

**Seminar in Experimental Psychopathology:  
Research Methods  
Psychology 852  
Fall 2006**

***Instructor***

Name: V. Robin Weersing, Ph.D.  
Address: JDP, Suite 103, Office 10  
Phone: 594-8493  
Office hours: After class and by appointment  
Email: rweersin@sciences.sdsu.edu

***Meetings and Format***

This course will meet Thursdays from 2:30 to 5:10 p.m. in Room 13 of the JDP (6363 Alvarado Court, Suite 103). Meetings will focus on discussion of issues raised by the readings, class exercises, and assignments. Because a central goal of this course is for students to develop mastery of and facility with the issues raised in each week's readings, active participation in discussions is critical.

***Course Description and Learning Objectives***

This course will consider the logic and application of the methods of clinical psychological research, with an emphasis on issues of validity, experimental and quasi-experimental design, and appropriate inference. In addition, significant course content and discussion time will be focused on the practical and ethical issues involved in conducting research (e.g., grant writing, publication). In general, I have attempted to select readings that focus on the central methodological issues that define the common core of clinical psychology. Students will be expected to be the "local experts" in their specific areas of research application and to actively discuss how these general concepts apply to their own work (e.g., the construct validity issues involved in neuroimaging versus assessment of therapeutic change). By the end of the course students should be able to:

1. *Succinctly analyze the methodological strengths and weakness of published research in clinical psychology*
2. *Propose novel solutions for solving methodological problems observed in others' work*
3. *Produce a full-length, methodologically sound project proposal in the student's area of research expertise, suitable for submission to a federal funding agency*

***Required Reading***

Readings for this course consist of classic and modern methodological papers in clinical psychology. The majority of readings are drawn from two source books:

Kazdin, A. E. (Ed). (2003). *Methodological issues and strategies in clinical research* (3rd ed). Washington, D.C.: APA.

Kazdin, A. E. (2003). *Research design in clinical psychology* (4th ed). Boston: Allyn & Bacon.

I strongly suggest that you invest in the purchase of both of these books (I consult my graduate school copies still). However, for your convenience, I have placed the *Methodological Issues* book on 24 hour reserve in the SDSU library. Also on hold are selected journal articles not contained in either source book. These articles will be on electronic course reserve, and you should be able to download and print .pdf versions of the papers from the library website. In the *Course Schedule* table, readings are cited by author name and date, and source denoted with a suitable abbreviation: *Methodological Issues* book (MI), *Research Design* book (RD), or electronic reserve (ER).

### ***Assignments and Grading***

A total of 100 points may be earned for performance in this course. Final grade will be determined by calculating the percentage of points earned and applying conventional grading criteria to assign letter grades to percentages. Break down of points by assignment follows:

1. *Weekly written assignments (18 points)*. Throughout the semester, you will be asked to write brief papers (no more than 2 pages) to illuminate the topics under discussion. Guidance on paper content is provided in the *Course Schedule* in the written assignments column. The more intensive of these papers will be assigned early in the semester, to allow you to have time to focus on your major research proposal in the later portion of the course. The papers will be used as a basis for class discussion, so be prepared to share your thoughts. Papers will be assigned a score of 0, 1, or 2, and points summed to determine the final assignment grade total. All papers will be due no later than 12:00 p.m. (noon) on the day before class. Please email your papers directly to me in MS Word for Windows or pdf format. Papers turned in late, but before class, can receive a maximum score of 1. Papers turned in after that time will not receive credit.
2. *Research proposal (42 points)*. The major assignment of this course is the production of a full research proposal in your area of study. Ideally, this proposal will take the form of a pre-doctoral NRSA application, although I am willing to discuss other options, if you have a compelling professional reason to write a different type of grant (e.g., you have already received an NRSA). Deadlines for draft sections of the grant are listed in the *Course Schedule* table, and these due dates are based on the production of an NRSA. Prior to these dates, I will review drafts, and I urge you to speak with me and your primary research mentor very early in the semester about your thoughts for an NRSA. If you invest substantial time and energy in this assignment (and seek appropriate mentoring), not only will you do well in this class, you will have the bulk of a grant ready for submission by the end of the semester. Points for the research proposal will be assigned for both the draft sections and the final product. Each draft assignment (Specific Aims/Applicant, Research Plan, and Training Plan) will receive a score of 0, 1, or 2 for a maximum total of 6 points for drafts. Timely comments will be provided on these drafts to enable you to incorporate this feedback into your final proposal. The final, complete proposal can receive a maximum of 36 points. All portions of the research proposal assignment are due at the beginning of the class meeting. Late drafts will be penalized 1 point per day. Late final proposals will be penalized 4 points per day.

3. *Final examination (32 points).* There will be one written final examination in the course. The exam will be essay format and ask students to explain key methodological concepts and/or to apply their knowledge in the critique of an example research study.
4. *Class participation (8 points).* Finally, you will be evaluated on your active participation in class discussions and on a brief presentation on your research proposal, at the end of the term. Up to a ½ point per meeting will be assigned for participation in Week 2 through Week 14. If you have a compelling professional reason (or catastrophic personal reason) to miss class, you may make up your participation credit by making an appointment to have a half-hour, intensive discussion with the instructor about the class material, during which you will be expected to demonstrate your mastery of the readings. In Week 15, students also will present their completed research proposal to the class and earn a total of 0, 1, or 2 points on their presentation.

### ***Course Code of Ethics***

Plagiarism is defined at SDSU as “the act of incorporating ideas, words, or specific substance of another, whether purchased, borrowed, or otherwise obtained, and submitting same to the University as one’s own work to fulfill academic requirements without giving credit to the appropriate source.” Plagiarism constitutes both a violation of the University Judicial Code and of the APA Ethics Code. Plagiarism in this course refers to copying and presenting as your own any material from published or unpublished sources. Please note, ***I also will consider your work plagiarized, if you attempt to get “double-duty” out of your own previously created work or prior grant submissions, unless you have spoken with me ahead of time to make specific arrangements in this regard.*** If you plagiarize work from any source, you will receive a failing grade on the plagiarized assignment, and you may receive a failing grade for the semester. In addition, you will be reported to the JDP Co-Directors and the SDSU Office of Judicial Affairs for investigation.

### Course Schedule

<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Readings</b>	<b>Written Assignments</b>
1	8/31	Science of clinical psychology	McFall (1991 ER)	None
2	9/7	Hypothesis generation	Wicker (MI); Treat & Weersing (2005 ER); Table 5.1 (RD); NIH handouts	Generate three, testable hypotheses in your area of research, describe connection to current NIH programs and projects.
3	9/14	Grant writing	Review NRSA PA and application packet <a href="http://grants.nih.gov/grants/guide/pa-files/PA-04-032.html">http://grants.nih.gov/grants/guide/pa-files/PA-04-032.html</a>	Confirm specific target funding mechanism for your research proposal (NRSA is the default). Subscribe to NIH listserv.
4	9/21	Construct validity and measurement	Ch 13 and 14 (RD), Frank et al (1991 ER)	Evaluate the current research assessment of a key construct in your work, brainstorm alternate assessment strategies
5	9/28	Internal and external validity	Ch 2 (RD); Mook (MI); Prentice & Miller (MI); Weisz et al (1995 ER)	<i>Draft of Specific Aims due</i> <i>Draft of Applicant section due</i>
6	10/5	Experimentation	Ch 6 and 7 (RD); Brent et al (1997 ER)	Critique the design of the target study (Brent et al., 1997)
7	10/12	Current controversies in clinical trial research	TADS (2004 ER); Westen et al (2004 ER); Weisz et al (2005 ER)	Critique the design of the target study (TADS, 2004) and compare to Brent in light of divergent findings
8	10/19	Testing mediation and searching for mechanism	Baron & Kenny (1986 ER), Kraemer et al (2002 ER), Weersing & Weisz (2002a ER)	Analyze the methodological approach to and scientific progress on a mechanism question in your general area of research

9	10/26	Predicting moderation, interaction, or risk	Owens et al. (2003 ER), Caspi et al. (2003 ER), Kaufman et al. (2006 ER); Kraemer (2003 ER)	None
10	11/2	Group-based quasi- and non-experimental research designs	Ch 9 (RD); Weersing & Weisz (2002b ER); Doss & Atkins (2006 ER)	<i>Draft of Research Plan due</i>
11	11/9	Single case designs <i>Guest lecture by Dr. Klonoff</i>	Morgan & Morgan (2001 MI), Ch 10 (RD)	None
12	TBA	Data analysis and interpretation	Treat & Weersing (2005), Cohen (MI); Ch 14 (RD)	<i>Draft of Training Plan due</i>
13	11/23	NO MEETING (Thanksgiving)	-----	-----
14	11/30	Ethics / human subjects	APA ethical guidelines (ER); Sue (MI); Case & Smith (MI); CONSORT (ER)	None
15	12/7	Publication and the peer review process	Wilson, DePaulo, Mook, & Klaaren (1993 ER), Kazdin (1995 MI)	<i>Short presentations of Research Proposals Complete Research Proposal due</i>
16	TBA	FINAL EXAM	-----	-----