

**Peabody College of Vanderbilt University  
Department of Special Education  
Syllabus for SPED 3014  
Thursday, 1:10 to 4:00  
Administration Building, Room 104  
Fall Semester, 2005**

***Course Prefix, Number, Title, and Credit***

SPED 3014: Advanced Single Subject Research Methods (3 semester credit hours)

***Instructor and Contact Information***

Instructor: Craig H. Kennedy, Ph.D.  
Office: Department of Special Education  
Office 304D, MRL Building  
Contact: 322-8178 (office)  
343-1570 (fax)  
craig.kennedy@vanderbilt.edu

Office Hours: By appointment

***Course Description***

Use of research procedures to investigate problems in the education of people with disabilities. Advanced procedures in single-case research methodology, including design strategies and experimental control, are emphasized. Design and implementation of a research study is required.

Prerequisites: SPED 3013; SPED 3210 [SPED 3017 (highly recommended)]

***Textbook***

***Required:***

Sidman, M. (1960/1999). *Tactics of scientific research: Evaluating experimental data in psychology*. Boston: Authors Cooperative.

*I would suggest you obtain copies of the following books, but they are not required:*

Budd, K. S., & Stokes, T. (2003). *A small matter of proof: The legacy of Donald M. Baer*. Reno, NV: Context press.

Johnston, J. M., & Pennypacker, H. S. (1993). *Strategies and tactics of behavioral research* (2<sup>nd</sup> Ed.). Hillsdale, NJ: Erlbaum.

Skinner, B. F. (1953). *Science and human behavior*. New York: Free Press.

### ***Behavior Analysis Board Certification***

SPED 3014 is a required course for endorsement to take the national board exam in behavior analysis. For more information on Behavior Analysis Board Certification see the website: [www.bacb.com](http://www.bacb.com).

### ***Class Content***

<b><i>Week</i></b>	<b><i>Topic/Readings</i></b>
August 25	<i>What is Science, and is Special Education Research Scientific?</i> Preface (pp. v-vii) & Appendix (pp. 393-410)
September 1	<i>Aspects of Internal and External Validity</i> Chapter 2 (pp. 42-68)
September 8	<i>Direct Replication</i> Chapter 3 (pp. 73-109)
September 15	<i>Systematic Replication</i> Chapter 4 (pp. 110-140) – Review 1 assigned
September 22	<i>Selecting Experimental Questions</i> Chapter 1 (pp. 3-41)
September 29	<i>Analyzing Variability</i> Chapter 5 (pp. 145-190)
October 6	<i>Midterm</i>
October 13	<i>Selecting an Appropriate Baseline</i> Chapter 11 (pp. 317-340) – Review 2 assigned
October 20	<i>Choosing Dimensional Quantities and Recording Systems</i> Chapter 7 (pp. 217-233)

October 27	<i>Experimental Control Techniques</i> Chapter 12 (pp. 341-363)
November 3	<i>Combined Designs</i> Chapter 13 (pp. 364-410) – Review 3 assigned
November 10	<i>Visualizing Quantitative Information</i> Chapter 8 (pp. 234-256)
November 17	<i>Estimating Social Validity</i> Chapter 9 (pp. 257-280)
December 1	<i>Literature Reviews and Information Synthesis</i> Chapter 6 (pp. 191-212)
December 8	<i>Final Exam</i>

---

### ***Performance Evaluation***

<b>Task</b>	<b>Points</b>
Review 1	10
Review 2	10
Review 3	10
Midterm Exam	50
Final Exam	50
Final Paper	25
<b><i>Total 155</i></b>	

### ***Grading***

A (100% to 93%)	A- (92% to 90%)	B+ (89% to 87%)	B (86% to 83%)
B- (82% to 80%)	C+ (79% to 77%)	C ( $\leq$ 76%)	

### ***Presentations***

All students are expected to be involved in conducting experiments during the semester in conjunction with their advisors. Two presentations relating to the student's experimental work are expected during the semester. The first presentation will be a of review the experimental question, rationale for the experiment, a description of the methods, including experimental design. [If you opt to use a multiple baseline across participants design, you will need to defend the selection of this design and present at least one design alternative that meets the requirements of an  $N=1$  design.] The second presentation will present data from the ongoing experiment. Critiques of each presentation will be conducted by class members who will be assigned to comment on specific aspects of the presentation.

### ***Reviews***

Provide a 3 to 4 page, single-spaced written review of a manuscript submitted for publication consideration. Students will be assigned a manuscript to review which is due in 7 days. Students will then be given the original reviews from the *Journal of Applied Behavior Analysis* (i.e., board members and guest reviewers, along with the Associate Editor's decision letter).

### ***Final Paper***

A final paper will be submitted by 12/9/05. The paper will be written in the Report style of the *Journal of Applied Behavior Analysis* and summarize the findings from Presentations 1 and 2.

**Notes:** All documents produced in this class will adhere to the style requirements of the APA Publication Manual (5<sup>th</sup> Ed.). See page 306 of The Manual. A late paper will be docked 1 grade for each week it is late.