SPD 632: Evaluation and Measurement of Behavior

SPD 632 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, 113 M-F, 3-4:50 pm

Text/Readings:

Cooper, J. O., Heron, T. E., & Heward, W.L. (2007). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

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

Course Description:

This course addresses ethical issues in research, measurement of behavior, visual analysis, and interpretation of data. Prerequisite: SPD 633

IDEA Objectives for this course:

Essential:

1. Gaining factual knowledge

Important:

2. Learning to apply course material

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.
- 7. While taking exams, please be quiet in consideration of others who are trying to think.
- 8. Please do not mock others everyone makes mistakes.

Course Format:

This course will be taught through lecture, discussion, text readings, and *in vivo* observation exercises with supplemental use of Blackboard.

Course Learning Objectives:

- 1. Design an experiment.
- 2. Describe the history, the rationale and the different types of single-subject designs.
- 3. Conduct visual analysis

Course Content/Requirements:

1. Exams:

Each exam will consist of 10, four-choice questions. Some questions will address definitions of major concepts, some will address providing and recognizing examples of major concepts, and some will require synthesis and analysis of concepts.

- 2. Research Projects
 - 1. Select two of the provided research articles.
 - 2. From these articles, you should propose a follow-up study that will have the components identified in the project rubric (see below).
 - 3. For each target behavior, you will submit a draft and then revise it based on the provided feedback. The student will be graded on the second draft of that section.
 - 4. The project does not have to be written as a paper per se. Rather, label a section with the target behavior (flush left, bold) and then write in paragraphs. Please clearly indicate which article you have selected at the top of the first page.

- 5. If the student is late in turning in the project, there will be an automatic penalty of the highest point score in the absent/poor column.
- 6. For target behaviors #3, #8 and #10, the student can not choose the same for both projects. Any overlap will automatically result in an absent score.

		Well				
	Target Behavior:	done	Good	Fair	Absent/Poor	Total
1.	State the	9-11	6-8	3-5	0-2	10
	experimental					
	question.					
2.	Describe the	9-11	6-8	3-5	0-2	10
	subjects					
3.	State the	16-20	11-15	6-10	0-5	18
	experimental					
	design. Describe					
	how this					
	experimental					
	design shows an					
	effect.					
4.	Describe the	31-40	21-30	11-20	0-10	35
	experimental					
	design in terms of					
	what will happen					
	to the subjects.					
5.	Describe the	31-40	21-30	16-20	0-15	35
	experimental					
	design in terms of					
	how it controls for					
	at least two					
	potential					
	contounds (threats					
	to internal					
(validity)	7.0		2.4	0.0	0
6.	what is the	7-8	5-6	3-4	0-2	8
	independent					
	variable?	7.0	Εſ	2.4	0.2	0
1.	vv nat is the	7-8	3-6	3-4	0-2	ð
	uepenaent					
	variable?	1			1	

	Well				
Target Behavior:	done	Good	Fair	Absent/Poor	Total
 8. Describe the system of measurement. Design data sheet(s). Why did you select this method of measurement over others? 	31-40	21-30	11-20	0-10	35
9. Draw a graph (can be done by hand) depicting likely data	31-40	21-30	11-20	0-10	35
10. Describe the method of calculating IOA. Provide data, calculate IOA and state outcome.	16-20	11-15	6-10	0-5	18
11. At least one measure of social validity	9-11	6-8	3-5	0-2	10
12. Timeliness, neatness, no spelling or grammar errors.	16-20	11-15	6-10	0-5	18
				Total =	240

Course Evaluation:

Task	Number	Points	Total
			Points
Class Participation	2	100	200
Exams	5	50	250
Projects	2	240	480
			930

Letter Grade	Percent	Range
Α	90%	837-930
В	80%	744-836
С	70%	651-743

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. Late policy :
 - a. Exceptions to this policy are for verified illness or death.
 - b. You may take an exam before the next class period without penalty. If you take the exam later than the next class period, you will automatically be penalized a letter grade.
 - c. If you turn in a project section late, there will be an automatic penalty of the highest point score in the absent/poor column of the rubric.
- 3. 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. Be aware that the work for most in-class activities can not be made up outside of class time. There is no need to inform Dr. Metzger of your absence or the reason for the absence.

Class Communication:

The primary form of communication to the class with be through email. It is the student's responsibility to regularly and frequently check their Sam email account. I usually check my email daily, there are times, however, that it may take me a day or two to respond.

Tentative Course Schedule:

Class 1 Tuesday July 8Review SyllabusFree Choice:
Tuesday July 8Free Choice:K, Chapter 1• Conducting ExperimentsK, Chapter 1• History of Single-Case DesignsK, Chapter 2• Functional RelationsK, Chapter 3Class 2Free Choice:• Conducting ExperimentsK, Chapter 1
July 8Free Choice:K, Chapter 1• Conducting ExperimentsK, Chapter 1• History of Single-Case DesignsK, Chapter 2• Functional RelationsK, Chapter 3Class 2Free Choice:Wednesday• Conducting ExperimentsK, Chapter 1
 Conducting Experiments History of Single-Case Designs Functional Relations K, Chapter 2 K, Chapter 3
• History of Single-Case Designs K, Chapter 2 • Functional Relations K, Chapter 3 Class 2 Free Choice: Wednesday • Conducting Experiments
• Functional RelationsK, Chapter 3Class 2Free Choice:Wednesday• Conducting ExperimentsK, Chapter 1
Class 2Free Choice:Wednesday• Conducting ExperimentsK, Chapter 1
Wednesday • Conducting Experiments K, Chapter 1
July 9 • History of Single-Case Designs K, Chapter 2
Functional Relations K, Chapter 3
Class 3 Review:
Thursday • Conducting Experiments K. Chapter 1
July 10 • History of Single-Case Designs K. Chapter 2
Functional Relations K, Chapter 3
Class 4 Feedback on Learning
Friday Response Correction Read Articles
July 11 Stimuli and Reinforcer Assessment
Close 5 Exam 1 (K. Chapters 1.2)
Mondoy
Induay Indu 14 Discuss Articles
July 14 Discuss Africies
Free Choice:
Direct and Systematic Replication K Chapter 4
Experimental Questions K Chapter 5
Ouantifying Behavior K Chapter 6
• Stimuli and Reinforcer Assessment C H & H: pp 275-284
Class 6 Free Choice:
Tuesday • Direct and Systematic Replication K Chapter 4
July 15 • Experimental Questions K Chapter 5
• Quantifying Behavior K. Chapter 6
• Stimuli and Reinforcer Assessment C H & H: pp 275-284
Class 7 Free Choice:
Wednesday • Direct and Systematic Replication K Chapter 4
July 16 • Experimental Questions K Chapter 5
Ouantifying Behavior K Chapter 6
• Stimuli and Reinforcer Assessment C H & H· nn 275-284
Class 8 Review
Thursday • Direct and Systematic Replication K Chapter 4
July 17 • Experimental Ouestions K Chapter 5
Ouantifying Behavior K Chapter 6
Stimuli and Reinforcer Assessment C H & H ¹ pp 275-284

Class 9	Projects 1 and 2	Experimental Ouestion (TB
Friday		#1)
July 18		• IV (TB #6)
		• DV (TB #7)
		All due by 7:00 pm
Class 10	Exam 2 (K. Chapters 4-6: CH&H. pp. 275-	
Monday	284)	
July 21		
	Discuss Projects 1 and 2	
	Free Choice:	K, Chapter 7
	Recording Systems	K, Chapter 8
	Interobserver Agreement	CHH, Chapter 6
	Constructing and Interpreting Graphic	
	Displays	K, Ch. 15
	Visual Data Analysis	
Class 11	Free Choice:	
Tuesday	Recording Systems	K, Chapter 7
July 22	Interobserver Agreement	K, Chapter 8
	Constructing and Interpreting Graphic	CHH, Chapter 6
	Displays	
	Visual Data Analysis	K, Ch. 15
Class 12	Free Choice:	
Wednesday	Recording Systems	K, Chapter 7
July 23	Interobserver Agreement	K, Chapter 8
	Constructing and Interpreting Graphic	CHH, Chapter 6
	Displays	
	Visual Data Analysis	K, Ch. 15
Class 13	Review:	
Thursday	Recording Systems	K, Chapter 7
July 24	Interobserver Agreement	K, Chapter 8
	Constructing and Interpreting Graphic	CHH, Chapter 6
	Displays	
	Visual Data Analysis	K, Ch. 15
Class 14	Projects 1 and 2	Revisions
Friday		Measurement System (TB
July 25		#8)
		• IOA (TB # 10)
		• Subjects (TB #2)
		All due by 7:00 pm

Class 15	Exam 3 (K, Chapters 7,8 & 15; CH&H,	
Monday Chapter 6)		
July 28		
	Discuss Projects 1 and 2	
	Free Choice:	
	Reversal Designs	K, Ch. 9
	Alternating Treatment Designs	K, Ch. 10
	Multiple Baseline Designs	K, Ch. 11
	Repeated Acquisition Desisgns	K, Ch. 12
Class 16	Free Choice:	
Tuesday	Reversal Designs	K, Ch. 9
July 29	Alternating Treatment Designs	K, Ch. 10
	Multiple Baseline Designs	K, Ch. 11
	Repeated Acquisition Desisgns	K, Ch. 12
Class 17	Free Choice:	
Wednesday	Reversal Designs	K, Ch. 9
July 30	Alternating Treatment Designs	K, Ch. 10
	Multiple Baseline Designs	K, Ch. 11
	Repeated Acquisition Desisgns	K, Ch. 12
Class 18	Review:	
Thursday	Reversal Designs	K, Ch. 9
July 31	Alternating Treatment Designs	K, Ch. 10
	Multiple Baseline Designs	K, Ch. 11
	Repeated Acquisition Desisgns	K, Ch. 12
Class 19	Projects 1 and 2	Revisions
Friday		• Experimental Design (TB
Aug. 01		#3-5)
		• Graph(s) (TB #9)
		All due by 7:00 pm
Class 20	Exam 4 (K, Chapters 9-12)	
Monday	D' D' (1 12	
Aug. 04 Discuss Projects 1 and 2		
	Free Choice:	
	• Analyzing Behavior Change: Basic	CHH Chapter 7
	Anaryzing Denavior Change. Dasic Assumptions and Stratagies	K Chapter 16
	Social Validity	R, Chapter 10
Class 21	Review:	
Tuesdav	Analyzing Behavior Change: Basic	
Αμσ 05	Assumptions and Strategies	CHH Chapter 7
1145.00	Social Validity	K Chapter 16

Class 22	Exam 5 (CHH, Chapter 7; K, Chapter 16)	Final Draft, Projects 1 and 2
Wednesday		Due
Aug. 06		

Performance Matrix

			BACB's
		Performance	Standard(s)
Course Learning Objectives	Activities	Assessment	Standard(s)
1. Select appropriate data	Projects	Project Rubric	4-2a
collection method, collect data,	Class	• Exams	4-2b
graph data.	Discussion		4-3a
			4-3b
			6-1
			6-2
			6-4
			6-5
			6-6
			6-7
			6-8
			6-13
			6-14
			7-1
			7-2
			7-4
			7-6
2. Design an intervention based	• Projects	 Project Rubric 	8-2
upon the obtained data.	• Class	• Exams	8-3
	Discussion		8-4
			8-5
			8-6
3. Describe the history, the	Projects	Project Rubric	5-2
rationale, the different types of	• Class	• Exams	6-1
single-subject designs.	Discussion		6-2
			6-3
			6-4
			6-5
			6-6
			6-7
			6-8
			6-9
			6-10
			6-11

			6-12 6-13 6-14
4. Conduct visual analysis	 Projects Class Discussion	 Project Rubric Exams	7-1 7-2 7-4 7-6

Internet Address for the Behavior Analysis Certification Board's Standards: <u>http://www.bacb.com/</u>

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

STUDENTS WITH DISABILITIES POLICY

It is the policy of Sam Houston State University that no otherwise qualified individual with disabilities shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Students with disabilities may request help with academically related problems stemming from individual disabilities from their instructors, school/department chair, or by contacting the Chair of the Committee for Continuing Assistance for Disabled Students and Director of the Counseling Center, Lee Drain Annex, or by calling (936) 294-1720.

AMERICANS WITH DISABILITIES ACT

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. Students with disabilities that may affect adversely their work in this class should register with the SHSU Counseling Center and talk with their University supervisor and classroom mentor teachers about how they can help. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until registration with the Counseling Center is complete.