

Comprehensive Exam for Cognition and Instruction

The Comprehensive Examination for Cognition and Instruction consists of a portfolio assessment in the areas covered in core Cognition and Instruction courses and representative of each student's program. Students will submit an independently designed portfolio consisting of their best research work, comprehensively representing their breadth and depth of knowledge and research capabilities acquired through their program of study at the University of Connecticut. The comprehensive examination process culminates in an oral examination arranged by the student's advisory committee.

The "Advisory Committee" must be formed in compliance with Graduate School guidelines that the committee to have at least 3 members, including a chair from the Cognition and Instruction program and at least one associate advisor from the EPSY department, in which the degree is awarded, but not necessarily from the Cognition and Instruction program. The Advisory Committee is responsible for administering and overseeing the comprehensive examination process and, with the assistance of two outside readers, is responsible for evaluation of all components including the oral examination. The major advisor chooses the two outside readers; distribution of labor on evaluating the components is at the discretion of the advisory committee.

The portfolio will consist of a minimum of seven components, and is expected to be completed by the first semester following completion of Cognition and Instruction core coursework, and within the guidelines set by the graduate school. Your major adviser will be able to assist you and offer additional guidance as you prepare your portfolio. Items 5, 6, and 7 must be completed within the same semester, Fall, Spring, or Summer (sessions 1 and 2 combined). Two readers in addition to the advisory committee will be selected by the major advisor at the beginning of the semester in which items 5,6 and 7 are to be completed. The readers will be required to evaluate all portfolio components and submit written feedback to the major advisor by the completion of the oral.

Portfolio Components

1. **Current Vita.** The student will submit an updated complete Curricula Vita. The C.V. may contain the following information:
 - a. Contact information
 - b. Educational degrees
 - c. Papers and book chapters published
 - d. Papers presented at conferences; published proceedings
 - e. Technical reports
 - f. Teaching experience
 - g. Positions held
 - h. Special skills
 - i. Languages
 - ii. Technology skills
 - iii. Other

2. Philosophy and Pedagogy Statement. The student will prepare a personal statement with regard to their philosophy of thinking, teaching, and learning. Instructions for completion of this requirement can be found below.

During completion of your coursework, you have encountered many theorists and scholars who have espoused tenets of thinking, teaching and learning. In 8, double-pages or fewer (Compliant with APA guidelines; references, tables, figures are not included in 8 pages), present a statement of philosophy and pedagogy that describes three of your tenets regarding "best cognition and instruction practices." Of course, it may be obvious that teaching and learning positions complement one another. As you present these points of view, refer to at least one philosopher, psychologist, or educational psychologist who holds similar viewpoints. Additionally, introduce the ideas of at least one philosopher, psychologist, or educational psychologist who would express opposing views to yours. Emphasize at least one major difference between your views and those of the opposing ones. With respect to this difference, argue why you think your view is better for the enhancement of thinking, teaching and/or learning.

Then as you begin to close your statement, we ask that you think about the future give your philosophical views. Be visionary. List one good and one bad thing that you think likely to happen to education in the next 25 years. How might your philosophy or associated practices help us realize this "good thing" or avoid/ overcome the "bad thing" that you envision for us?

Your response will be evaluated for:

- a) your ability to state your philosophical views clearly
- b) your accurate reference and description of the viewpoints/works of others
- c) the overall cohesion and semantic clarity of the full response including accurate use of APA style
- d) your ability to hypothesize about the impact of your philosophical views for the future

3. Research Papers/Presentations. Students must complete two professional products in the form of published papers or presentations at professional conferences. Details on this requirement can be found below.

Students must complete two professional products. For one professional products, the student must be the first author of an empirical paper or must be the co-author who is primarily responsible for the empirical analysis. In multiple author situations, the paper must be accompanied by a brief explanation of the student's role in the paper.

For the second professional product, the student may be the primary author or co-author. The second product may be an empirical paper, but it does not have to be.

The following is a list of possible professional products, both empirical and not empirical, that students may submit.

- a. Empirical refereed publication incorporation quantitative and/or qualitative methods
- b. Refereed publication---literature review
- c. Refereed publication---book review
- d. Refereed publication---test review
- e. Book chapter of an edited volume
- f. Computer software program

- g. Test manual
- h. Empirical paper presented at an international conference
- i. Empirical paper presented at a national conference
- j. Empirical paper presented at a regional conference
- k. Technical report demonstrating proficiency in quantitative and/or qualitative methods
- l. Federal grant proposal incorporating quantitative and/or qualitative methods
- m. State grant proposal incorporating quantitative and/or qualitative methods
- n. Federal grant proposal for teaching or technology program development
- o. State grant proposal for teaching or technology program development

4. Statistics Component. The student will submit one research-based, quantitative analysis paper to provide evidence of their ability in this area. *Note: Either of the products for the papers/presentations requirement may be used to fulfill the statistics component.* Alternatively, EPSY346 with a B or better can be substituted for this component.

The Statistics and Evaluation Component of the Comprehensive Examination in Cognition and Instruction is showcase component. This means that you get to decide how to best illustrate your quality work in measurement, research methods, statistical analysis, or program evaluation. Members of Cognition and Instruction are aware that you have likely completed at least one project that can be showcased, if not more. For example, you may decide to submit a completed evaluation study from an independent project, or an updated or revised copy of your best work from among several quantitative applied course projects. In the case of a paper presented at a conference, or a manuscript submitted or accepted for publication, please provide a copy of this work for your portfolio submission.

Purpose of this component: Demonstrate competence in research design, quantitative analysis, and interpretation of statistical results.

Portfolio Submission: A published/presented statistical paper, or application of appropriate statistical coursework in the form of a completed research and quantitative analysis paper. The student will submit one piece of evidence of his/her best work in this area. Alternatively, the student will provide evidence of having successfully completed the course EPSY346 with a grade of B or higher.

Examples of Portfolio Submissions:

- Conference presentation of a research paper or poster, involving statistical design and analysis for which the student was the primary responsible author.
- Personal project for which a full research and analysis paper is prepared. Examples could be updated (not resubmitted) quantitative projects from courses including:
 - 344 Construction of Evaluation Instruments
 - 346 Multivariate Analysis in Educational Research
 - 405 Program Evaluation
 - 406 Sampling Designs and Survey Research Methods in Education
 - 436 Measurement Theory and Application
 - 437 Item Response Theory
 - 440 Logistic and Hierarchical Linear Models

- Manuscript submitted or manuscript accepted for publication which includes statistical design and analysis, measurement analysis, or program evaluation and interpretation for which the student was the responsible author.

5. Syllabus Response. The advisory committee will assign a course topic for which the student will create a syllabus with supporting documents(1 week time limit).

6. Article Analysis. Students will read an article or book selected from the educational psychology literature, and prepare a written response to a prompt provided in relation to that article. The student has one week to respond to the prompt. Additional information on the article analysis can be found below.

An article or book will be selected for you by the advisory committee that represents an important or controversial piece in our field.

Your task is to thoroughly read the article and prepare for a prompt that will require you to analyze the current article and respond in such a manner as to demonstrate your knowledge of the field, your ability to analyze and synthesize the field, and to communicate these skills in writing. You will have one week to read the article before receiving the prompt, and one week in which to submit your written response to the prompt. The response is limited to 8 double spaced 10 pt font (or larger), not including references.

You **may** be required to take a specific position regarding the present article and defend it with relevant research citations, to provide an alternative explanation with evidence supporting your positions(research-based evidence), or to design an experiment that would test some of the points raised in the article. You **may** be asked to serve as a member of an editorial board for a journal and to provide a review of the manuscript for the author(s), suggesting improvements and commenting on components that are exemplary.

You will be graded on your ability to demonstrate a depth of knowledge, skill in analysis and synthesis, your ability to make a clear case for your position(providing appropriate citations) and your ability to write in a professional manner within the field of educational Psychology.

7. One-hour Oral Examination. The oral examination typically focuses on the student's personal statement, their research, and the article essay, but may include questions related to any of the portfolio components. The date for the oral examination will be set by the student and his/her committee.

This will consist of a one-hour oral examination in which questions are posed by the advisory committee and two outside readers. All faculty in Cognition and Instruction will be notified of the oral examination and invited to attend.

Additional refereed publications, including "in press", published proceedings, and online journal articles.