Eastern Illinois University

New Course Proposal

PSY 5020, Advanced Measurement Principles

1. Catalog Description
   a. Psychology 5020
   b. Advanced Measurement Principles
   c. 3-0-3
   d. F
   f. This course provides a review, elaboration, and extension of the basic psychological measurement principles and procedures used in the construction and evaluation of psychological and educational tests and methods to quantify psychological constructs.
   g. Prerequisite: None.

2. Objectives of Course
   Following the successful completion of this course the student will be able to:
   • Identify, describe, and apply appropriate uses of reliability and validity techniques to such psychometric questions in the psychological measurement area.
   • Understand and articulate the principles outlined in the Standards for Educational and Psychological Testing (AERA, APA, NCME, 1999).
   • Utilize appropriate data analytic procedures via SPSS, SAS, or other computer statistics package given specific psychometric research questions relating to reliability and validity.
   • Present and report empirical results according to APA Publication Manual style.

3. Outline of the Course

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**Evaluation**

a. Students will complete 10 Exercises in applied psychological measurement designed to reinforce data analysis and interpretation illustrated in class readings and lecture. Sample data sets will be provided along with specific research questions involving methods in reliability and validity. Students will use data analysis procedures and provide statistical results to answer the research questions and write a brief report of the results according to the *Publication Manual of the American Psychological Association* (5th Ed.).

b. Students will complete an integrative final exam assessing course content.

c. Grading Scale
   - A = 90% and above
   - B = 80% to 89%
   - C = 70% to 79%
   - D = 60% to 69%
   - F = 60%
4. Implementation
   a. Initial Instructor: Gary L. Canivez, Ph.D.
   b. No additional cost to students
   c. Texts for the course
      Supplemental Reading: TBA Annually
   d. Psychology 5020 will be offered Fall 2002

5. Rationale
   a. Purpose and Need
      School and clinical psychologists are often required to provide assessments of individuals and frequently use psychological and educational tests to aid in the assessment process. The *Standards for Educational and Psychological Testing* (AERA, APA, NCME, 1999) as well as professional associations including the National Association of School Psychologists and the American Psychological Association indicate that those using psychological and educational tests need to understand principles of reliability, validity, and norms as these are the principles by which psychological and educational tests are evaluated, selected, and interpreted. Test users need to limit their use and interpretations of tests based on empirical support presented in test manuals and the empirical literature. Without a strong understanding of the various methods of reliability and validity psychologists will not be able to critically evaluate tests and procedures available and this poses a potential risk to their clients.
      At the present time, the psychology department offers a course PSY5970: Seminar Topics in Psychology: Advanced Measurement Principles which is a required course for the school psychology students during their first semester to provide students with strong skills in understanding and applying principles of reliability, validity, and norms. This course was developed to address the above needs. This course prepares these students for the coursework in their second semester that includes PSY 5005 Personality Assessment II: Child and Adolescent and PSY 5015 Individual Intellectual Assessment. These two assessment courses cover topics relating to the theoretical basis of measurement of intelligence and psychopathology as well as the administration, scoring, and interpretation of the various tests. In order for students to understand the psychometric characteristics of these various intelligence and psychopathology measures presented in the respective manuals and empirical literature, they need to understand the principles of reliability, validity, and norms.
   b. Justification of the level of the course and prerequisite.
      This course is numbered 5020 due to its content, demands, and workload that is consistent with graduate level training in psychology. The prerequisite requirement of PSY 3601 Psychological Measurement: Fundamental Principles or equivalent is
important as this course is an extension and elaboration of the content of a basic, introductory, undergraduate psychological measurement or standardized testing course.

c. Similarity to existing courses and/or effect upon programs in other departments
   No other advanced courses in psychological measurement are offered in the psychology department. Historically, these topics were included within other courses such as PSY 5005 and PSY 5015 due to the critical nature of the topics in understanding the psychometric characteristics of tests of intelligence and psychopathology. However, PSY 5005 and PSY 5015 have too much material to present within the semester credit hour limit to adequately teach content relevant to those areas and also present basic measurement principles. Thus, this course provides instruction in basic measurement principles as a prerequisite to these two assessment courses.

d. Requirement or elective
   This course will be a requirement for graduate students in School Psychology.

6. Community College Transfer
   Not applicable

7. Date approved by the Department of Psychology 11/9/01

8. Date approved by the College Curriculum Committee 2/15/02

9. Date approved by the Council on Graduate Studies 4/16/02