

# QUANTITATIVE PSYCHOLOGY MINOR

## OVERVIEW

A minor in quantitative psychology is offered for all graduate students enrolled in any of the Department of Psychology's major programs: Clinical, Clinical Child, Cognitive, Developmental, and Social. The quantitative psychology minor is an add-on to the regular program and does not replace any existing or future requirements of the student's major program of study. Students desiring a major emphasis in quantitative psychology should apply directly to the Quantitative Psychology Program.

The Quantitative Psychology Minor consists of advanced coursework in statistics, measurement and methodology. There are two purposes for the quantitative minor. First, and most obviously, it provides the student with elevated levels of quantitative expertise in order to enhance the overall quality of the student's program of research. Second, it provides students with a competitive edge in the job market. In the academic arena, many faculty positions are now requesting both expertise in a substantive area *and* expertise in quantitative methods. In the non-academic arena, the possession of advanced quantitative skills also affords student additional job opportunities. The goal of the quantitative minor is to provide the additional credentials needed to pursue these academic and nonacademic jobs.

The quantitative psychology minor consists of completing PSYC 790 Statistical Methods in Psychology plus five elective quantitative analysis courses. The classes could be taken in the Department of Psychology, or in other departments where approved, including Educational Psychology and Research, and the School of Business. Currently available courses in the Department of Psychology include Multivariate Analysis, Structural Equation Modeling I, Structural Equation Modeling II, Measurement (Classical and Item Response Theory), Attitude Measurement, and a regularly offered Advanced Topics in Quantitative Psychology seminar with varying topics.

The quantitative psychology minor should be distinguished from the Quantitative Psychology program. The Quantitative Psychology graduate program typically involves the completion of coursework and the following: (1) participation in teaching, research, and trainee assistantships relevant to quantitative psychology, (2) presentation of papers or posters at a quantitative association, such as the Psychometric Society, and (3) the completion of a basic or applied quantitative dissertation.

## FOR MORE INFORMATION PLEASE CONTACT:

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## FOR APPLICATION MATERIALS:

Go to: [www.psych.ku.edu](http://www.psych.ku.edu)

## **PROGRAM FACULTY AND STAFF**

The Quantitative Psychology Program expects to be adding additional faculty in the coming years. Currently, the following persons are core or associated faculty and research staff members:

### *Core and Associated Faculty*

**Todd D. Little, Ph.D., 1988, University of California at Riverside** (Associate Professor & Program Director, Quantitative Psychology; Director, Research Design & Analysis Unit, Institute for Life Span Studies). Psychometric methods, structural equation modeling, longitudinal modeling, selection effects, multi-level modeling.

**James A. Bovaird, Ph.D., 2002, University of Kansas** (Lecturer, Quantitative Psychology; Research Associate, Institute for Life Span Studies). Neuroscience data analysis, multilevel modeling, longitudinal methods, latent variable modeling, inference issues, detecting test-taking strategy, cognitive ability testing, construct validity. 10/25/2007

**Douglas R. Glasnapp, Ph.D., 1970, George Peabody College for Teachers** (Professor, Educational Psychology and Research; Co-Director, Center for Educational Testing and Evaluation). Applied statistical analysis, measurement and testing methodology.

**Steve Hillmer, Ph.D., 1976, University of Wisconsin-Madison** (Professor, School of Business). Mathematical statistics, statistical methods applied to solving organizational & business problems, total quality management, time series analysis and forecasting.

**Janet G. Marquis, Ph.D., 1983, University of Kansas** (Adjunct Assistant Professor, Psychology and Research in Education; co-Director, Research Design & Analysis Unit, Institute for Life Span Studies). Time series analysis, multivariate analyses, latent variable models, general linear mixed models, quasi-experimental and experimental design, statistical computing.

**Vicki Peyton, Ph.D., 2000, University of Kansas** (Assistant Professor, Psychology and Research in Education; Research Associate, Center for Educational Testing and Evaluation). Differential item functioning, multilevel modeling.

**John P. Poggio, Ph.D., 1972, Boston College** (Professor, Educational Psychology and Research; Co-Director, Center for Educational Testing and Evaluation). Educational measurement, measurement theory, program evaluation.

### *Associated Research Staff*

**Kandace K. Fleming, Ph.D., 1998, University of Kansas** (Statistical and Informational Officer, Research Design & Analysis Unit, Institute for Life Span Studies). Hierarchical linear modeling, multivariate analyses, experimental design.

**David W. Slegers, A.B.D., Bowling Green University** (co-Director, Advanced Statistical Methods Core; Research Associate, Institute for Life Span Studies). Longitudinal modeling, Bayesian hierarchical models, test theory, and bounded rationality decision-making algorithms.

**Xiangdon Yang, Ph.D. 2003, University of Kansas** (Research Associate, Center for Educational Testing and Evaluation). Item response theory, categorical data analysis, computerized adaptive testing.