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:


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.
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 do 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.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignments</th>
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| Class 1 08-22 | Syllabus  
Literature Review  
Human Subjects Approval  
APA Workbook  
Experimental Question  
Research Ideas | First Draft of an Experimental Question Due |
| Class 2 08-29 | Inter-teaching session  
• Overview of Single-Subject Research Designs  
  1. Reversal  
  2. Multiple Baseline  
  3. Multielement  
Forming a Thesis Committee  
Responsibilities of Committee Members  
Thesis Outline | Work on Lit Review  
Work on HPPERT Certification |
| Class 3 09-05 | Writing A Methods Section  
Writing a Proposed Results Section | Work on Lit Review  
APA Student Workbook Due  
HPPERT Complete |
| Class 4 09-12 | No Class Meeting | Write Methods and Results Section  
Thesis Committee Forms Due  
Thesis Outline Due |
| Class 5 09-19 | Writing an Introduction and Reference Section | **Methods Section, Results & Title Page Due**  
Meet in Room 322  
Meet in Room 322 | Human Subjects Application Must be Submitted |
| Class 6 09-26 | No Class Meeting | Write Introduction |
| Class 7 10-03 | Inter-Teaching Session  
Ethics Scenarios for Behavior Analysts  
Ethical Issues in Research | Write Introduction  
Revise Methods and Results |
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<tr>
<td>Class 8</td>
<td>10-10</td>
<td>Research Presentations and Critiques</td>
<td>First Complete Draft Due</td>
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<td>Class 9</td>
<td>10-17</td>
<td>Research Presentations and Critiques</td>
<td>Make revisions</td>
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<td>Class 10</td>
<td>10-24</td>
<td>Research Presentations and Critiques</td>
<td>Make revisions</td>
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<tr>
<td>Class 11</td>
<td>10-31</td>
<td>Research Presentations and Critiques</td>
<td>Make revisions</td>
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<td>Class 12</td>
<td>11-07</td>
<td>Thesis Proposals!</td>
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<tr>
<td>Class 13</td>
<td>11-14</td>
<td>Inter-Teaching Session Lecture</td>
<td>Kennedy, Ch. 9</td>
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<td></td>
<td></td>
<td>• Reversal Designs</td>
<td>Kennedy, Ch. 10</td>
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<td>• Multielement Designs</td>
<td>Kennedy, Chapter 11</td>
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<td></td>
<td>• Multiple Baseline Designs</td>
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<tr>
<td>Class 14</td>
<td>11-21</td>
<td>Thanksgiving Break!</td>
<td></td>
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<tr>
<td>Class 15</td>
<td>11-28</td>
<td>Thesis Proposals!</td>
<td>On-Line Exam 1 (K, Ch. 9,10,11)</td>
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<tr>
<td>Class 16</td>
<td>12-05</td>
<td>Inter-Teaching Session Lecture</td>
<td>Kennedy, Chapter 12</td>
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<td>• Repeated Acquisitions Designs</td>
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<td>• Brief Experimental Designs</td>
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<td>• Combined Designs</td>
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<td>Final</td>
<td>Week</td>
<td>Thesis Proposals!</td>
<td>On-Line Exam 2 (K, Ch. 12,13,14)</td>
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Performance Matrix

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<tr>
<th>Course Learning Objectives</th>
<th>Activities</th>
<th>Performance Assessment</th>
<th>BACB’s Standard(s)</th>
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1. Engage in ethical behavior while conducting Behavior Analytic research
   - Interteaching session
   - HEPPERT certification
   - Consent Forms
   - Ethics Interteaching Form
   - Human Subjects/IRB approval
   1-4
   1-9
   1-11

2. Define single-subject experimental designs; select appropriate design for thesis; critique experimental designs
   - Interteaching sessions
   - Thesis proposal
   - Interteaching Forms
   - Exams
   - Research Presentations and Critiques
   - Thesis Proposal Meeting
   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.
   - Thesis drafts
   - Research Presentations and Critiques
   - Thesis Proposal Meeting
   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.
   - Thesis drafts
   - Research Presentations and Critiques
   - Thesis Proposal Meeting
   7-1
   7-2
   7-4
   7-5
   7-6

5. Select appropriate intervention/behavior change procedure for thesis intervention
   - Thesis drafts
   - Research Presentations and Critiques
   - Thesis Proposal Meeting
   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/