Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

1. This request is submitted by the Department of Educational Psychology

2. Course prefix, number and complete title of course: EPSY 625 : Advanced Behavioral Measurement

3. Change requested
   a. Prerequisite(s): From: ___________________________ To: ___________________________
   b. Withdrawal (reason): ___________________________
   c. Cross-list with: ___________________________

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and course description in item 4; enter proposed course title and proposed course description in item 5.

   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 6. Attach a course syllabus.

4. Complete current course title and current course description: EPSY 625. ADVANCED BEHAVIORAL MEASUREMENT.
Psychometric theory, planning, construction, analysis, and evaluation of written and performance tests; item analysis, norms, reliability, and validity studies; factor analysis of tests.

5. Complete proposed course title and proposed course description (not to exceed 50 words): EPSY 625. ADVANCED PSYCHOMETRIC THEORY. Psychometric theory, planning, construction, analysis, and evaluation of written and performance tests; item analysis, norms, reliability, and validity (including factor analytic) studies; item response theory.

6. a. As currently in course inventory:

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<th>Prefix</th>
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<tr>
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<th>CRP and Fund Code</th>
<th>Admin. Unit</th>
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   b. Change to:

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<td>625</td>
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   Approval recommended by: ___________________________

   Head of Department Date

   Head of Department (if cross-listed course) Date

   Submitted to Coordinating Board by: ___________________________

   Date Effective Date

   Chair, College Review Committee Date

   Dean of College Date

   Associate Director, Curricular Services Date
November 13, 2008

MEMORANDUM

TO: Graduate Instruction Committee, CEHD

THROUGH: Jim Kracht, PhD
Associate Dean for Academic Affairs

FROM: Victor Willson, PhD
Professor and Head

SUBJECT: Change in Course: EPSY 625 – Advanced Behavioral Measurement

Attached please find the appropriate paperwork for the establishing of a new course, EPSY 605, in the Department of Educational Psychology.

Pursuant to the directives of the College, the following information is provided:

1. Rationale: These minor title/description changes bring the course description into congruence with contemporary language used today to describe this course and its contents.

2. Vote by the Program: This course is being offered as a graduate course so that the appropriate subvention is received for it. It has the unanimous support of our department.

We appreciate your consideration of this course. Please contact us should you require additional information.
Bruce Thompson
Distinguished Professor of Educational Psychology
and CEHD Distinguished Research Fellow, and
Distinguished Professor of Library Science,
Texas A&M University, and
Adjunct Professor of Allied Health Sciences,
Baylor College of Medicine (Houston), and
Executive Director, Southwest Educational Research Association

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EPSY 625: ADVANCED PSYCHOMETRIC THEORY

Course Description:
Psychometric theory, planning, construction, analysis, and evaluation of written and performance tests; item analysis, norms, reliability, and validity (including factor analytic) studies; item response theory.

Prerequisites: EPSY 641; approval of department head.

Suggested Texts:

Selected Additional Readings:


Each student will do one or two class lectures on an assigned topic on a date I assign. In each presentation, include a "5 Most Important Points" slide that lists your 5 most important points in rank order.

Presentations will be graded on completeness, technical accuracy, accessibility, clarity, and the use of outside references. Most lectures will take 1-3 hrs, but the IRT lecture will take 4-6 hrs. In some cases, I have assigned students 2 shorter lectures, and the presentation grade of these students will be the average of their 2 presentation grades.

At least 1 week prior to each of your presentations you must make available to your classmates a required reading. This must be read by everyone prior to the presentation.

Each student will also write 5 multiple choice questions with either 4 or 5 alternative answers (1 correct and 3 or 4 distractors) only on the topic of your first presentation. The questions should be written on the topic of your presentation, and are due no later than 2 days before your first presentation. All distractors should be plausible. Do not use combination choices (e.g., "A and B but not C"). Do not use "all of the above" with positively worded item stems (e.g., "Which 1 of the following is true?"). Do not use "none of the above" with negatively worded stems. Do not designate which answers are correct. Do not give anyone other than me copies of your
questions. Items will be graded on comprehensiveness of coverage, plausibility, technical accuracy.

Each class I may present a pop quiz on the reading, which may either be the student-written questions, mine, or a combination thereof. Pop-quizes may cover either that night's reading or readings/lectures from the previous week. Pop-quiz scores will be incorporated on an item-by-item basis into the final exam. That is, I will count the number of right answers on the quizzes plus the number of right answers on the exam as your score on that exam.

You also will write a paper in APA style on the same topic on which you present; papers must be submitted in a format appropriate for conference presentation. Your grade on your paper will be lowered one letter grade for every 5 citation or reference errors that you make. Both writing quality and content are considered in grading papers. For persons who wish to complete the class this fall, papers will be due the last scheduled lecture day. Students who want more time to complete the paper may take an Incomplete, in which case the papers will be due no later than 1/20/09. Beginning with that due date, late papers (unless advance arrangements are made) are docked one course letter grade per day late.

The use of heuristic data and examples is encouraged in both presentations and papers. You must use the official RMS software (SPSS for Windows/Mac) for all computer work, unless an exception is granted. In presentations give each audience member a printout of (a) the SPSS ASCII "syntax" file, (b) the SPSS ASCII "data" file, and (c) the SPSS ASCII "output" file.

Please do NOT send me your practice questions or your papers as e-mail attachments. I only accept physical paper copies of practice questions and papers.

Grading Policy
86-100     A
71-85      B
61-70      C
51-60      D
Below 50   F

Thus, your course grade consists of 4 elements, weighted as follows:
45% Presentation
30% Paper
10% Items
15% Test (includes pop quizzes)

Topics
1. Basics of classical test reliability theory
   (esp alpha, but including kappa)
2. Generalizability theory
3. Test construction
4. Item Analysis
5. Validity Theory (including Factor Analysis)
6. Item Response Theory
7. Bias detection
8. Norming
9. Standard setting
10. Test equating
11. CIs for reliability coefficients (see August 2002 Educational and Psyc Measurement)
12. Measurement error impacts in GLM parameter estimates (SEM demo)
13. Measurement models (e.g., tau equivalent)
and alpha estimated within SEM

TAMU Addenda
The following has been recommended by the TAMU Faculty Senate for inclusion in all syllabi, and is herein incorporated by exercise of discretion within my academic freedom:

The handouts used in this course are copyrighted. By "handouts" I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty."

Students who plagiarize, or who without my prior permission turn in a paper in this class which has been submitted in another class, will be assigned a course grade of "F."

Americans with Disabilities Act (ADA) Policy Statement
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, contact Disability Services, in Cain Hall, Room B118, or call
845-1637. For additional information visit: <http://disability.tamu.edu>

Academic Integrity Statement and Policy
"An Aggie does not lie, cheat or steal, or tolerate those who do." Information about the TAMU Honor Council Rules and Procedures is available at: <http://www.tamu.edu/aggiehonor>