18:820:513:80 Basic Principles of Behavior Analysis

Fall 2025 Syllabus

Instructor: Emma Auten, Ph.D., BCBA-D Class meetings: Wednesday 5-7:30 p.m.

Office: CSH–RUCARES Class location:

Tadie Conference Room

E-mail: ea761@rbhs.rutgers.edu Office hours: By appointment

eauten@childrens-specialized.org

Description

18:820:513 Basic Principles of Behavior Analysis (3)

Presents the student with an introduction to the basic principles and historical overview of applied behavior analysis, learning theory, and the fundamental principles of science and behavior. Students will learn to distinguish between respondent and operant models of behavior and conditions. Concepts and principles of behavior including reinforcement, punishment, stimulus control, verbal behavior, and motivational operations will be defined and discussed in the context of behavioral learning theory in order to establish a theoretical foundation for applications in advanced-level courses.

Class Format

Basic Principles of Behavior Analysis is an in-person course. The expectation is that students will attend in person, unless there is a change made by the university and/or the instructor, which would be announced to the students in a timely fashion. Please do NOT attend class in person if you are experiencing symptoms of illness.

Attendance

Each student is required to attend class. If you are unable to attend a class due to unusual circumstances (e.g., illness, childcare) or religious observance, please inform the instructor in writing as soon as possible. It is your responsibility to obtain any missed notes and handouts from your peers, so please make arrangements with them in advance.

- Students with a disability should contact the Office of Disability Services: www.ods.rutgers.edu/students/getting-registered
- Students with a temporary disabling condition (e.g., broken leg) should contact the Dean of Students Office: www.deanofstudents.rutgers.edu

BACB Task List

This course covers the "Concepts and Principles" Section of the Behavior Analyst Certification Board's (BACB's) 6th Edition Task List. For reference, those are listed below.

B. Concepts and Principles

B-1 Identify and distinguish among behavior, response, and response class.B-2 Identify and distinguish

between stimulus and stimulus class

- B-3 Identify and distinguish between respondent and operant conditioning.
- B-4 Identify and distinguish between positive and negative reinforcement contingencies.
- B-5 Identify and distinguish between positive and negative punishment contingencies.
- B-6 Identify and distinguish between automatic and socially mediated contingencies.
- B-7 Identify and distinguish among unconditioned, conditioned, and generalized reinforcers.
- B-8 Identify and distinguish among unconditioned, conditioned, and generalized punishers.
- B-9 Identify and distinguish among simple schedules of reinforcement.
- B-10 Identify and distinguish among concurrent, multiple, mixed, and chained schedules of reinforcement.
- B-11 Identify and distinguish between operant and respondent extinction as operations and processes. B-12 Identify examples of stimulus control.
- B-13 Identify examples of stimulus discrimination.
- B-14 Identify and distinguish between stimulus and response generalization.
- B-15 Identify examples of response maintenance.
- B-16 Identify examples of motivating operations.
- B-17 Distinguish between motivating operations and stimulus control.
- B-18 Identify and distinguish between rule-governed and contingency-shaped behavior.
- B-19 Identify and distinguish among verbal operants.
- B-20 Identify the role of multiple control in verbal behavior.
- B-21 Identify examples of processes that promote emergent relations and generative performance.
- B-22 Identify ways behavioral momentum can be used to understand response persistence.
- B-23 Identify ways the matching law can be used to interpret response allocation.
- B-24 Identify and distinguish between imitation and observational learning.

Objectives

Objective 1: Describe both seminal and contemporary theory and research related to the philosophical underpinnings of Applied Behavior Analysis.

Objective 2: Define and provide examples of foundational concepts and principles associated with Applied Behavior Analysis.

Objective 3: Apply foundational concepts and principles and dimensions of Applied Behavior Analysis when reading, discussing, and synthesizing research through writing and presenting.

Readings and Recommended Texts

Required readings

- Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). An introduction to behavior analysis. John Wiley & Sons.
 - https://www.wiley.com/en-us/An+Introduction+to+Behavior+Analysis-p-9781119126539
- Articles and chapters have been (or will be) placed in a shared folder available on Canvas.

You are not required to purchase these books for class; however, I recommend that you obtain these as references.

• American Psychological Association (2020). Publication manual of the American

- Psychological Association (7th ed.). https://doi.org/10.1037/0000165-000.
- Strunk, W., Jr., & White, E. B. (2000). *The elements of style* (4th ed.). Needham Heights, MA: Allyn & Bacon.

Class Format

The format of the class will vary and may include group discussions, student presentations, and brief lectures.

- Participation/discussion questions: The majority of class time will be spent discussing the assigned readings, which are listed on the schedule. Everyone is responsible for all readings and for contributing to the class discussions, which will involve discussion based on discussion questions emailed to me prior to class (see below).
- Reading Quizzes (see below).

Participation

Everyone is responsible for all readings and contributing to class discussion. You must be in class to receive participation credit. You will be graded on the quantity and quality of your participation as follows:

- 3 points = actively participated throughout the class
- 2 points = actively participated at times but most participation was passive
- 1 point = passively participated in class but seemed off task or distracted at times
- 0 points = unable to participate due to missing class

Discussion Questions

To help prepare you for class discussion, you will write **two** paragraph-long discussion questions on the readings each week. Discussion questions are due by 11:59 p.m. via Canvas the day before class. Please submit discussion questions using the "Discussions" tab in Canvas.

Each set of discussion questions is worth 10 points. Five points will be subtracted if the discussion questions are sent after they are due (see above). No points will be provided for discussion questions that are not received prior to class.

Some Do's and Don'ts for Writing Discussion Questions from Dr. Gregory Madden:

- Don't ask, "Do you agree with the authors?"
- Don't write a question concerned exclusively with a point made on the first page of the paper (your instructor will strongly suspect you did not read the entire article)
- Never ask, "What has been published since this paper was published?" Professors see this question frequently. So, it fails to distinguish you as a thoughtful student.
- Don't ask questions that sound like they would appear on an exam (e.g., "What single-subject design was used?").

- Don't ask questions about whether or not the subjects' gender affected their behavior. These are legitimate concerns (sometimes), but it is such a common question that it fails to set you apart as a thoughtful student.
- Don't ask questions that have "yes" or "no" answers.
- Don't submit single-sentence questions. On rare occasions, these receive good grades, but most of the time they do not.
- Run your question through a spell- and grammar-check program before submitting them. Errors of this kind make you look careless because they are easily avoided.
- Ask questions that require discussion. Said another way, your question should make the reader think and evaluate the evidence for or against a particular hypothesis, suggestion, theory, etc.
- Be specific and concrete. Once you have stated your basic idea/question, tell us why you think this. Are there some data in the article that led you to your idea/question? If so, tell us about them in concrete terms.
- Don't waste half of your writing space rehashing the findings of the study. We all read it, so just tell us the specific finding that you are interested in talking about.

Reading Quizzes

Because the course is discussion-based, it is imperative that students read the assigned content before each meeting. To facilitate this, you will respond to reading quiz questions at the start of class meetings. These questions are intended to verify that you read in preparation for the class meeting; they are not meant to be "tricky" or difficult. Questions will be general and answers should simply indicate that you read and understand the material. Free-response answers should be only 2–3 sentences each. Your instructor understands that everyone has an "off" week; thus, your lowest Reading Quiz score will be dropped at the end of the semester. As such, there will be no makeup quizzes. Quizzes will be worth 10 points each.

A Note on Plagiarism

Plagiarism means using the words or ideas of another person without giving them credit. Therefore, "quotation marks" should be used to indicate the exact words of another. However, in graduate school, you should really be digesting the material and reframing the ideas in your own words (i.e., paraphrasing). If you have any questions about what constitutes cheating or plagiarism, please see me. Students who plagiarize any material will earn a grade of F for the course.

Grading

Your course grade will be based on the following:

Class participation: 30%Discussion questions: 30%Reading quizzes: 40%

Final letter grades will be assigned based on the percentage of available points earned. Please note that a "B" or higher is required to pass this course.

A = 89.5%-100% B+ = 84.5%-89.49% B = 79.5%-84.49% C = 69.5%-79.49% F = 0%-69.49%

Student Success

The faculty and staff at Rutgers are committed to your success. Students who are successful tend to seek out resources that enable them to excel academically, maintain their health and wellness, prepare for future careers, navigate college life and finances, and connect with the RU community. Resources that can help you succeed and connect with the Rutgers community can be found at success.rutgers.edu, and nearly all services and resources that are typically provided in-person are now available remotely.

Disability Statement

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form (https://webapps.rutgers.edu/student-ods/forms/registration).

Tentative Class Schedule

This schedule will change throughout the semester. You will be provided advanced notice when schedule changes occur

Readings appear in their suggested reading order

Week 1 (9/3/25): Syllabus Review

Week 2 (9/8/25): ***Note that this week only, class will meet on Monday*** An Introduction to Behavior Analysis

Chapter 1 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons. Skinner, B. F. (1966). What is the experimental analysis of behavior? *Journal of the Experimental Analysis of Behavior*, *9*(3), 213–218

Sidman, M. (2011). Can an understanding of basic research facilitate the effectiveness of practitioners? Reflections and personal perspectives. *Journal of Applied Behavior Analysis*, 44(4), 973–991.

Week 3 (9/17/25): Understanding Behavioral Research

Chapter 2 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Lattal, K. A. (2013). The five pillars of the experimental analysis of behavior. In G. J. Madden, W. V. Dube, T. D. Hackenberg, G. P. Hanley, & K. A. Lattal (Eds.), *APA handbook of behavior analysis, Vol. 1. Methods and principles* (pp. 33–63). American Psychological Association.

Week 4 (9/24/25): Experimental Designs in Behavior Analysis

Chapter 3 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Mace, F. C. (1996). In pursuit of general behavioral relations. *Journal of Applied Behavior Analysis*, 29(4), 557–563.

Fisher, W. W., Fuhrman, A. M., Greer, B. D., Ibañez, V. F., Peterson, K. M., & Piazza, C. C. (2023). Ethical considerations with balancing clinical effectiveness with research design. In D. J. Cox, M. T. Brodhead, & S. P. Quigley (Eds.), *Research ethics in behavior analysis: From bench to bedside*. (pp. X–Y). Cambridge, MA: Academic Press, Elsevier.

Week 5 (10/1/25): Phylogenetic Behavior and Pavlovian Learning

Chapter 4 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Madden, G. J., Mahmoudi, S., & Brown, K. (2023). Pavlovian learning and conditioned reinforcement. *Journal of Applied Behavior Analysis*, *56*(3), 498–519.

Breland, K., & Breland, M. (1961). The misbehavior of organisms. *American Psychologist*, 16(11), 681–684.

Week 6 (10/8/25): Operant Learning I: Reinforcement

Chapter 5 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Shahan, T. A. (2017). Moving beyond reinforcement and response strength. *The Behavior Analyst*, 40, 107–121.

Week 7 (10/15/25): Operant Learning II: Positive and Negative Reinforcement

Chapter 6 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Perone, M. (2003). Negative effects of positive reinforcement. The Behavior Analyst, 26,

Week 8 (10/22/25): Extinction and Differential Reinforcement

Chapter 7 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

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(1), 131–144.

Fisher, W. W., Greer, B. D., Shahan, T. A., & Norris, H. M. (2023). Basic and applied research on extinction bursts. *Journal of Applied Behavior Analysis*, 56(1), 4–28.

Week 9 (10/29/25): Primary and Conditioned Reinforcement, and Shaping

Chapter 8 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Hackenberg, T. D. (2018). Token reinforcement: Translational research and application. *Journal of Applied Behavior Analysis*, *51*(2), 393–435

Week 10 (11/9/23): Motivation, Reinforcer Efficacy, and Habit Formation

Chapter 9 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Fisher, W. W., Greer, B. D., Mitteer, D. R., Fuhrman, A. M., Romani, P. W., & Zangrillo, A. N. (2018). Further evaluation of differential exposure to establishing operations during functional communication training. *Journal of Applied Behavior Analysis*, *51*(2), 360–373.

Week 11 (11/5/25): Punishment and Ethics Surrounding its Use

Chapter 10 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Fontes, R. M., & Shahan, T. A. (2021). Punishment and its putative fallout: A reappraisal. *Journal of the Experimental Analysis of Behavior*, 115(1), 185–203.

Fisher, W. W., Greer, B. D., & Mitteer, D. R. (2023). Additional comments on the use of contingent electric skin shock. *Perspectives on Behavior Science*, *46*, 339–348.

Week 12 (11/12/25): Complex Contingencies of Reinforcement

Chapter 11 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

DeLeon, I. G., Fernandez, N., Goldman, K. J., Schieber, E., Greer, B. D., & Reed, D. D. (in press). Behavioral economics: Principles and applications. In W. W. Fisher, C. C. Piazza, & H. S. Roane (Eds.), *Handbook of applied behavior analysis*. (2nd ed., pp. X–Y). New York: Guilford Press.

Week 13 (11/19/25): Antecedent Stimulus Control

Chapter 12 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Greer, B. D., Fisher, W. W., Saini, V., Owen, T. M., & Jones, J. K. (2016). Functional communication training during reinforcement schedule thinning: An analysis of 25 applications. *Journal of Applied Behavior Analysis*, 49, 105–121.

Fisher, W. W., Greer, B. D., Fuhrman, A. M., & Querim, A. C. (2015). Using multiple schedules during functional communication training to promote rapid transfer of treatment effects. *Journal of Applied Behavior Analysis*, 48, 713–733.

Week 14 (11/26/25): Choice GUEST LECTURER

Chapter 13 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Fisher, W. W., & Mazur, J. E. (1997). Basic and applied research on choice responding. *Journal of Applied Behavior Analysis*, *30*(3), 387–410.

Week 15 (12/3/25): Verbal Behavior, Rule-Following, and Clinical Behavior Analysis

Chapter 14 — Madden, G. J., Reed, D. D., & DiGennaro Reed, F. D. (2021). *An introduction to behavior analysis*. John Wiley & Sons.

Kazdin, A. E. (1973). The effect of vicarious reinforcement on attentive behavior in the classroom. *Journal of Applied Behavior Analysis*, 6(1), 71–78.

Week 16 (12/10/25): Final Semester Wrap Up (Presentations)