

Introduction to Performance Standard Setting Methods  
EPSY 5223  
Spring Semester, 2011; January 18 – February 15  
Tuesday, 4:40 – 7:20 PM

Instructor: Michael C. Rodriguez  
Phone: 612-624-4324  
Email: mcrdz@umn.edu  
Web: <http://www.edmeasurement.net>

Classroom: 125 Burton Hall  
Office: 163 Education Sciences  
Office Hours: Tuesday/Thursday 3-4  
Or by appointment

## Course Description

This course will enable students to understand the principles of setting performance standards in a variety of settings, with a focus on achievement tests. Students will engage in standard setting exercises, analyze real data from standard setting procedures in state testing programs, develop a standard setting plan, and investigate current literature in standard setting practices.

The course will include a mix of instructional strategies, including lecture, small group work, and computer demonstrations. Small group and individual exercises will be used to practice methods learned in the course, as described below.

## Course Goals

Students will be able to:

- Understand the purposes of standard setting and the context in which it is conducted;
- Distinguish between standard setting methodologies;
- Appreciate the importance of standard setting to test development;
- Interpret results from standard setting analyses;
- Design reasonable and useful standard setting studies;
- Identify appropriate and inappropriate uses and interpretations of standard setting results.

## Course Outline, Topics & Assignments

Jan 18:	Introduction and Concepts	Cizek & Bunch, Chapters 1-3
Jan 25:	Nedelsky, Ebel, Angoff, & Direct Consensus Methods <i>Discuss Published Standard Setting Reports</i>	C&B, Chapters 4-7
Feb 1:	Contrasting Group, Body of Work, & Bookmark Methods	C&B, Chapters 8-10
Feb 8:	Alternate Assessments and Special Populations [Due: Critique]	C&B, Chapter 15
Feb 15:	Practice and Quality Control [Due: Standard Setting Plan, Literature Review]	C&B, Chapters 13 & 16

## **Readings:**

- Cizek, G.J., & Bunch, M.B. (Eds.). (2007). *Standard Setting: A Guide to Establishing and Evaluating Performance Standards on Tests*. Thousand Oaks, CA: Sage.
- Crane, E.W., & Winter, P.C. (2006). *Setting coherent performance standards*. Washington, DC: Council of Chief State School Officers.
- Huynh, H. (2006). A clarification on the response probability criterion RP67 for standard setting based on bookmark and item mapping. *Educational Measurement: Issues and Practice*, 25(2), 19-20.
- MacCann, R.G., & Stanley, G. (2006). The use of Rasch modeling to improve standard setting. *Practical Assessment, Research & Evaluation*, 11(2), 1-17.
- Morgan, D.L. & Michaelides, M.P. (2005). *Setting cut scores for college placement*. College Board Research Report No. 2005-9. New York: The College Board.
- Reckase, M. D. (2006). A conceptual framework for a psychometric theory for standard setting with examples of its use for evaluating the functioning of two standard setting methods. *Educational Measurement: Issues and Practice*, 25(2), 4–18.
- Schultz, E.M. (2006). Commentary: A response to Reckase’s conceptual framework and examples for evaluating standard setting methods. *Educational Measurement: Issues and Practice*, 25(3), 4-13.
- Zieky, M. & Perie, M. (2006). *A primer on setting cut scores on tests of educational achievement*. Princeton, NJ: Educational Testing Service.

## **Additional Readings:**

- Downing, S.M., & Haladyna, T.M. (Eds.). (2006). *Handbook of test development*. Mahwah, NJ: Lawrence Erlbaum.
- Brennan, R.L. (Ed.). (2006). *Educational measurement* (4<sup>th</sup> ed.). Westport, CT: Praeger.
- Rao, C.R., & Sinharay, S. (Eds.). (2007). *Handbook on Statistics 26: Psychometrics*. Amsterdam, The Netherlands: Elsevier.

## **Evaluation of Student Performance**

Several projects will be required to assess student achievement of the above objectives. Each assignment can be done with a partner.

Assignment #1, a presentation of one standard setting method, consists of selecting one chapter on a standard setting method and a presentation to the class, introducing the method. This presentation should be about 15 minutes and include a one-page handout for the class. [15%]

Assignment #2, a critique of a published standard setting report. The critique should include a table of procedures described in the report and the identification of unique components or missing elements based on those components described by Cizek and Bunch. Also include a summary of the context of the standard setting procedure and a general discussion of the clarity of the report, procedures, and results. No more than 5 pages of double-spaced text. [25%]

Assignment #3, a standard setting plan, should include a report of all stages of the standard setting process (e.g., selection of method, participant selection, training materials (descriptions only), procedures for conducting the standard setting sessions—agenda, analysis of results, and evaluation plan). [35%]

Assignment #4, a literature review, including 4-6 current articles on a standard setting topic in the areas of theory, practice, or policy. The literature review should include a deep analysis of each article and an integrated synthesis, including implications for theory, practice, or policy; about 8-10 pages of double-spaced text. [25%]

All assignments are due by February 21.

### *Late Work and Incompletes*

Late work will be accepted only if I am previously notified – no points will be deducted for late work that was previously agreed upon. It is up to you to stay on track. An incomplete (“I”) will be assigned only if agreed to before February 15. If course work is incomplete and no prior notification has been given, the grade based on points obtained will be awarded. No options will be given at that point to submit incomplete work.

### *Returning Papers and Projects*

If, after the end of the course, you would like to receive remaining work through U.S. mail, submit a self-addressed stamped envelope. Otherwise, you may pick up final projects once grades are submitted in the Educational Psychology Department office in the Education Sciences Building with an ID. Papers will be available there until June and from me afterward. Uncollected papers will be destroyed just prior to fall semester.

<i>Letter Grade</i>	<i>Percentage</i>
A	95-100%
A-	90-94.99%
B+	85-89.99%
B	80-84.99%
B-	75-79.99%
C+	70-74.99%

*Evaluation* ([http://www1.umn.edu/usenate/u\\_senate/usenpol.html](http://www1.umn.edu/usenate/u_senate/usenpol.html)):

- A -- achievement that is outstanding relative to the level necessary to meet course requirements.
- B -- achievement that is significantly above the level necessary to meet course requirements.
- C -- achievement that meets the course requirements in every respect.
- D -- achievement that is worthy of credit even though it fails to meet fully the course requirements.
- S -- achievement that is satisfactory, which is equivalent to a C- or better (achievement required for an S is at the discretion of the instructor but may be no lower than a C-).
- F (or N) -- Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (see also I)
- I -- (Incomplete) Assigned at the discretion of the instructor when, due to extraordinary circumstances, e.g., hospitalization, a student is prevented from completing the work of the course on time. Requires a written agreement between instructor and student.

#### *How to Access Your Grades*

You may view your grades online at [www.onestop.umn.edu](http://www.onestop.umn.edu). To access your grades via telephone, call the Gopher Student Line at 612-624-5200.

The Senate affirms the standard (first adopted by the University Senate on February 16, 1922, and reaffirmed 1993) that one semester credit is to represent, for the average University of Minnesota undergraduate student, three hours of academic work per week (including lectures, laboratories, recitations, discussion groups, field work, study, and so on), or approximately 45 hours of work over the course of an enrollment period. Expectations of faculty and students will be made clear. It is expected that the academic work required of graduate and professional students will exceed three hours per credit per week or 45 hours per semester.

#### *University of Minnesota Policy on Scholastic Misconduct*

Scholastic misconduct is broadly defined as "any act that violates the rights of another student in academic work or that involves misrepresentation of your own work." **Scholastic dishonesty** includes, (but is not necessarily limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as you own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another

student of necessary course materials; or interfering with another student's work. Scholastic dishonesty in any portion of the academic work for a course shall be grounds for awarding a grade of F or N for the entire course.

### **Citations/Avoiding Plagiarism**

<http://swc.umn.edu/writinglinks.htm>

From the UM's Student Writing Center. Scroll down to find "Citations/Avoiding Plagiarism."

### **Avoiding Plagiarism**

<http://ollie.dcccd.edu/library/module4/M4-VII/plagar.htm>

Details what plagiarism is, illustrates with examples of "what not to do", and links to other sites that "further define plagiarism"

### **Technology**

Technology is becoming increasingly important in education and we will pursue learning with the aid of technology in several ways. Students will be allowed to submit projects electronically. Students are encouraged to investigate equating and test-design related web sites to support their reading and project work. A page of links to additional readings and resources is provided at the class website. During discussions of equating design and data analysis, computer demonstrations will be conducted in class to illustrate various methods.

### **Diversity**

The College of Education and Human Development is committed to have every course contribute to our understanding of diversity, including but not limited to: age, creed, disability, ethnicity, gender, global perspectives, international background, language background, learning differences, marital status, multicultural perspectives, national origin, public assistance status, race, religion, sex, sexual orientation, and veteran status. Each of these characteristics plays a role in educational and psychological measurement and research. They are factors that contribute to individual and group differences -- they (may) affect the constructs we set out to measure and the way we interpret and report test results. These issues will be addressed throughout the course and will be used as topics of debate and considerations of selecting equating methods to understand the role of group differences in evaluating test results.

It is the University Policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact me when possible to discuss their individual needs for accommodations.

## University Policies

See <http://onestop.umn.edu/onestop/faculty/Teaching/Policies.html> for a list of policies related to teaching with links to those policies. Also see <http://www1.umn.edu/usenate/usen/policies.html> for University Senate policies related to Teaching/Education.

### Statement on accommodations

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact their instructors to discuss their individual needs for accommodations.

### Statement on classroom conduct

<http://www1.umn.edu/usenate/policies/classexpectguide.html> and/or <http://www1.umn.edu/regents/policies/academic/StudentConductCode.pdf>

### Statement on academic misconduct

[http://www1.umn.edu/regents/policies/humanresources/Academic\\_Misconduct.pdf](http://www1.umn.edu/regents/policies/humanresources/Academic_Misconduct.pdf)

Scholastic misconduct is broadly defined as "any act that violates the rights of another student in academic work or that involves misrepresentation of your own work." Scholastic dishonesty includes, (but is not necessarily limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as you own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials; or interfering with another student's work.

### Statement regarding sexual harassment

<http://www1.umn.edu/regents/policies/humanresources/SexHarassment.pdf>

"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature when: (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic advancement in any University activity or program; (2) submission to or rejection of such conduct by an individual is used as the basis of employment or academic decisions affecting this individual in any University activity or program; or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. University policy prohibits sexual harassment. Complaints about sexual harassment should be reported to the University Office of Equal Opportunity, 419 Morrill Hall.

This syllabus is available in alternative formats upon request. Please see the course website: [www.edmeasurement.net](http://www.edmeasurement.net)

The University of Minnesota is an equal opportunity employer and educator.

---

*QME Mission Statement*

**To prepare students to become cutting-edge professionals in educational measurement, evaluation, statistics, and statistics education, through excellence in teaching, research, and service; and through investigating and developing research methodology in education.**

*Department of Educational Psychology Mission Statement*

The broad mission of the Department of Educational Psychology is to:

- create and disseminate new knowledge about successful educational practices.
- preserve the established and time honored practices of the past.
- promote the welfare and development of all students from all abilities and backgrounds.

Within this mission, the department's priorities are to:

- prepare graduate students to take leadership in research, teaching, professional practice, and service.
- train new and practicing teachers in the instructional applications of psychological theory.
- foster an appreciation of the role that educational psychology can play in solving educational problems.
- work with schools and individuals to help them achieve their goals.

*College of Education & Human Development Mission Statement*

The new College of Education and Human Development is a world leader in discovering, creating, sharing, and applying principles and practices of multiculturalism and multidisciplinary scholarship to advance teaching and learning and to enhance the psychological, physical, and social development of children, youth, and adults across the lifespan in families, organizations, and communities.

---