

## CDLP 3494.501

**Research and Evaluation Method Lecture:** Thursdays, 7:00-9:45 p.m., GR 4.208

**Research and Evaluation Lab:** Mondays, 7:00–9:00 p.m., JO 3.209/3.210

**Spring 2013**

### Instructor:

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Office Hours: BY APPOINTMENT/TBA

### **Prerequisites**

PSY 2317 or STAT 1342

### **Course Description**

This is a 3-hour lecture course with a required 2-hour lab. Students gain experience in all phases of behavior science research, including study design, measurement, sampling, data collection, data analysis, and report writing. The course covers the fundamental concepts of the psychometrics of measurement and testing, as well as foundations of experimental and nonexperimental designs in research and evaluation.

### **Required Material**

*PUBLICATION MANUAL OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION, 6<sup>th</sup> edition (2010)*

#### Optional material:

*IBM SPSS STATISTICS 20 – can be rented for 6 months from onthefhub.com for about \$55.*

### **Course Objectives**

This course has three major goals. First, students learn about research designs and methods; second, they learn about data management and analysis; and third, they learn to write up a formal research report following APA standards. After completing this course, students should be “beginning” researchers capable of a) formulating testable research questions, b) creating appropriate designs and data gathering methods, c) carrying out and presenting appropriate statistical analyses, and d) and writing research reports that meet the standards required for submission for publication.

#### **After completing the course, students should be able to:**

- 2.1 Identify and explain different research methods used by developmentalists.
- 2.2 Explain and apply basic statistical analyses and employ critical thinking to evaluate the appropriateness of conclusions derived from their use.
- 2.3 Gather, accurately summarize, incorporate, and interpret sources materials in their writing.
- 2.4 Use critical thinking to design and conduct basic studies to address research questions using appropriate methods
- 2.5 Demonstrate proficiency in writing research reports following APA Style Guidelines that include an abstract, introduction, methods, results and discussion sections.
- 2.6 Describe and apply basic methods used in program evaluation.
- 3.2 Use critical thinking to construct effective written arguments.
- 3.3 Engage in creative thinking in identifying research questions and designs.
- 4.1 Write effectively using appropriate organization, mechanics, and style.
- 4.2 Demonstrate effective oral communication skills.

### **Course Assignments and Evaluation**

#### *Original Paper*

15%

Nineteen percent of the grade in this course will come from each student’s APA-style article based upon an original experimental project. Each student will choose and research an experimental topic, design an experiment, acquire data, analyze that data, and write an APA journal style paper. Because rewriting is an

important part of academic writing and research publication, the first drafts of writing assignments—including the first draft of the whole paper—are due relatively early, allowing for rewrite opportunities. Although each section of this paper will receive a separate grade, the grade on the final paper will not necessarily equal the sum of the grades of its parts. **Many of the sections must be adapted as the experiment evolves.** Rewrites of the final paper are due ten days after the first draft is returned with comments.

#### *Literature Review*

8%

This assignment is intended to assist in the generation of an original research idea, the development of an academic literature database, the development of library skills as well as skills for writing in APA style. Students will be expected to locate **six or more articles** from *peer-reviewed* or *refereed* publications. These articles must be chosen according to their relevancy to a central concept or idea. Students will be graded on their ability to locate relevant articles, to develop ideas and concepts in their literature review, and to write clearly and in APA style. It is the literature review that will supply the **Introduction/Background section** of the final paper, the ideas for how to conduct the experiment, and the prism through which the results will be interpreted. Students may rewrite their literature reviews for a better grade. Rewrites are due one week after the first draft is returned with comments.

#### *Methods Section*

7%

This assignment is intended to assist students in refinement of research topics and to develop skills for writing a methods section in APA style. Students will be graded on the quality of their methods in addition to the quality of their writing. Students may rewrite their methods sections for a better grade. Rewrites are due **four** days after the first draft is returned with comments.

#### *Results Section*

7%

Students will be expected to analyze their data and report their findings in APA style. Students are also expected to present their data in a table or graph. Students may rewrite their results sections for a better grade. Rewrites are due **three** days after the first draft is returned with comments.

#### *Discussion Section*

8%

The discussion section is where one explains, evaluates, and interprets the results of the experiment in light of previous research, conflicting theories, and the original hypotheses, most of which would have been introduced in the Introduction/Background Section. The discussion section offers the justification for why others should tend to the findings presented in the paper. Your outline of the discussion section will be evaluated and discussed with you before you write this section, which is turned in with the first draft of the final paper.

#### *Presentation*

7%

This assignment is intended to give students exposure to and to encourage class discussion of other projects done in class. Students will prepare a poster presentation for a poster session. This assignment is intended to give students the opportunity to practice the presentation skills that are necessary as one begins to present his or her research at seminars, talks, and conferences. Audience participation counts as part of the presentation grade so **attendance is required during the poster sessions** (May 2). Half the students will present their posters during the first part of the class period (Session I, 7:10-7:45 PM) and the other half during the second part (Session II, 7:50-8:25 PM). Each student will complete a rating sheet for the posters that are presented during the session that he or she is not presenting a poster. For example, students who present their posters during Session I will rate the posters presented during Session II. Each student's completion of these poster evaluations will account for 25% of his or her poster grade.

#### *Lab Exercises*

24%

These are intended for assessing statistical concepts and as tutorials for using SPSS to analyze data.

*Lecture Quizzes*

12%

The quizzes are necessary to assure that course objectives have been met.

*Other Assignments*

18%

These assignments are to assure that you have done the appropriate foundation work for the next step in your project.

**Grade Assignment**

|        |   |
|--------|---|
| 90-100 | A |
| 80-89  | B |
| 70-79  | C |
| 60-69  | D |
| <60    | F |

**Policies**

*Late Assignments:* Late assignments will be accepted with a penalty of 5% of the assignment grade per day. Therefore, an assignment will not be accepted after 20 days, at which time the assignment would be worth zero. Any penalty for missing the initial due date will be applied to rewritten papers as well. **Turn in a paper—at any level of completion—on its due date to avoid penalty points.**

*Attendance:* Students are expected to take responsibility for attending class. Attendance is important for receiving a grade on the in-class assignments and quizzes as well. There are reasonable cushions within the grading scheme (i.e., 106 percentage points available, plus ¼ point added to your final grade for participating in another experiment) to account for a normal semester's inconveniences.

*Emails:* As this is a writing course, students are expected to use good writing in their emails as well. Emails should be in clear, full sentences with proper grammar, punctuation, and spelling.

*The Student Success Center – Writing Center:* The Student Success Center, which is part of the Office of Undergraduate Education, can provide help for any stage of your writing process. It is located in McDermott Library, MC1.206. You can drop by or call 972-883-6707 to make an appointment. Visiting the writing center to address specific writing concerns might be recommended to you.

*Academic Dishonesty:* For information on the academic dishonesty policy at UTD, please go to <http://www.utdallas.edu/student/slife/dishonesty.html> or contact the instructor. Plagiarism is an especially arresting issue. Each student should take special care to use his or her own words.

*Copyrighted Material:* All UT Dallas syllabi are required to include, whether in text or a hyperlink, student conduct policies including a copyright notice. That notice directs students to UT Dallas' Policy Regarding Photocopying Copyrighted Materials (UTD PP 1043) (<http://provost.utdallas.edu/policy/utdpp1043>) and UT System's copyright website (<http://www.utsystem.edu/ogc/intellectualproperty/copyrighthome.htm>). Further, the Director of Information Security ([infosecurity@utdallas.edu](mailto:infosecurity@utdallas.edu)) is identified as the University's contact for copyright questions or concerns. See [www.utdallas.edu/copyright](http://www.utdallas.edu/copyright).

*Learning Disabilities:* For information on the learning disabilities center, call 972-883-2098, go to <http://www.utdallas.edu/studentaccess>, or contact the instructor.

## Schedule

1. 1/14 **GR 4.208**  
Syllabus Review  
APA Manual & APA Style  
References a al APA – Chapters 6 & 7 in APA Manual  
Introduction to Your Literature Review/Background/Introduction to research paper  
**ASSIGNED: Six or more references in APA Reference List style on your research topic--Due 1/31.**  
**ASSIGNED: Read Chapter 2 of APA Manual**
2. 1/17 **LIBRARY Instruction (MC 2.524). Meet in ground floor lobby of library**  
Finding information and refereed articles on your topic
3. 1/21 Martin Luther King, Jr. Day  
**No classes held**
4. 1/24 **GR 4.208**  
Grammar a la APA – Chapters 3 & 4 in APA Manual  
References a al APA – Chapters 6 & 7 in APA Manual  
APA Manual Exercise & Quiz – work in groups
5. 1/28 **JO 3.209/3.210 LAB**  
Refresher course in statistics  
Importance of measurement  
Brief introduction to SPSS
6. 1/31 **GR 4.208**  
**DUE: Six or more references in APA Reference List style on your research topic**  
Writing for different audiences  
**ASSIGNED: 2-page report of one of the empirical studies in your reference list written for a lay audience—Due 2/14.**  
Your Literature Review/Background/Introduction  
Sample papers  
Organizing and outlining
7. 2/4 **JO 3.209/3.210 LAB**  
Correlation and Regression using SPSS  
In-class exercise
8. 2/7 **GR 4.208**  
Your Literature Review/Background/Introduction  
Generating hypotheses  
Film with discussion – Hypothesis testing on Black Death . . .  
**DUE: First draft of Literature Review/Background/Intro is due by email no later than 1:00 a.m. on Sunday 2/10 (think of it as late Saturday night 2/09)**
9. 2/11 **JO 3.209/3.210 LAB**  
Multiple regression in SPSS  
In-class exercise

10. 2/14 **GR 4.208**  
**DUE: Research report written for a lay audience.**  
 First draft of LitReview/Background/Intro returned  
 Experimental and Observational Methods  
 Measurement  
 Design  
**ASSIGNED: What you will *measure* for your project and HOW you will *measure* it—Due 2/25**
11. 2/18 **JO 3.209/3.210 LAB**  
 Comparing Means: *t*-test and one-way ANOVA  
 In-class exercise
12. 2/21 **GR 4.208**  
**DUE: Literature Review/Background/Introduction rewrites – HARD COPY**  
 Measurement  
 The parts of the Method section  
 Sample Method sections
13. 2/25 **JO 3.209/3.210 LAB**  
**DUE: What you will measure and HOW you will measure it**  
 Two-way between-subjects ANOVA in SPSS  
 In-class exercise
14. 2/28 **GR 4.208**  
 Individual time slots to discuss your measurements and Method - **Required: Come when you are scheduled**  
**AND**
15. 3/4 **JO 3.209/3.210 LAB**  
 Individual time slots to discuss your measurements and Method – **Required: Come when you are scheduled**
16. 3/7 **GR 4.208**  
 Method section  
 Setting up your data for SPSS analysis  
 Time for participating in and conducting your experiments
- SPRING BREAK**
17. 3/18 **JO 3.209/3.210 LAB**  
**DUE: First draft of Method section is due by hard copy or email (by midnight)**  
 Two-way within-subjects ANOVA ; Two-way mixed ANOVA  
 In-class exercise
18. 3/21 **GR 4.208**  
 First draft of Method section returned  
 Results section sample paragraphs  
 Time for participating in and conducting your experiments
19. 3/25 **JO 3.209/3.210 LAB**  
**DUE: Method rewrite - HARD COPY**  
 Nonparametric tests: Chi-Square/Cross Tabs, Wilcoxon rank-sum, Mann-Whitney  
 In-class exercise

20. 3/28 **GR 4.208**  
 Method rewrite returned  
 Results section  
 Figures and Tables a la APA  
 Time for participating in and conducting your experiments
21. 4/1 **JO 3.209/3.210 LAB**  
 CRUNCH and INTERPRET YOUR DATA IN SPSS  
*Note: YOU MUST HAVE COLLECTED ALL YOUR DATA*
22. 4/4 **GR 4.208**  
**DUE: First draft of Results section due by email no later than 1:00 a.m. on Sunday 4/7 (think of it as late Saturday night 4/6)**  
 The Discussion section  
**ASSIGNED: Outline of your discussion section; due 4/15**
23. 4/8 **JO 3.209/3.210 LAB**  
 First draft of Results section returned  
 Discussion section
24. 4/11 **GR 4.208**  
**DUE: Results section rewrite - HARD COPY**  
 The Discussion section  
 Sample papers and outline
25. 4/15 **JO 3.209/3.210 LAB**  
**DUE: Outline of Discussion section**  
 Results sections returned  
 The Discussion section  
 Sample papers and outlines  
 Putting the whole paper together
26. 4/18 **GR 4.208**  
 Individual time slots to review Discussion section – *Required: Come when you are scheduled*
- AND**
27. 4/22 **JO 3.209/3.210 LAB**  
 Individual time slots to review Discussion section – *Required: Come when you are scheduled*
28. 4/25 **GR 4.208**  
 Putting the whole paper together  
 Preparing a poster presentation  
**DUE: WHOLE PAPER first draft due by email no later than 1:00 P.M. on Saturday 4/27**
29. 4/29 **JO 3.209/3.210 LAB**  
 Whole papers first draft returned  
 Preparing a poster presentation  
 Catch-up
30. 5/2 **GR 4.208**  
**POSTER SESSION**

31. 5/6 **READING DAY**  
**No classes held**
32. 5/9 **GR 4.208 (8:00–10:45 p.m.)**  
**DUE by 10:30 p.m.: Final rewrite of final paper – HARD COPY**

***These descriptions and timelines are subject to change at the discretion of the Professor.***

### **Student Conduct & Discipline**

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UT Dallas publication, A to Z Guide, which is provided to all registered students each academic year. The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations*, Board of Regents, The University of Texas System, Series 50101 and in Title V, Rules on Student Services and Activities, Chapter 49 of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students where staff are available to assist students in interpreting the rules and regulations (SSB 4.400, 972-883-6391). A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating its standards of conduct whether such conduct takes place on or off campus or whether civil or criminal penalties are also imposed for such conduct.

### **Academic Integrity**

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion, and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source (including your own work for other past or current classes) is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details).

### **Email Use**

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. All official student email correspondence will be sent only to a student's UT Dallas email address and UT Dallas will only consider email requests originating from an official UT Dallas student email account. This allows the University to maintain a high degree of confidence in the identity of each individual's corresponding via email and the security of the transmitted information. The University of Texas at Dallas furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources provides a method for students to have their UT Dallas mail forwarded to other email accounts. To activate a student UT Dallas computer account and forward email to another account, go to <http://netid.utdallas.edu>.

### **Withdrawal from Class**

The administration of this institution has set deadlines for withdrawal from any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student, even though your paperwork may require my signature. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

### **Incomplete Grades (I)**

A grade of Incomplete may be given, at the discretion of the instructor of record for a course, when a student has completed at least 70% of the required course material but cannot complete all requirements by the end of the semester. An incomplete course grade (grade of 'I') must be completed within the time period specified by the instructor, not to exceed eight weeks from the first day of the subsequent long semester. Upon completion of the required work, the symbol 'I' may be converted into a letter grade (A through F) by the instructor. If the grade of Incomplete is not removed by the end of the specified period, it will automatically be changed to F. Extension beyond the specified limit can be made only with the permission of the instructor, the student's Associate Dean and the Undergraduate Dean. A student may not re-enroll in a course in which a grade of 'I' remains. Students may obtain a petition/documentation form for an Incomplete in the office of the student's Undergraduate Associate Dean. The form is to be submitted to the instructor from whom the Incomplete is sought. If a significant fraction of a semester is missed with cause, see the section on "Dropping, Withdrawing, or Adding Courses" at <http://catalog.utdallas.edu/2012/undergraduate/policies/registration#dropadd>. An instructor assigning an Incomplete ('I') must submit the petition/documentation form containing a description of the work required to complete the course to the Undergraduate Associate Dean of the school offering the course. Upon approval, a copy of the petition will be forwarded to the student's Undergraduate Associate Dean to be retained with the student's

academic record. The instructor alone will be responsible for determining whether the requirements for completion are met and for assigning a grade in the course. However, if the instructor who has signed the Incomplete (I) is no longer associated with UT Dallas and the work is completed within the time allowed before the Incomplete lapses to an F, the Associate Dean of the instructor's college may assign a committee of appropriate faculty to evaluate the material and/or obtain any other information that may be required to assign a grade in the course.

### **Student Grievance Procedures**

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*. In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy to the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations. See also <http://policy.utdallas.edu/utdsp5005>.

### **Incomplete Grade Policy**

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of **F**.

### **Student AccessAbility**

The Office of Student AccessAbility is committed to ensuring that qualified students with documented disabilities are provided with an equal opportunity to participate in the variety of educational, recreational and social opportunities at UT Dallas. The Office of Student AccessAbility's primary functions are to provide a) academic accommodations for students with a documented permanent physical, mental or sensory disability; b) non-academic accommodations; and c) resource and referral information and advocacy support as necessary and appropriate. Nonacademic accommodations must meet the same standards regarding documentation as academic accommodations. Academic accommodations for each student are determined by Student AccessAbility on an individual basis with input from qualified professionals. The Student AccessAbility center is located in room 3.200 in the Student Services Building. Office hours are Monday–Thursday, 8:30 a.m. to 6:00 p.m.; and Friday, 8:00 a.m. to 5:00 p.m. The contact information is:

|                                 |   |
|---------------------------------|---|
| UT Dallas Student AccessAbility | (972) 883-2098 Fax (972) 883-6561   |
| 800 W. Campbell Rd., SSB32      | <a href="http://www.utdallas.edu/studentaccess">http://www.utdallas.edu/studentaccess</a> |
| Richardson, TX 75083            | <a href="mailto:disabilityservice@utdallas.edu">disabilityservice@utdallas.edu</a>        |

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes of enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance. It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

### **Religious Holy Days**

The University of Texas at Dallas will excuse a student from class or other required activities for the observance of a religious holy day (including travel time) for a religion whose places of worship are exempt from property tax under Section 11.20, of the *Texas Tax Code*. Students are encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. Excused students will be allowed to take missed exams or complete assignments within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment. If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the President of UT Dallas or from the President's designee. The chief executive officer or designee must take into account the legislative intent of *TEC* 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.