



SPED 6314: RESEARCH METHODS IN BEHAVIOR ANALYSIS FALL, 2017

SPED 6314 is a required course for the Master's Degree in Special Education and the Applied Behavior Analysis Certification.

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

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Office hours: Tuesday and Wednesday 3:30-5:30 pm at TWC 310
Friday 11:00-1:00 pm at TEC

Class Format: The course format will be a combination of lecture, discussion, and presentations. Each week, we will meet as a large group to discuss the assigned topic related to the research project. During some class periods (if time permits), students will share data and discuss progress of individual projects. In addition, the students are expected to complete APA quizzes and data collection/research sessions outside of class.

Class day and time: Tuesday 5:30-8:20 PM

Class location: TWC 353

Course Description: In this class, we will examine many issues related to the topic of research in behavior analysis. The course will have a primary focus of conducting research. For the research project, students will learn the IRB process, APA format, and how to design a research project, collect data, and report research findings. In addition, completion of BDS modules is required.

Textbooks:

American Psychological Association (2010). *Publication manual of the American Psychological Association*, Washington DC.

Behavior Development Solutions CBA Learning Module Series v6. The Learning Module Series is available through www.behaviordevelopmentsolutions.com/.

Course Objectives: The following objectives will be met during this course:

1. Conduct behavior analytic research in accordance to ethical standards
2. Select appropriate data collection and design measurement system for research project.
3. Select appropriate data display for research project
4. Select appropriate intervention/behavior change procedure for research project
5. Perfect scientific writing

A matrix that aligns course objectives, activities, assessments, and standards can be viewed below

Topic(s)/Objective(s)	Activities/Assignments (including field-based activities)	Measurement (including performance-based)	Standards Alignment BCBA—Behavior Analyst Certification Board
1. Conduct behavior analytic research in accordance to ethical standards.	<ul style="list-style-type: none"> BDS Ethics Module Research project 	<ul style="list-style-type: none"> Research data presentations Research project rubric 	BCBA: K-05; J-09
2. Select appropriate data collection and design measurement system for research project.	<ul style="list-style-type: none"> Research Project Drafts Project/data presentations 	<ul style="list-style-type: none"> Written Research Proposal Oral Presentation of Research Proposal 	BCBA A-1-14, H-01-03, I-01-05
3. Select appropriate data display for research project.	<ul style="list-style-type: none"> Research Project Drafts Project/data presentations 	<ul style="list-style-type: none"> Written Research Proposal Oral Presentation of Research Proposal 	BCBA- H-03-04, B-4-11,
4. Select appropriate intervention/ behavior change procedure for research project.	<ul style="list-style-type: none"> Research Project Drafts Project/data presentations Readings 	<ul style="list-style-type: none"> Written Research Proposal Oral Presentation of Research Proposal In-class discussions 	BCBA- J-1-12
5. Perfect scientific writing.	<ul style="list-style-type: none"> Research Project Drafts 	<ul style="list-style-type: none"> Written Research Proposal Oral Presentation of Research Proposal APA quizzes 	BCBA:B-02

IDEA Objectives: The instruction in this course will address the following major objectives (as assessed by the IDEA course evaluation system):

Essential: Learning how to find, evaluate, and use resources to explore a topic in depth

Important: Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)

Course Outline

Assignments

- 1. Research project data presentations:** Throughout the semester, we will discuss progress on projects and review data. Students will meet in small groups. All students are expected to come prepared to the meetings with document drafts and/or graphed data (depending on individual progress). During each meeting, students should prepare a brief 1-2 minute description of their project and a short powerpoint presentation discussing progress. Powerpoints should be uploaded to Blackboard by 5:00 pm the day they are due for the

professor to evaluate progress. If time permits at the end of class, each student will share their progress with the group and describe their data. Students will set individual goals with their advisor and points will be awarded for progress toward goals.

2. **Research project drafts:** Throughout the semester, students will be required to submit drafts of their full paper to their advisor for edits. The papers should include all APA sections, with the exception of a results and discussion sections (until complete). Grades will be assigned according to the rubric found on Blackboard. Points will be awarded for edits and progress rather than overall product.
3. **Research project final paper and presentation:** An original research project is required by each student. A written research project should include all applicable sections (i.e., title page, abstract, introduction, method, results, discussion, and references) of a manuscript according to the APA Manual 6th Edition. In addition, students will be required to present their project and data to the entire class during the last two weeks of the semester via a formal powerpoint presentation. Rubrics are posted on Blackboard.
4. **APA Quizzes:** These quizzes will be open-book and should be completed outside of class *individually*. These quizzes will serve as a contingency to ensure familiarity and practice with the APA manual. Quizzes should be uploaded to blackboard by 11:59 pm the night they are due. Feedback will be provided on Blackboard.
5. **In-class discussions:** Students are expected to come to class prepared to discuss the material assigned for that class period. Students are also required to submit a hard copy of 2 discussion questions over that class's assigned readings. Points will be awarded for quality and quantity of discussion contributions and discussion questions. In the event that the professor suspects students have not read the articles and come prepared, a pop quiz will be given.
6. **BDS Modules:** Students will complete a series of modules online, outside of class to prepare for the BCBA exam and to target maintenance of behavior analytic material. BDS modules must be completed by their due date, but students are encouraged to work ahead.

BDS Topics	# of Module Sets	Area	Due Date
Intro, Strategies for Success, & Pre-Test	13	01 Getting Started Unit	9/05
A Measurement (A00 - A14)	15	04 A Unit	9/26
B Experimental Design (B01 – B09)	13	04 B Unit	10/24
C Behavior-Change Considerations (C01 – C03) D Fundamental Elements of Behavior Change (D01 – D05)	3 10	04 C-D Units	11/14
E Specific Behavior-Change Procedures (E01 – E10)	13	04 E Unit	12/05

Grades

A: 690-621 B: 620-552 C: 551-483

Task	Number	Points	Total Points
Research data presentations	6	10	60
Research project drafts	2	30	60
Thesis/Literature review final paper	1	160	160
Thesis/Literature review presentation	1	40	40
APA Quizzes	3	30	90
In-class discussions	8	10	80
BDS modules	5	40	200
			690

Schedule – This schedule is tentative.

Date	Class Topic	Task List Items	Activities and Assignments Due
1 8/29	<ul style="list-style-type: none"> Syllabus review Research meeting and data analysis 	B-01, B-03	<ul style="list-style-type: none"> Data presentation in PowerPoint
2 9/5	<ul style="list-style-type: none"> Behavior change considerations related to reinforcement, punishment, and extinction 	C-01, C-02, C-03	<ul style="list-style-type: none"> In-class discussion over readings Read Bloom & Lambert (2015); Putnam & Kincaid (2014); Wallace et al. (2012) BDS modules intro, strategies, pre-test due
3 9/12	<ul style="list-style-type: none"> Selecting intervention strategies Research meeting and data analysis (if time) 	J-02	<ul style="list-style-type: none"> Data presentation in PowerPoint In-class discussion over readings Read Geiger et al. (2010); Carr & Briggs (2010)
4 9/19	<ul style="list-style-type: none"> APA style review How to conduct a proper literature review 	G-01, G-04, G-05, Ethics Code	<ul style="list-style-type: none"> Drafts of IRB or paper due by 11:59 pm on BB

5 9/26	<ul style="list-style-type: none"> • Antecedent interventions • Research meeting and data analysis (if time) 	D-02, D-18, E-01, E-03, E-09	<ul style="list-style-type: none"> • Data presentation in PowerPoint • APA quiz 1 due • In-class discussion over readings • Read Langthorne & McGill (2009); Wilder et al. (2010) • BDS modules due
6 10/3	<ul style="list-style-type: none"> • Behavioral contrast effects 	E-07	<ul style="list-style-type: none"> • In-class discussion over readings • Read Pierce & Epling (1999, Ch. 8); Tarbox & Hayes (2005)
7 10/10	<ul style="list-style-type: none"> • APA style review 	G-01, G-04, G-05, Ethics Code	
8 10/17	<ul style="list-style-type: none"> • Choice/matching law • Research meeting and data analysis (if time) 	E-08	<ul style="list-style-type: none"> • Data presentation in PowerPoint • APA quiz 2 • In-class discussion over readings • Read: Reed & Kaplan (2011); Rivard et al. (2014)
9 10/24	<ul style="list-style-type: none"> • Elements of a method section • How to write a results section 	G-01, G-04, G-05, H-01, H-02, H-03, H-04, H-05	<ul style="list-style-type: none"> • Revised IRB or paper due by 11:59 pm on BB • BDS modules due
10 10/31	<ul style="list-style-type: none"> • APA style review (Figures and tables) 	A-10, A-11	
11 11/7	<ul style="list-style-type: none"> • Parameters of reinforcement and punishment in research; ethical considerations • Research meeting and data analysis (if time) 	D-01, D-02, D-16, D-17,	<ul style="list-style-type: none"> • Data presentation in PowerPoint • APA quiz 3 due • In-class discussion over readings • Read Lerman & Vorndran (2002); Cooke & Cooke (1974)
12 11/14	<ul style="list-style-type: none"> • Effects of instructions/rules on research outcomes 	D-09, E-03	<ul style="list-style-type: none"> • In-class discussion over readings • Read Vaughan (2004) from "Rule-governed behavior" • BDS modules due

13 11/21	<ul style="list-style-type: none"> • Verbal behavior considerations • Research meeting and data analysis (if time) 	D-09, D-10, D-11, D-12, D-13, D-14, E-01	<ul style="list-style-type: none"> • Data presentation in PowerPoint • In-class discussion over readings • Read Plavnick & Normand (2013)
14 11/28	<ul style="list-style-type: none"> • Research Project Presentations (PPT) 	A-10, A-11, H-04, H-05	<ul style="list-style-type: none"> • Final papers due by 11:59 pm to BB • Formal critique of peer presentations
15 12/5	<ul style="list-style-type: none"> • Research Project Presentations (PPT) 	A-10, A-11, H-04, H-05	<ul style="list-style-type: none"> • BDS modules due

Sam HoustonTM

STATE UNIVERSITY

Student Guidelines

University Policies

- SHSU Academic Policy Manual-Students
 - [Procedures in Cases of Academic Dishonesty #810213](#)
 - [Students with Disabilities #811006](#)
 - [Student Absences on Religious Holy Days #861001](#)
 - [Academic Grievance Procedures for Students #900823](#)
- SHSU Academic Policy Manual-Curriculum and Instruction
 - [Use of Telephones and Text Messagers in Academic Classrooms and Facilities #100728](#)
 - Technology during instruction: Students are permitted to use technology that will aide in the learning process. Students are encouraged to take notes on lectures via their computer or tablets. However, cell phones are not allowed. Additionally, if the instructor suspects that a student is using technology for non-educational purposes (e.g., Facebook, email, Twitter, etc.), technology will no longer be permitted.
 - Technology during exams: Students are not permitted to use technology during exams or quizzes without explicit written approval from the instructor.
 - Technology in emergencies: In the event of an emergency, students will be allowed to use technology if necessary. Students are asked to exit the classroom when in use.
- Visitors in the Classroom- Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance.

Attendance

- The University allows one absence (3 clock hours) per course. Use the allowed absence for medical, family, and personal needs. There are no excused or unexcused absences in the class. Absences past **1 class meetings** (University Policy is 3 hours) result in 15 points absence reduction. After 2 absences, there will be an automatic grade reduction. After 3 absences, course grade is an F. Please discuss any extenuating circumstances with the professor as soon as possible.

Course Expectations

- **Late Assignment Policy:** All assignments will be submitted online to the class blackboard site, unless otherwise specified. Assignments are by 11:59 pm on the designated date. Assignments that are not submitted on time will accrue a 5% penalty per day, immediately following the assigned time (e.g. assignments due at 11:59 pm but submitted at 12:14 a.m. = 5% penalty).
- **Time Requirement:** For each credit hour, you will be expected to commit at least three hours of course time outside of class.
- **Grading Policy:** While I will do my best to score all assignments accurately, a potential for human error always exists. If you feel that an error was made in the scoring process, please submit a written or emailed explanation of the error and a justification, and I will review your concerns in a timely manner. Please do not try to discuss grading issues with me in person; always submit them in writing.

Bibliography

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Web resources:

- Association for Behavior Analysis International
 - <http://www.abainternational.org/ba.asp>
- Journal of Applied Behavior Analysis
 - <http://seab.envmed.rochester.edu/jaba/>
- The Analysis of Verbal Behavior <http://www.ncbi.nlm.nih.gov/pmc/journals/609/>
- Cambridge Center for Behavioral Studies
 - <http://www.behavior.org/>
- Behavior Analysis.com
 - <http://www.behavioranalysis.com/>
- Behavior Analyst Online
 - <http://www.behavior-analyst-online.org/>

Recommended Journals:

Behavior Analysis in Practice
Behavior Analyst
Behavior Modification
Journal of Applied Behavior Analysis
Journal of the Experimental Analysis of Behavior
Research in Developmental Disabilities

Suggested APA Resources:

Web-based resources: <http://www.apastyle.org/> or
<http://www.wooster.edu/psychology/apa-crib.html> or
<http://webster.commnet.edu/apa/> or
<http://owl.english.purdue.edu/owl/resource/560/01/> or
<http://www.wisc.edu/writing/Handbook/DocAPA.html>

College of Education Information

Accreditation

The programs within the SHSU College of Education have the distinction of receiving accreditation and national recognition from multiple accrediting bodies. All educator certification programs, including teaching and professional certifications, have received ongoing accreditation from the Texas Education Agency ([TEA](#)). Additionally, the educator preparation program has been accredited by the Council for the Accreditation of Educator Preparation ([CAEP](#)-formerly NCATE) since 1954. Many of the educator preparation concentration areas have also chosen to pursue national recognition from their respective Specialized Professional Associations ([SPA](#)), signifying the program is among the best in the nation. The programs within the Department of Counselor Education have also received accreditation from the Council for Accreditation of Counseling and Related Educational Programs ([CACREP](#)).

Course and Program Evaluation

Near the end of the semester, students are asked to take part in the University's adopted course evaluation system, IDEA. The assessments are completed online and instructions are emailed to each student. Students' assessments of courses are taken are systematically reviewed by the Dean, Associate Deans, Department Chairs, and individual faculty members. Only after the semester has completed are faculty members allowed to view aggregated results of non-personally-identifiable student responses.

The College of Education conducts ongoing research regarding the effectiveness of the programs. Students receive one survey in the final semester prior to graduation regarding the operations of the unit during their time here. A second survey occurs within one year following completion of a program, and is sent to students and their employers. This survey requests information related to students' quality of preparation while at SHSU. Students' responses to these surveys are critical to maintaining SHSU's programs' excellence.