

Current Topics in Educational Psychology and Research
PRE 918 – Fall 2007
Monday 1:30 – 4:15
Pearson 720

Instructor: Neal Kingston
Office 1: 640 JRP
E-Mail: nkingsto@ku.edu
Phone: 785-864-9705
Office Hours: Walk in or by appointment

Required Texts

None

Context of Course within the School of Education Mission

The primary mission of the School of Education is to prepare leaders in education and human services fields. As stated in the School Code:

Within the University, the School of Education serves Kansas, the nation, and the world by (1) preparing individuals to be leaders and practitioners in education and related human service fields, (2) expanding and deepening understanding of education as a fundamental human endeavor, and (3) helping society define and respond to its educational responsibilities and challenges.

The components that frame this mission for our initial and advanced programs are Research and Best Practice, Content Knowledge, and Professionalism. These interlocking themes build our Conceptual Framework.

Purpose of This Course

The purpose of this course is to provide graduate students who will be pursuing careers in research methods, evaluation, measurement, or statistics with a knowledge and appreciation of current topics in these fields. In Spring 2007 the course will focus on four topics:

- Advances in Validity Theory
- Diagnostic Testing Models
- Meta-Analysis
- Measuring Growth

Broad Course Objectives

- Students will be able to read, evaluate, and synthesize the literature on these issues.
- Students will be able to identify the major features of different integrated psychometric-cognitive models and determine which might be appropriate for different constructs.
- Students will be able to design and carry out a simple meta-analysis.
- Students will be able to identify the challenges associated with measuring growth and suggest approaches to address those challenges.
- Students will be able to develop simple and complex validation plans and identify challenges to implementing those plans.

Syllabus PRE 725 (Spring 2007)

Week	Date	Topic
1	August 20	Introductions, Class Requirements, Overview of Topics <ul style="list-style-type: none"> • Validity theory • Meta-analysis • Diagnostic Testing • Growth Modeling
2	August 27	Class selection of a topic for meta-analysis Validity I <ul style="list-style-type: none"> • History of the concept of validity
3	September 3	No class
4	September 10	Validity II Messick, 1989
5	September 17	Term paper topics due Validity III <ul style="list-style-type: none"> • Artifacts in Validity Research • Validity Generalization
6	September 24	Meta-Analysis I <ul style="list-style-type: none"> • Philosophy and General Methods
7	October 1	Meta-Analysis II <ul style="list-style-type: none"> • Fitting Effect Size Models
8	October 8	Meta-Analysis III <ul style="list-style-type: none"> • In Class Meta-Analysis Project
9	October 15	Diagnostic Testing I <ul style="list-style-type: none"> • Approaches to Diagnostic Testing (clinical and psychometric) • Overview of item response theory
10	October 22	Diagnostic Testing II <ul style="list-style-type: none"> • Psychometric diagnostic models
11	October 29	Diagnostic Testing III <ul style="list-style-type: none"> • Findings from the application of diagnostic psychometric testing
12	November 5	Growth Models I <ul style="list-style-type: none"> • The naïve approach: $X_1 - X_2$ • Vertical scaling • Challenges in measuring growth of individuals • $T_1 - T_2$
13	November 12	Growth Models II <ul style="list-style-type: none"> • Measuring change in group scores
14	November 19	Term papers due Growth Models III <ul style="list-style-type: none"> • Growth models and NCLB
15	November 26	Class Presentations
16	December 3	Class Presentations
17	December 10	No Final

Evaluation Activities

Class Participation	30%
Gathering research for class meta-analysis project	30%
Term project	40%

Policies

Cheating: Any student found cheating will be given a 0 for that exam/project/assignment and reported to the Academic Dishonesty Committee.

Assignments: Students are expected to work by themselves. Any use of the ideas of another work must be cited appropriately. Any words of another should be clearly shown as such. Any degree of plagiarism is unacceptable and will be treated as cheating.

Attendance: All students are encouraged to attend class regularly, but attendance is not mandatory. You do NOT need to notify me of absences.

Accommodations: The staff of Services for Students with Disabilities (SSD), located in Strong 135, coordinates accommodations and services for KU courses. If you want accommodations and have not yet contacted them, please do so as soon as possible. Please also see me privately if you think accommodations are desirable.

Blackboard: I will use Blackboard to share notes and data and create discussion groups.