

SPED 6720: Advanced Behavior Analysis
Syllabus, Spring Semester, 2006

Instructor: Thomas S. Higbee, Ph.D.
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Office: Education Building Room #328
Office Hours: By appointment

Course Date and Time: Tuesday, 4:30-7:00 p.m.

Readings: All readings will be posted to the course website or distributed during class.

Course Overview

The purpose of this course is to expand students' understanding of behavior analysis and their ability to apply behavior analysis to practical situations. The course assumes that students enter with a strong understanding of basic concepts of behavior analysis and that they have experience applying these concepts to practical educational or clinical problems. Given this background, the course is designed to deepen students' understanding of the fundamental concepts of antecedent stimuli, behaviors, and consequences. This process begins with examination of the defining features, animal research, and conceptual writing relevant to each concept. The course will then proceed to issues of generalization and maintenance of behavior in school and clinical situations. Functional analysis of behavior will be examined as an application of behavioral approach and as a set of practical methods for solving behavioral problems.

Course web site: <http://webct.usu.edu>

General Expectations

- Assignments are to be turned in at the beginning of class time (4:30 p.m.) on the date they are due. Late assignments will be assessed a 15% penalty ***per day late***.
- Students are expected to attend class sessions and to remain for the entire scheduled period (4:30 p.m. to 7:00 p.m.) unless previous arrangements are approved by the instructor.
- Students are to adhere to the USU Honor Code and Classroom Civility policy (see course website for details).

Student Evaluation:

Discussion/Participation points: Regular participation by all students in class discussions is expected. Students will be able to earn up to 5 pts each week for active and thoughtful participation in class discussions.

Quizzes: Each class period will begin with a brief (5-10 min) quiz on the readings to be discussed that day. Quizzes will consist of short answer questions and will be worth 5 pts each. There will be 13 total quizzes and the lowest quiz score will be dropped. Quizzes will only be delivered during class on the days they are scheduled and cannot be made up for any reason.

Behavior change project: Students will be required to carry out and report on one intervention designed to change behavior that is based on behavioral principles learned in class. A 10-15 page paper written in APA style outlining the details of the project and including graphs demonstrating the results will be turned in to the instructor. Each student's project topic must be approved by the instructor before it is begun and no later than Feb. 14th. The completed report, including graphs demonstrating the effectiveness of the project, is due on Apr. 18th. Further details about this project will be provided at a later date. The behavior change project is worth 50 points.

In-class presentations of behavior change projects: Students will deliver 10-15 minute presentations on their behavior change projects during the last class period on May 2nd. Presentations will be worth 10 pts.

Absences: Contact the instructor (797-1933, tom.higbee@usu.edu) prior to scheduled class time to report absences.

Allocation of Points and Grading:

<u>Course Product/Activity</u>	<u>Points Possible</u>
Discussion/Participation	60
Weekly Quizzes (12 @ 5 pts each)	60
Behavior Change Project	50
<u>Class Presentation</u>	<u>10</u>
Total	180

GRADE SCALE

94-100%	A
90-93%	A-
87-89%	B+
83-86%	B
80-82%	B-
77-79%	C+
73-76%	C
70-72%	C-
67-69%	D+
60-66%	D
59% & below	F

Accommodations and Alternate Format Materials

In coordination with the USU Disability Resource Center (DRC), reasonable accommodation will be provided for qualified students with disabilities. Please notify the instructor during the first week of class if accommodations are necessary. Accommodations and alternate format materials are available through the DRC found at TSC 104 or call 435-797-2444 TTY: 435-797-0740.

SPED 6720: Advanced Behavior Analysis
Course Schedule

Week	Date	Topic
1	Jan. 10	Syllabus Review, Definitions and Characteristics of Applied Behavior Analysis, Basic Concepts
2	Jan. 17	Reinforcer Identification Procedures I: Stimulus Preference Assessment Methods
3	Jan. 24	Reinforcer Identification Procedures II: Special Issues in Preference Assessment
4	Jan. 31	Functional Assessment I: Informant and Descriptive Methods
5	Feb. 7	Functional Assessment II: Experimental Functional Analysis
6	Feb. 14	Functional Assessment III: Functional Analysis of Automatically Reinforced Behavior
7	Feb. 21	NO CLASS-MONDAY SCHEDULE
8	Feb. 28	Function Based Interventions: Extinction, Noncontingent Reinforcement, Differential Reinforcement
9	Mar. 7	Behavioral Antecedents I: Basic Principles
10	Mar. 14	NO CLASS- SPRING BREAK
11	Mar. 21	Behavioral Antecedents II: Antecedent Interventions
12	Mar. 28	Behavioral Acquisition Techniques: Chaining, Shaping, and Imitation
13	Apr. 4	Special Applications of Reinforcement: Contingency Contracting, Token Economies, Self-Management Strategies
14	Apr. 11	Operant Punishment/Aversive Control
15	Apr. 18	Generalization & Maintenance of Behavior
16	Apr. 25	Ethics in Applied Behavior Analysis
17	May 2	BCP Presentations

Note: The instructor reserves the right to make modifications to this schedule during the course of the semester if the need arises.

Course Readings:

Week 1: Introduction-

- 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.

Week 2: Stimulus Preference Assessment Methods

- Pace, G. M., Ivancic, M. T., Edwards, G. L., Iwata, B. A., & Page, T. A. (1985). Assessment of stimulus preference and reinforcer value with profoundly retarded individuals. *Journal of Applied Behavior Analysis, 18*, 249-255.
- Fisher, W., Piazza, C. C., Bowman, L. G., Hagopian, L. P., Owens, J. C., & Slevin, I. (1992). A comparison of two approaches for identifying reinforcers for persons with severe and profound disabilities. *Journal of Applied Behavior Analysis, 25*, 491-498.

- DeLeon, I. G., & Iwata, B. A. (1996). Evaluation of a multiple-stimulus presentation format for assessing reinforcer preferences. *Journal of Applied Behavior Analysis, 29*, 519-533.
- Carr, J.E., Nicholson, A.C., & Higbee, T.S. (2000). Evaluation of a brief multiple-stimulus preference assessment in a naturalistic context. *Journal of Applied Behavior Analysis, 33*, 353-357.
- Roane, H. S. Vollmer, T. R. Ringdahl, J. E. & Marcus, B. A. (1998). Evaluation of a brief stimulus preference assessment. *Journal of Applied Behavior Analysis, 31*, 605-620.
- Paramore, N.W. & Higbee, T.S. (2005). An evaluation of a brief multiple-stimulus preference assessment with adolescents with emotional/behavioral disorders (E/BD) in an educational setting. *Journal of Applied Behavior Analysis, 38*, 399-404.

Week 3: Special Issues in Preference Assessment

- Northup, J., George, T., Jones, K., Broussard, C., & Vollmer, T. R. (1996). A comparison of reinforcer assessment methods: The utility of verbal and pictorial choice procedures. *Journal of Applied Behavior Analysis, 29*, 201-212.
- Higbee, T.S., Carr, J.E., & Harrison, C.D. (1999). The effects of pictorial versus tangible stimuli in stimulus preference assessments. *Research in Developmental Disabilities, 20*, 63-72.
- Cohen-Almeida, D., Graff, R.B., & Ahearn, W.H. (2000). A comparison of verbal and tangible stimulus-choice preference assessments. *Journal of Applied Behavior Analysis, 33*. 329-334.
- Wilder, D.A., Ellsworth, C., White, H., & Schock, K. (2003). A comparison of stimulus preference assessment methods in adults with schizophrenia. *Behavioral Interventions, 18*, 151-160.
- Hanley, G.P., Iwata, B.A., & Lindberg, J.S. (1999). Analysis of activity preferences as a function of differential consequences. *Journal of Applied Behavior Analysis, 32*, 419-435.
- DeLeon, I.G, Iwata, B.A., & Roscoe, E.M. (1997). Displacement of leisure reinforcers by food during preference assessments. *Journal of Applied Behavior Analysis, 30*, 475-484.
- Bojeak, S.L. & Carr, J.E. (1999). On the displacement of leisure items by food during multiple-stimulus preference assessments. *Journal of Applied Behavior Analysis, 32*, 515-518.

Week 4: Informant and Descriptive Functional Assessment Methods

- O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Story, K., Newton, J. S. (1997). *Functional assessment and program development for problem behaviors: A practical handbook* (2nd ed.). Pacific Grove, CA: Brooks/Cole Publishing Company. (Chapters 2 & 3: pp. 9-53).
- Sturmey, P. (1994). Assessing the functions of aberrant behaviors: A review of psychometric instruments. *Journal of Autism and Developmental Disorders, 24*, 293-304.
- Chong, I. M., Carr, J. E., & Sidener, T. M. *Descriptive functional assessment of problem behavior: A methodological review*. Unpublished manuscript.
- Kahng, S., Iwata, B. A., Fischer, S. M., Page, T. J., Treadwell, K. R. H., Williams, D. E., & Smith, R. G. (1998). Temporal distributions of problem behavior based on scatter plot analysis. *Journal of Applied Behavior Analysis, 31*, 593-604.

- Vollmer, T. R., Borrero, J. C., Wright, C. S., Van Camp, C., & Lalli, J. S. (2001). Identifying possible contingencies during descriptive analyses of severe behavior disorders. *Journal of Applied Behavior Analysis, 34*, 269-287.

Week 5: Experimental Functional Analysis

- Iwata, B. A., Pace, G. M., Dorsey, M. F., Zarcone, J. R., Vollmer, T. R., Smith, R. G., et al. (1994). The functions of self-injurious behavior: An experimental-epidemiological analysis. *Journal of Applied Behavior Analysis, 27*, 215-240.
- Hanley, G. P., Iwata, B. A., & McCord, B. E. (2003). Functional analysis of problem behavior: A review. *Journal of Applied Behavior Analysis, 36*, 147-185.
- Carr, J. E., & LeBlanc, L. A. (2003). Functional analysis of problem behavior. In W. O'Donohue, J. E. Fisher, & S. C. Hayes (Eds.), *Cognitive behavior therapy: Applying empirically supported techniques in your practice* (pp. 167-175). Hoboken, NJ: Wiley.
- Derby, K. M., Wacker, D. P., Sasso, G., Steege, M., Northup, J., Cigrand, K., & Asmus, J. (1992). Brief functional assessment techniques to evaluate aberrant behavior in an outpatient setting: A summary of 79 cases. *Journal of Applied Behavior Analysis, 25*, 713-721.
- Vollmer, T. R., Marcus, B. A., Ringdahl, J. E., & Roane, H. S. (1995). Progressing from brief assessments to extended experimental analyses in the evaluation of aberrant behavior. *Journal of Applied Behavior Analysis, 28*, 561-576.
- Wright-Gallo, G.L., Higbee, T.S, Reagon, K.A., & Davey, B.J. (in press). Classroom-based functional analysis and intervention for students with emotional/behavioral disorders. *Education and Treatment of Children*.

Week 6: Functional Analysis of Automatically Reinforced Behavior

- 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.
- O'Reilly, M. F. (1997). Functional analysis of episodic self-injury correlated with recurrent otitis media. *Journal of Applied Behavior Analysis, 30*, 165-167.
- Kennedy, C. H., & Meyer, K. A. (1996). Sleep deprivation, allergy symptoms, and negatively reinforced problem behavior. *Journal of Applied Behavior Analysis, 29*, 133-135.
- Kennedy, C. H., & Souza, G. (1995). Functional analysis and treatment of eye poking. *Journal of Applied Behavior Analysis, 28*, 27-37.
- Piazza, C. C., Hanley, G. P., & Fisher, W. W. (1996). Functional analysis and treatment of cigarette pica. *Journal of Applied Behavior Analysis, 29*, 437-450.
- Van Camp, C. M., Lerman, D. C., Kelley, M. E., Roane, H. S., Contrucci, S. A., & Vorndran, C. M. (2000). Further analysis of idiosyncratic antecedent influences during the assessment and treatment of problem behavior. *Journal of Applied Behavior Analysis, 33*, 207-221.

- LeBlanc, L. A., Patel, M. R., & Carr, J. E. (2000). Recent advances in the assessment of aberrant behavior maintained by automatic reinforcement in individuals with developmental disabilities. *Journal of Behavior Therapy and Experimental Psychiatry, 31*, 137-154.

Week 8: Extinction, Noncontingent Reinforcement, & Differential Reinforcement

- Iwata, B. A., Pace, G. M., Cowdery, G. E., & Miltenberger, R. G. (1994). What makes extinction work: An analysis of procedural form and function. *Journal of Applied Behavior Analysis, 27*, 131-144.
- 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.
- Vollmer, T. R., Iwata, B. A., Zarcone, J. R., Smith, R. G., & Mazaleski, J. L. (1993). The role of attention in the treatment of attention-maintained self-injurious behavior: Noncontingent reinforcement and differential reinforcement of other behavior. *Journal of Applied Behavior Analysis, 26*, 9-21.
- Hagopian, L.P., Crockett, J.L., van Stone, M., DeLeon, I.G., & Bowman, L.G. (2000). Effects of noncontingent reinforcement on problem behavior and stimulus engagement: The role of satiation, extinction, and alternative reinforcement. *Journal of Applied Behavior Analysis, 33*, 433-449.
- Carr, J. E., Coriaty, S., Wilder, D. A., Gaunt, B. T., Dozier, C. L., Britton, L. N., Avina, C., & Reed, C. L. (2000). A review of "noncontingent" reinforcement as treatment for the aberrant behavior of individuals with developmental disabilities. *Research in Developmental Disabilities, 21*, 377-391.
- Hagopian, L. P., Fisher, W. W., Sullivan, M. T., Acquisto, J., & LeBlanc, L. A. (1998). Effectiveness of functional communication training with and without extinction and punishment: A summary of 21 inpatient cases. *Journal of Applied Behavior Analysis, 31*, 211-235.
- Hanley, G. P., Iwata, B. A., & Thompson, R. H. (2001). Reinforcement schedule thinning following treatment with functional communication training. *Journal of Applied Behavior Analysis, 34*, 17-38.

Week 9: Behavioral Antecedents: Basic Principles

- Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). *Applied behavior analysis*. Columbus, OH: Merrill. (Ch. 13 – Stimulus Control)
- Michael, J.L. (1993). *Concepts and principles of behavior analysis*. Kalamazoo, MI: ABA (Chapters 7, 8, & 9).
- Michael, J.L. (1993). Establishing operations. *The Behavior Analyst, 16*, 191-206.
- Michael, J. (2000). Implications and refinements of the establishing operation concept. *Journal of Applied Behavior Analysis, 33*, 401-410.
- Laraway, S., Snyckerski, S., Michael, J., & Poling, A. (2003). Motivating operations and terms to describe them: Some further refinements. *Journal of Applied Behavior Analysis, 36*, 407-414.

Week 11: Behavioral Antecedents: Antecedent Interventions

- Carr, J. E., & LeBlanc, L. A. (in press). Noncontingent reinforcement (NCR) as antecedent behavior support. In J. K. Luiselli (Ed.), *Antecedent intervention: Recent developments in community focused behavior support*. Baltimore, MD: Brookes.
- Munk, D.D. & Karsh, K.G. (1999). Antecedent curriculum and instructional variables as classwide interventions for preventing or reducing problem behaviors. In A.C. Repp & R.H. Horner (Eds.), *Functional Analysis of Problem Behavior: From Effective Assessment to Effective Support* (pp. 259-276). Belmont, CA: Wadsworth.
- McComas, J., Hoch, H., Paone, D., & El-Roy, D. (2000). Escape behavior during academic tasks: A preliminary analysis of idiosyncratic establishing operations. *Journal of Applied Behavior Analysis*, 33, 479-494.

Week 12: Chaining, Shaping, and Imitation

- Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). *Applied behavior analysis*. Columbus, OH: Merrill. (Chapters 14, 15, & 16).
- Werts, M. G., Caldwell, N. K., & Wolery, M. (1996). Peer modeling of response chains: Observational learning by students with disabilities. *Journal of Applied Behavior Analysis*, 29, 53-66.
- Hagopian, L. P., & Thompson, R. H. (1999). Reinforcement of compliance with respiratory treatment in a child with cystic fibrosis. *Journal of Applied Behavior Analysis*, 32, 233-236.
- Neef, N.A., Marckel, J., Ferreri, S., Jung, S., Nist, L., & Armstrong, N. (2004). Effects of modeling versus instructions on sensitivity to reinforcement schedules. *Journal of Applied Behavior Analysis*, 37, 267-281.
- Nikopoulos, C.K. & Keenan, M. (2004). Effects of video modeling on social initiations by children with autism. *Journal of Applied Behavior Analysis*, 37, 93-96.
- LeBlanc, L. A., Coates, A. M., Daneshvar, S., Charlop-Christy, M. H., Morris, C., & Lancaster, B. M. (2003). Using video modeling and reinforcement to teach perspective-taking skills to children with autism. *Journal of Applied Behavior Analysis*, 36, 253-257.

Week 13: Contingency Contracting, Token Economies, & Self-Management Strategies

- Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). *Applied behavior analysis*. Columbus, OH: Merrill. (Chapters 23, 24, & 26).
- Kahng, S., Boscoe, J. H., & Byrne, S. (2003). The use of an escape contingency and a token economy to increase food acceptance. *Journal of Applied Behavior Analysis*, 36, 349-353.
- McGinnis, J. C., Friman, P. C., & Carlyon, W. D. (1999). The effect of token rewards on "intrinsic" motivation for doing math. *Journal of Applied Behavior Analysis*, 32, 375-379.
- Mithaug, D. K., & Mithaug, D. E. (2003). Effects of teacher-directed versus student-directed instruction on self-management of young children with disabilities. *Journal of Applied Behavior Analysis*, 36, 133-136.

Week 14: Operant Punishment/Aversive Control

- Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). *Applied behavior analysis*. Columbus, OH: Merrill. (Chapters 19, 20, 21, & 22).

- Lerman, D. C., & Vorndran, C. M. (2002). On the status of knowledge for using punishment: Implications for treating behavior disorders. *Journal of Applied Behavior Analysis*, 35, 431-464.
- Perone, M. (2003). Negative effects of positive reinforcement. *The Behavior Analyst*, 26, 1-14.
- Hanley, G.P., Piazza, C.C., Fisher, W.W., & Maglieri, K.A. (2005). On the effectiveness of and preference of punishment and extinction components of function-based interventions. *Journal of Applied Behavior Analysis*, 38, 51-65.
- Conyers, C., Miltenberger, R., Maki, A., Barenz, R., Jurgens, M., Sailer, A., Haugen, M., & Kopp, B. (2004). A comparison of response cost and differential reinforcement of other behavior to reduce disruptive behavior in a preschool classroom. *Journal of Applied Behavior Analysis*, 37, 411-415.

Week 15: Generalization & Maintenance of Behavior

- Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). *Applied behavior analysis*. Columbus, OH: Merrill. (Chapter 27).
- Stokes, T.F. & Baer, D.M. (1977). An implicit technology of generalization. *Journal of Applied Behavior Analysis*, 10, 349-367.
- Esveldt-Dawson, K. & Kazdin, A.E. (1998). *How to maintain behavior*. Austin, TX: Pro-ED.
- Hager, K.D., Slocum, T.A., & Salzberg, C.L. Current treatment of maintenance in behavior analytic literature: A review of JABA studies. Manuscript submitted for publication.

Week 16: Ethics in Behavior Analysis

- Behavior Analysis Certification Board (2004). *Behavior analysis certification board guidelines for responsible conduct for behavior analysts*. Retrieved January 9, 2006, from <http://www.bacb.com>
- Bailey, J.S. & Burch, M.R. (2005). *Ethics for behavior analysts*. Mahwah, New Jersey: Lawrence Erlbaum Associates (Chapters 1, 2, & 3).