

# SPED 6301, APPLIED BEHAVIOR ANALYSIS FALL, 2017

SPED 6301 is a required course for the Master's Degree in Special Education and the Behavior Analysis Certification.

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

**Instructor:** Dr. Kristina Vargo

E & CG TEC 138

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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: A behavioral approach to teaching and learning will be used in this course. Specifically, you will be tested frequently, you will be provided feedback on your performance, and you will be given opportunities to exhibit new behavior and have your behavior shaped through the course of the semester.

Class day and time: Wednesday 5:30-8:20

Class location: TWC 235

**Course Description:** This course presents basic principles, processes, and concepts in Applied Behavior Analysis. Applied project required.

**Textbooks:** Miltenberger, R. (2016). *Behavior modification: Principles and procedures*. Cengage Learning. ISBN-13: 978-1305109391

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

- **1.** Define using technically accurate terms the basic principles of Applied Behavior Analysis (ABA).
- 2. Identify the measurable dimensions of behavior and use operational definitions of behavior.
- **3.** Measure and graphically represent responding.
- 4. Graph data and conduct a visual analysis.
- **5.** Read and interpret original research
- **6.** Conduct practice of ABA according to ethical guidelines



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
Define, using technically accurate terms, the basic principles of Applied Behavior Analysis.	<ul><li>Lecture</li><li>Read texts</li><li>Study questions</li></ul>	<ul><li> Quizzes</li><li> Exams</li><li> Pre- and post-tests</li></ul>	BCBA A-F
Identify the measurable dimensions of behavior and use operational definitions of behavior.	Lecture     Self-management     Project	Self-Management     Project Rubric     Quizzes     Exams	BCBA A01-09, H-01, I-01-02
Measure and graphically represent responding.	Lecture     Self-management     Project	Self-Management     Project Rubric     Quizzes     Exams	BCBA H-01-05, A-10, A-12, A-13, A-14, B-04, I-05
Graph data and conduct a visual analysis.	Lecture     Self-management     Project	Self-Management     Project Rubric     Quizzes     Exams	BCBA H-03-05
Read and interpret original research	Self-management     Project	Self-Management     Project Rubric	BCBA B-02
. Conduct practice of ABA according to ethical guidelines	Lecture     Study Questions     Self-management     Project	Self-Management     Project Rubric     Quizzes     Exams	BCBA J-01, J-02, J-09, F-01

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

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

**Important**: Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course

## Course/Instructor Requirements:

This course is an introduction to applied behavior analysis, which is a field dedicated to the application of behavioral principles and procedures. We will cover basic principles such as reinforcement, punishment, stimulus control, extinction, etc. and we will address how these principles relate to common behavioral procedures.

## **Course Outline**

## Assignments

- 1. **Syllabus quiz (10 pts)** On the first day of class, an open-book syllabus quiz will be conducted to ensure reading and understanding of the syllabus.
- 2. Quizzes (9x10 pts-MINUS ONE DROP= 80 pts) Quizzes will be conducted daily at the beginning of class on the readings assigned for the day. Quizzes will be brief and serve the function of assessing whether you read the material. If you read the chapters, the quizzes should be a breeze. It is HIGHLY recommended that students complete the practice tests at



- the end of each chapter. There will be 9 quizzes total worth 10 points each, but you may drop your lowest quiz score. There will be no make-up quizzes.
- 3. Study questions (4x10 pts= 40 pts) Prior to 11:59 pm on the day following the last class day before the exam, you will write at least 2 questions about the assigned readings for the unit that require additional clarification. Questions should be something you have a legitimate question about from the readings and lecture, but they might just be a topic about which you would like more information. Submit these questions to Blackboard; feedback will also be provided via Blackboard.
- 4. Exams (4x40 pts=160 pts) –There will be four unit tests. The tests will cover the objectives and some "cumulative" questions (questions covering past material). All tests will be worth 40 points. The tests serve several functions. First, they are designed to break up your studying into smaller more manageable units. Second, they will prompt you to keep up with scheduled reading. Third, you will receive frequent feedback about your performance in the class. Fourth, they will serve as a prompt for class discussion when going over the answers.
- 5. Pre- and post-test (2x25 pts=50 pts) All students will complete a pre-test on the first day of class and a post-test on the last day of class. Points will be given for submitting an answer for each question, regardless of the accuracy of the answer. Students are encouraged to do their best.
- 6. Self-Management Project (5x20 pts+50 pts=150 pts) All students will complete a selfmanagement project throughout the semester. Each student will select at least one target behavior to change, design a measurement system, implement a behavior change strategy, and graph the results. If any student does not feel comfortable reporting on their own behavior, they may choose to change the behavior of another person (with consent obtained). The project will be broken into 5 components (each worth 20 points). The selfmanagement components will be due throughout the semester. The purpose of the selfmanagement project is to give you practice applying some of the core elements of applied behavior analysis, e.g. operational definitions, data collection, graphing, treatment implementation, etc. Each aspect of the assignment will apply to material previously covered in class and will be explained in detail. At the end of the semester, the final project will be turned in as a poster presentation, complete with brief introduction, methods, results, and discussion sections and will be worth 50 points. The last class day will be a poster presentation of your results. Students should create a PowerPoint poster with an introduction, subjects, methods, and results section (use publication guidelines from The Journal of Applied Behavior Analysis).

#### Grades

Syllabus quiz	10	
Quizzes	8x10 = 80	
Study Questions	4x10 = 40	A = 490 - 441  or  100% - 90%
Exams	4x40 = 160	B = 440 - 392  or  89% - 80%
Pre/Post-test	2x25 = 50	C = 391 - 343  or  79% - 70%
Self-Management	5x20+50 = 150	
Total	490	



## Schedule – This schedule is tentative.

Date		Topic/Activities		Task List Items		Reading Due		Assessments
Class 1	•	Introductions to ABA and LIDA	•	FK-01, FK-02, FK-			•	Syllabus quiz
8/23	•	Review syllabus, syllabus quiz,		03, FK-04, FK-05,				
		pre-test		FK-06				
Class 2	•	Definition and Characteristics of	•	A-01, A-02, A-03,	•	Milt Chapters	•	Quiz 1
<mark>8/30</mark>		ABA		A-04, H-01, H-02,		1+2		
	•	Measurement of behavior						
Class 3	•	Graphing and Measuring	•	H-03, H-04, H-05,	•	Milt Chapters	•	Quiz 2
<mark>9/6</mark>		behavior Change/graphing		A-10		3+20	•	SQ 1 due
		activity						before exam
Class 4	•	Self-Management Exam 1	•	FV 1F FV 17 FV	+-	Milt Chapter 4		EXAM 1
9/13	•	Reinforcement	•	FK-15, FK-17, FK- 18, FK-21	•	Milt Chapter 4	•	SM 1 due
<b>5/ 13</b>		Reimorcement		10, I K-21				Sivi I due
Class 5	•	Extinction	•	FK-22	•	Milt Chapters	•	Quiz 3
9/20				==		5+14		Q2 0
Class 6	•	Respondent conditioning	•	FK-13, FK-14	•	Milt Chapters	•	Quiz 4
<mark>9/27</mark>						8 +24	•	SM 2 due
Class 7	•	Punishment	•	FK-15, FK-19, FK-	•	Milt Chapters	•	Quiz 5
10/4				20		6, 17, 18	•	SQ 2 due
								before exam
Class 8	•	Exam 2	•	FK-24, FK-35, FK-	•	Milt Chapter	•	EXAM 2
10/11	•	Stimulus Control and		37		7+19	•	SM 3 due
Class 9	•	Generalization		FV 24 FV 41 FV	+-	Milt Chapters		Oui- 6
10/18	•	Prompting and Transfer of Stimulus Control	•	FK-24, FK-41, FK- 42	•	Milt Chapters 10+12	•	Quiz 6
10/10	•	BST		72		10112		
Class 10	•	Shaping	•	FK-17, FK-18, FK-	•	Milt Chapters	•	Quiz 7
10/25	•	Chaining		22, Fk-25		9+11	•	SQ 3 due
		3 3		,				before exam
Class 11	•	Exam 3	•	FK-15, FK-21, FK-	•	Milt Chapter	•	EXAM 3
<mark>11/1</mark>	•	Functional Behavior Assessment		24, FK-30, FK-31,		13	•	SM 4 due
				FK-33,				
Class 12	•	Differential Reinforcement	•	FK-17, FK-18, FK-	•	Milt Chapters	•	Quiz 8
<mark>11/8</mark>	•	Antecedent Control Procedures		19, FK-20, FK-21,		15+16		
				FK-22, FK-26, FK-				
Cl				27		A 411. 51		
Class 13	•	Token Economy	•	FK-18, Kk-42	•	Milt Chapter	•	Quiz 9
11/15	•	Behavioral Contracts				22+23	•	SM 5 due
							•	SQ 4 due before exam
Holiday	•	Thanksgiving (no class)						DETUTE EXAIT
Class 14	•	Exam 4	•	FK-41, FK-42		Milt Chapter	•	EXAM 4
11/29	•	Habit Reversal Procedures				21, 25	•	In-class
	•	Cognitive Behavior Modification						discussion ch.
Class 1F	_	Doct toot	-	A 10 A 11 U 04			-	21, 25
Class 15 12/6	•	Post test	•	A-10, A-11, H-04,			•	Poster
12/0	•	Behavior Change Presentations and data analysis		H-05				presentation (SM 6)
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## **Student Guidelines**

## **University Policies**

- SHSU Academic Policy Manual-Students
  - o Procedures in Cases of Academic Dishonesty #810213
  - o Students with Disabilities #811006
  - o Student Absences on Religious Holy Days #861001
  - O 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.
  - o Technology during exams: Students are not permitted to use technology during exams or quizzes without explicit written approval from the instructor.
  - O 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**

- Allyon, T. & Michael, J. (1959). The psychiatric nurse as a behavioral engineer. *Journal of the Experimental Analysis of Behavior*, 2, 323-334.
- Baer, D. M. (1987a). Weak contingencies, strong contingencies, and many behaviors to change. *Journal of Applied Behavior Analysis*, 20, 335-337.
- Baer, D. M. (1991). Tacting "to a fault." Journal of Applied Behavior Analysis, 24, 429-431.
- Baer, D. M. Wolf, M. M. & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1, 91-97.
- Baer, D. M. Wolf, M. M. & Risley, T. R. (1987). Some still-current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 20, 313-327.
- Barlow, D. H., & Hayes, S. C. (1979). Alternating treatments design: One strategy for comparing the effects of two treatments in a single subject. *Journal of Applied Behavior Analysis*, 12, 199-210.
- Baum, W. M. (1994). Behaviorism: Definition and history. In *Understanding behaviorism* (pp. 3-16). New York: HarperCollins.
- Baum, W. M. (1994). Behaviorism as a philosophy of science. In *Understanding behaviorism* (pp. 17-28). New York: HarperCollins.
- Baum, W. M. (1994). Behaviorism as a philosophy of science. In *Understanding behaviorism* (pp. 17-28). New York: HarperCollins.
- Bourret, J., Vollmer, T. R., & Rapp, J. T. (2004). Evaluation of a vocal mand assessment and vocal mand training procedures. *Journal of Applied Behavior Analysis*. 37, 129-144.
- Carr, E. G., & Durand, V. M. (1985). Reducing behavior problems through functional communication training. *Journal of Applied Behavior Analysis*, 18, 111-126.
- Catania, A. C. (1973). The concept of the operant in the analysis of behavior. *Behaviorism*, 1, 103-116.
- Cooper, J.O.; Heron, T.E.; Heward, W.L. (2007). Applied Behavior Analysis (2nd Ed.). Prentice Hall. ISBN 0-13-142113-1.
- Cuvo, A. J. (2000). Development and function of consequence classes in operant behavior. *The Behavior Analyst*, 23, 57-68.
- Fox, D. K., Hopkins, B. L., & Anger, W. K. (1987). The long-term effects of a token economy on safety performance in open-pit mining. *Journal of Applied Behavior Analysis*, 20, 215-224.
- Iwata, B. A. (1987). Negative reinforcement in applied behavior analysis: An emerging technology. *Journal of Applied Behavior Analysis*, 20, 361-378.



- Iwata, B. A. (1991). Applied behavior analysis as technological science. *Journal of Applied Behavior Analysis*, 24, 421-424.
- Iwata, B. A., Dorsey, M. F., Slifer, K. J., Bauman, K. E., and Richman, G. S. (1994). Toward a functional analysis of self-injury. *Journal of Applied Behavior Analysis*, 27, 197-209. (Reprinted from *Analysis and Intervention in Developmental Disabilities*, 1982, 2, 3-20).
- Iwata, B. A., Kahng, S., Wallace, M. D., & Lindberg, J. S. (2000). The functional analysis model of behavioral assessment. In J. Austin & J. E. Carr (Eds.), *Handbook of Applied Behavior Analysis* (pp. 61-89). Reno, NV: Context Press.
- Iwata, B. A., Pace, G. M., Cowdery, G. M., & Miltenberger, R. G. (1994). What makes extinction work: An analysis of procedural form and function. *Journal of Applied Behavior Analysis*, 27, 131-144.
- Iwata, B. A., Smith, R. G., & Michael, J. L. (2000). Current research on the influence of establishing operations on behavior in applied settings. *Journal of Applied Behavior Analysis*, 33, 411-418.
- Hanley, G. P., Piazza, C. C., & Fisher, W. W. (1997). Noncontingent presentation of attention and alternative stimuli in the treatment of attention-maintained destructive behavior. *Journal of Applied Behavior Analysis*, 30, 229-237.
- Johnston, J. M., & Pennypacker, H. S. (1993). Behaviorism as a scientific subject matter. In *Strategies* and tactics of human behavioral research (2<sup>nd</sup> Ed.) (pp. 15-35). Hillsdale, NJ: Erlbaum.
- Johnston, J. M., & Pennypacker, H. S. (1993). Defining response classes. In *Strategies and tactics of human behavioral research* (2<sup>nd</sup> Ed.) (pp. 65-90). Hillsdale, NJ: Erlbaum.
- Lalli, J. S., Vollmer, T. R., Progar, P. R., Wright, C., Borrero, J., Daniel, D., Barthold, C. H., Tocco, K., & May, W. (1999). Competition between positive and negative reinforcement in the treatment of escape behavior. *Journal of Applied Behavior Analysis*, 32, 285-296.
- Lattal, K. A., & Neef, N. A. (1996). Recent reinforcement-schedule research and applied behavior analysis. *Journal of Applied Behavior Analysis*, 29, 213-230.
- Lerman, D. C., & Iwata, B. A. (1996). Developing a technology for the use of operant extinction in clinical settings: An examination of basic and applied research. *Journal of Applied Behavior Analysis*, 29, 345-382.
- Lerman, D. C., Iwata, B. A., Shore, B. A., & DeLeon, I. G. (1997). Effects of intermittent punishment on self-injurious behavior: An evaluation of schedule thinning. *Journal of Applied Behavior Analysis*, 30, 187-201.
- Lindberg, J. S., Iwata, B. A., Roscoe, E. M., Worsdell, A. S., & Hanley, G. P. (2003). Treatment efficacy of noncontingent reinforcement during brief and extended application. *Journal of Applied Behavior Analysis*, 36, 1-19.
- Lovaas, O.I. (1987). Behavioral treatment and normal educational and intellectual functioning in young



autistic children. Journal of Consulting and Clinical Psychology, 55, 3-9.

- Malott, R. W. (1992a). Should we train applied behavior analysts to be researchers? *Journal of Applied Behavior Analysis*, 25, 83-88.
- Michael, J. (1974). Positive and negative reinforcement, a distinction that is no longer necessary; or a better way to talk about bad things. *Behaviorism*, *3*, 33-38.
- Michael, J. (1993). Establishing operations. The Behavior Analyst, 16, 196-206.
- Michael, J. (2000). Implications and refinements of the establishing operations concept. *Journal of Applied Behavior Analysis*, 33, 401-410.
- Morris, E. K., (1991). Deconstructing "technological to a fault." *Journal of Applied Behavior Analysis*, 24, 411-416.
- Patel, M. R., Piazza, C. C., Kelly, M. L., Ochsner, C. A., & Santana, C. M. (2001). Using a fading procedure to increase fluid consumption in a child with feeding problems. *Journal of Applied Behavior Analysis*, 34, 357-360.
- Skinner, B. F. (1953). Science and human behavior. New York: Free Press.
- Skinner, B. F. (1965). Reflexes and conditioned reflexes. In *Science and Human Behavior* (pp. 45-58). New York: Free Press.
- Skinner, B. F. (1965). Operant behavior. In *Science and Human Behavior* (pp. 59-90). New York: Free Press.
- Skinner, B. F. (1969). *Contingencies of reinforcement: A theoretical analysis*. New York: Appletton-Century-Crofts.
- Skinner, B. F. (1974). *About behaviorism*. New York: Knopf.
- Skinner, B. F. (1974). The causes of behavior. In *About behaviorism* (pp. 10-23). New York: Knopf.
- Skinner, B. F. (2004) Psychology in the year 2000. *Journal of the Experimental Analysis of Behavior*, 81(2), 207–213.
- Smith, R. G., & Iwata, B. A. (1997). Antecedent influences on behavior disorders. *Journal of Applied Behavior Analysis*, 30, 343-375.
- Smith, R. G., Iwata, B. A., Goh, H., & Shore, B. A. (1995). Analysis of establishing operations for self-injury maintained by escape. *Journal of Applied Behavior Analysis*, 28, 515-535.
- Stokes, T. F., & Baer, D. M. (1977). An implicit technology of generalization. *Journal of Applied Behavior Analysis*, 10, 349-367.
- Thompson, R. H., & Iwata, B. A. (2001). A descriptive analysis of social consequences following problem behavior. *Journal of Applied Behavior Analysis*, 34, 169-178.



- Van Houten, R. (1988). The effects of advance stop signs and sign prompts on pedestrian safety in a crosswalk on a multilane highway. *Journal of Applied Behavior Analysis*, 21, 245-251.
- Vollmer, T. R., & Iwata, B. A. (1992). Differential reinforcement as treatment for behavior disorders: Procedural and functional variations. *Research in Developmental Disabilities*, 13, 393-417.
- Vollmer, T. R., Roane, H. S., Ringdahl, J. E., & Marcus, B. A. (1999). Evaluating treatment challenges with differential reinforcement of alternative behavior. *Journal of Applied Behavior Analysis*, 32, 9-23.
- Wilder, D. A., Masuda, A., O'Connor, C., & Baham, M. (2001). Brief functional analysis and treatment of bizarre vocalizations in an adult with schizophrenia. *Journal of Applied Behavior Analysis*, 34, 65-68.
- Whitehead, W. E., Lurie, E., & Blackwell, B. (1976). Classical conditioning of decreases in human systolic blood pressure. *Journal of Applied Behavior Analysis*, 9, 153-157.
- Wolf, M. M. (1978). Social validity: The case for subjective measurement of how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, 11, 203-214.

#### Web resources:

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

## 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.