

## **SPD 587/698: Research Methods**

SPD 698 is a required course for the Master's Degree in Special Education and provides the academic foundation for courses in Behavior Analysis.

### **College of Education Department of Language, Literacy, and Special Populations**

Through programs dedicated to collaboration in instruction, field experience, and research, the candidates in Sam Houston State University's Educator Preparation Programs acquire the knowledge, dispositions, and skills necessary to create a positive learning environment. Employing a variety of technologies, these candidates learn to plan, implement, assess, and modify instruction to meet the needs of our communities' diverse learners.

#### **Instructor:**

Barbara Metzger, PhD, BCBA  
Teacher Education Center 151  
Office phone: (936) 294 4971  
Email: bam016@shsu.edu

#### **Location / Time:**

TEC, 131  
Wednesday, 5:30-8:30 pm

#### **Text/Readings:**

Kennedy, C. H. (2004). *Single-case designs for educational research*. Allyn & Bacon.

Bailey, J. & Burch, M. R. (2005). *Ethics for behavior analysts*. Mahwah, NJ: Laurence Erlbaum Associates, Inc.

American Psychological Association (2001). *Publication manual* (5<sup>th</sup> ed.). Washington, DC: American Psychological Association.

Gelfand, H., Walker, C.J., & American Psychological Association (2002). *Mastering APA style: Student's workbook and training guide*. Washington, DC: American Psychological Association.

#### **Course Description:**

This course addresses ethical issues in the practice of research, conducting literature reviews, designing research, and writing a research proposal in the field of Applied Behavior Analysis. Students will develop a research proposal using Behavior Analytic methods and subject matter, according to APA style, for their master's thesis. Prerequisite: SPD 532.

**Disability Statement:**

Students with a disability that affects their academic performance are expected to arrange for a conference with the instructor so that appropriate strategies can be considered to ensure that participation and achievement opportunities are not impaired. Students with physical disabilities may contact the Director of the Counseling Center as chair of the Committee for Continuing Assistance for Disabled Students by telephone (extension 1720).

**Course Format:**

This course will be taught through lecture, discussion, text readings, literature review, student presentations of research, practice writing and supplemental use of Blackboard.

**Behavior Expectations:**

1. Please turn off your cell phone and put it away during class.
2. Please do not eat during class, including chewing gum and eating candy/snacks. Drinks are OK.
3. Please do not interrupt others.
4. If you need additional clarification, please ask the instructor. You are not “interrupting” when you ask questions or make comments.
5. In the likely event that your instruction makes a mistake and/or forgets something in the running of the class, please let me know.
6. Please arrive on time.

**Course Learning Objectives:**

1. Engage in ethical behavior while conducting Behavior Analytic research
2. Define single-subject experimental designs; select appropriate design for thesis; critique experimental designs
3. Select appropriate data collection and measurement for thesis intervention.
4. Select appropriate data display for thesis intervention.
5. Select appropriate intervention/behavior change procedure for thesis intervention

**Exams:**

The two, on-line exams will consist of 10 multiple choice questions, each worth 5 points.

**Section Drafts**

Students will turn in section drafts of their thesis proposal. The grading of the drafts will be based upon timely progress of submitting drafts. Drafts must be written according to APA style. Dr. Metzger will be especially intolerant of basic spelling and grammar mistakes. It is suggested that you zip on your armor and be prepared to see a lot of red ink! The way you learn to write is by re-writing and re-writing.

**Final Thesis Proposal**

Upon Dr. Metzger’s approval, the student will form a thesis committee and will schedule a thesis proposal date at the convenience of the committee members. A complete draft of the thesis proposal must be given to all committee members at least two weeks before the proposal meeting date. The thesis proposal meeting should consist of a formal presentation of the rationale, experimental design and proposed results.

<b>Task</b>	<b>Number</b>	<b>Points</b>	<b>Total Points</b>
APA Student Workbook	2	50	100
On-Line Exams	2	50	100
HEPPERT Certification	1	50	50
Human Subjects Approval / Consent Form	1	50	50
Class Participation	1	50	50
Thesis Drafts	3	100	300
Thesis Proposal Meeting	1	350	350
			1000

<b>Letter Grade</b>	<b>Percent</b>	<b>Range</b>
A	90%	900-1000
B	80%	800-899
C	70%	700-799

**Grading Notes:**

1. Dr. Metzger does not round-up, give extra-credit, or curve grades. Your grade is a function of the number of points you earn.
2. While I strongly believe that reinforcing behaviors is the best way to treat others, I also believe that certain behaviors are not acceptable and should be punished. Any form of cheating, plagiarism, or dishonesty will be severely punished as I do not believe that an individual who makes poor ethical choices should be a member of the teaching or the Behavior Analytic professions.

**Attendance Policy:**

According to University Policy, students will be allowed one class period of an unexcused absence. The student is responsible for making up all missed work and will be held responsible for the material covered during his/her absence.

**Class Participation:**

Students can earn class participation points through attendance, promptness, making relevant comments and asking questions.

**Human Subjects Approval:**

It takes at least one month for the Human Subjects Approval process from the day you submit the form. You can not propose your thesis without this approval. Do not wait until the last possible moment on this!!!!

Go to the Sam Houston Web page.  
 Under fast links, go to the Research and Special Programs

Go to the first button, Protection of Human Participants in Research  
Look for the HPPERT link on the far right in blue.

You MUST complete the HPPERT Certification before you can fill out a Human Subjects Proposal. This will take you around 3 hours to complete. You must have a HPPERT certificate on file with the Sam Houston Research and Special Programs Office before you can submit a Human Subject Approval form.

Review the Sam Houston Procedures Manual

Go to the “Register” button at the top of the Human Subjects Home Page – it’s on the right side to the left of the picture.

Then click on “Begin a new Application” which is below the “Register” button.

Enter your Sam ID and password

Start a Research Application

On the first page, make sure you select “new submission” and “full review”

I found this form a bit hard to maneuver through as there is no “back” or “home” button. You can use the “checklist” button on the bottom to go back to the list of parts of the application. Note that there is a consent form on the checklist

Save a copy of the form on your desktop or stick. Dr. Metzger must review your application and consent form before you submit the form.

Once you have completed the form (as viewed by the checklist), you will see that a “submit” button has appeared. This button is what starts the application process.

The entire process is done electronically. Once you hit the “submit” button, your application goes to the Research and Special Programs office. They check that your form is filled out correctly and then send the form to your committee chair for approval. The committee chair sends it back to the Research Office. The same process happens for the department chair and then dean of the College of Education. Once everyone has signed their approval, the form goes before the IRB for final approval. With this many people and steps involved, you can see that this is not something that gets done in a week.

**Tentative Course Schedule:**

<b>Date</b>	<b>Topic</b>	<b>Assignments</b>
<b>Class 1 08-22</b>	Syllabus Literature Review Human Subjects Approval APA Workbook Experimental Question Research Ideas	First Draft of an Experimental Question Due
<b>Class 2 08-29</b>	Inter-teaching session <ul style="list-style-type: none"> <li>• Overview of Single-Subject Research Designs               <ol style="list-style-type: none"> <li>1. Reversal</li> <li>2. Multiple Baseline</li> <li>3. Multielement</li> </ol> </li> </ul> Forming a Thesis Committee Responsibilities of Committee Members  Thesis Outline	Work on Lit Review  Work on HPPERT Certification
<b>Class 3 09-05</b>	Writing A Methods Section  Writing a Proposed Results Section  <b>Meet in Room 322</b>	Work on Lit Review APA Student Workbook Due HPPERT Complete
<b>Class 4 09-12</b>	No Class Meeting	Write Methods and Results Section  Thesis Committee Forms Due Thesis Outline Due
<b>Class 5 09-19</b>	Writing an Introduction and Reference Section  <b>Meet in Room 322</b>	<b>Methods Section, Results &amp; Title Page Due</b>  Human Subjects Application Must be Submitted
<b>Class 6 09-26</b>	No Class Meeting	Write Introduction
<b>Class 7 10-03</b>	Inter-Teaching Session Ethics Scenarios for Behavior Analysts Ethical Issues in Research	Write Introduction Revise Methods and Results

<b>Class 8 10-10</b>	Research Presentations and Critiques	<b>First Complete Draft Due</b>
<b>Class 9 10-17</b>	Research Presentations and Critiques	Make revisions
<b>Class 10 10-24</b>	Research Presentations and Critiques	Make revisions
<b>Class 11 10-31</b>	Research Presentations and Critiques	Make revisions
<b>Class 12 11-07</b>	Thesis Proposals!	
<b>Class 13 11-14</b>	Inter-Teaching Session Lecture <ul style="list-style-type: none"> <li>• Reversal Designs</li> <li>• Multielement Designs</li> <li>• Multiple Baseline Designs</li> </ul>	Kennedy, Ch. 9 Kennedy, Ch. 10 Kennedy, Chapter 11
<b>Class 14 11-21</b>	Thanksgiving Break!	
<b>Class 15 11-28</b>	Thesis Proposals!	On-Line Exam 1 (K, Ch. 9,10,11)
<b>Class 16 12-05</b>	Inter-Teaching Session Lecture <ul style="list-style-type: none"> <li>• Repeated Acquisitions Designs</li> <li>• Brief Experimental Designs</li> <li>• Combined Designs</li> </ul>	Kennedy, Chapter 12 Kennedy, Chapter 13 Kennedy, Chapter 14
<b>Final Exam Week</b>	Thesis Proposals!	On-Line Exam 2 (K, Ch. 12,13,14)

Performance Matrix

<b>Course Learning Objectives</b>	<b>Activities</b>	<b>Performance Assessment</b>	<b>BACB's Standard(s)</b>
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1. Engage in ethical behavior while conducting Behavior Analytic research	<ul style="list-style-type: none"> <li>• Interteaching session</li> <li>• HEPPERT certification</li> <li>• Consent Forms</li> </ul>	<ul style="list-style-type: none"> <li>• Ethics Interteaching Form</li> <li>• Human Subjects/ IRB approval</li> </ul>	1-4 1-9 1-11
2. Define single-subject experimental designs; select appropriate design for thesis; critique experimental designs	<ul style="list-style-type: none"> <li>• Interteaching sessions</li> <li>• Thesis proposal</li> </ul>	<ul style="list-style-type: none"> <li>• Interteaching Forms</li> <li>• Exams</li> <li>• Research Presentations and Critiques</li> <li>• Thesis Proposal Meeting</li> </ul>	5-1a 5-1b 5-1c 5-1d 5-1e 5-2 5-3 5-4
3. Select appropriate data collection and measurement for thesis intervention.	<ul style="list-style-type: none"> <li>• Thesis drafts</li> </ul>	<ul style="list-style-type: none"> <li>• Research Presentations and Critiques</li> <li>• Thesis Proposal Meeting</li> </ul>	6-2 6-4 6-5 6-6 6-7 6-8 6-9 6-10 6-11 6-12 6-13 6-14
4. Select appropriate data display for thesis intervention.	<ul style="list-style-type: none"> <li>• Thesis drafts</li> </ul>	<ul style="list-style-type: none"> <li>• Research Presentations and Critiques</li> <li>• Thesis Proposal Meeting</li> </ul>	7-1 7-2 7-4 7-5 7-6
5. Select appropriate intervention/behavior change procedure for thesis intervention	<ul style="list-style-type: none"> <li>• Thesis drafts</li> </ul>	<ul style="list-style-type: none"> <li>• Research Presentations and Critiques</li> <li>• Thesis Proposal Meeting</li> </ul>	8-1 8-2 8-3 8-4 8-5 8-6 8-7 8-8

Internet Address for the Behavior Analysis Certification Board's Task List:

<http://www.bacb.com/>