacy of the Literature Review, Justification of Work, Overall Contribution to the Discipline, Experiment and Results and overall Conclusions and Discussion of the work. The Defense checklist will ask questions about Organization of the Final Oral Examination, Clarity of Presentation, Authorship and Expertise, Theoretical Proof of their Hypotheses, and Potential for Publication/Presentation of Results. A 5 point Likert scale will be used to collect data from committee members and this data will be summed and reported back to the G/E faculty as a way to see if program goals are being met, what areas show growth, and what areas require additional assessment and want improvements in the G/E program can be made. It is expected that these assessment data will allow for program goals to be met, exceeded and revised as needed. Assessment questions will ask about written and oral communication, critical thinking skills, evidence within the field of general/experimental psychology, adequate use of appropriate research methods and methodology, integrative thinking and evidence of breadth of knowledge within general/experimental psychology. The scale will range from Unacceptable (-2) to Unsatisfactorily (-1) to Neutral/No Opinion (0) to Satisfactorily (+1) to Excellently (+2). A copy of the questions for each assessment checklist is at the end of this document. Scores that fall at the 0, -1, and/or -2 level will require additional program scrutiny and revision and may result in improvements being made to the program as a whole.

**4. Timeline:** The G/E students follow the following time-line. All G/E students are aware of Normal Progress which is operationally defined as maintaining a 3.0 GPA (although a 3.5 GPA is required to be advanced to doctoral candidacy), have their MA thesis data collected by the end of the Spring semester of their 2<sup>nd</sup> year, and successfully defend (and gain final committee approval for) their MA thesis before the first day of classes during the Fall semester of their 3<sup>rd</sup> year. Funding is made available for only the first 4 years. During Year 1 all G/E students will form their MA committee, develop and get approval for MA Program of Study, and propose a MA thesis project. During Year 2 all G/E students will collect MA thesis data, prepare the MA thesis, obtain preliminary approval of the MA thesis, have their MA oral examination, obtain final approval of MA thesis, and be advanced to doctoral candidacy by the psychology department. During Year 3 all G/E students will form a PhD committee, develop and obtain approval of PhD program of study, take and pass the comprehensive examination, obtain PhD advisory committee approval for admission to doctoral candidacy and propose PhD project. In year 4 all G/E students will have their PhD outline approved, conduct the PhD project, write up the PhD dissertation, gain preliminary approval of the PhD, successfully pass the Final Oral Examination for the PhD, and submit the final approval of the dissertation.

The assumption is that all G/E students will finish the program (if they start with a BA/BS degree in 4-5 years; if they start with a MA/MS degree in 2-3 years) in a timely fashion. Additionally, it is assumed that all G/E students will complete the MA thesis, dissertation thesis and comprehensive examinations on the initial attempt. If not, students get 1 revision attempt. If they do not pass the exam on this revision the G/E faculty will determine if the student should be allowed to continue in the program. These timeline data will be collected and analyzed by the G/E Director and reported back to the G/E faculty. If the data indicate that students are not completing program milestones in a timely fashion, the G/E director will report this to the G/E faculty as a way of possibly improving the speed at which students are completing the program and completing program milestones. If students are taking longer than expected to complete the program and/or reach program milestones, this feedback could be used by program faculty as a starting point as to why this is occurring (e.g., admit stronger students, allow more flexibility in course choices, work more 1:1 (and earlier) with students that begin to show slowdown in program progress by the end of the first year).

**5. Responsibilities:** Individual instructors will be responsible for all aspects of the classes G/E students take from them. The G/E Director will meet individually with each G/E student through their tenure in the program yearly to discuss program progress as well as instances of when the student fall out of normal progress. The G/E director will meet bi-weekly with the G/E faculty re: student issues, program issues, and matters arising that are relevant to the G/E program (e.g., graduate admissions, faculty hiring) and minutes of these meetings will be retained by the Director and a copy will be made available in the Psychology Department Office. All G/E students are evaluated annually by the program and department and a written summary of this evaluation is deposited in the student's permanent departmental record. Discussion of these evaluations are made annually by the entire department at the Student Evaluation Meeting. The G/E director will also be responsible for obtaining program feedback from current (and former) students and informing the faculty of this feedback.

**6. Use of Results and Process for Documentation and Decision Making:** Results will be documented and communicated by the G/E director to the G/E faculty as well as the remaining members of the psychology department. This information will be given to the department chairperson for inclusion in the department's annual report. A copy of this report is routinely given to the Dean of Arts & Sciences, the Graduate Dean the Provost, and the President for their inspection. Each student's progress will be checked against the timeline outlined above and any discrepancies will be noted in the annual report of the G/E director. Results will be used in an on-going fashion in order to ensure that students are completing the program on time, passing comprehensive examinations on the first try, that courses needed for successful completion of the degrees (MA, PhD) are offered and available, that our plan for student learning and assessment is viable and if revision of said plan is required.

#### **D. Comprehensive Examination Assessment Checklist Questions**

1. Foundation: At what level has the student demonstrated mastery of topic material.

2. Theory: At what level has the student demonstrated an understanding of the theoretical material.
3. Problem-Solving: At what level of has the student demonstrated the ability to solve new problems in the topic area.
4. Current Trends: At what level has the student demonstrated knowledge of current trends in the topic area.
5. Clarity of Answers: To what extent did the student answer the comprehensive examination questions in a clear and concise manner.

#### **E. Thesis/Dissertation Assessment Checklist Questions**

1. Organization: Does the thesis/dissertation flow logically.
2. Clarity: Is the writing and grammar clear, concise and correct.
3. Literature Review: Is the literature current and up-to-date.
4. Justification of Work: Does the Introduction flow directly into testable hypotheses and is the Methodology logical and acceptable.
5. Experimental Design/Results: Are the experiments designed appropriately to test the hypotheses. Are the data analyzed correctly and competently and can the student adequately justify the experimental design and data analysis techniques.
6. Conclusions/Discussion: Does the conclusion/discussion summarize what was found and what logical direction the research should go next.

#### **F. Final Oral Examination/Defense Assessment Checklist Questions**

1. Organization: Does the presentation flow logically.
2. Clarity: Are the slides/powerpoint media self-explanatory and does the student discuss them in a logical fashion.
3. Authorship: Does the student convinced the committee that they are the sole author of the work presented.
4. Expertise: To what extend has the student convinced the committee that they are now an expert in the topic area of the thesis and/or dissertation.
5. Demonstration: Did the student provide adequate proof of their hypotheses.
6. Publication: What is the likelihood that the results are publishable.