



Department of Applied Psychology
Graduate School of Applied and Professional Psychology (GSAPP)
Rutgers University
New Brunswick, New Jersey
Fall 2024

18:820:513:02 Basic Principles of Behavior Analysis

Credits: 3

Level: Graduate

Thursdays 6:15-8:45pm

Smithers Room 219

Instructor: Meghan Deshais, Ph.D., BCBA-D (she/her)

Office: Nelson D313

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Office Hours: By appointment

*The instructor will make every reasonable effort to meet with students whenever necessary.

Rutgers University Mission: As the premier comprehensive public research university in the state's system of higher education, Rutgers, The State University of New Jersey, has the threefold mission of

- providing for the instructional needs of New Jersey's citizens through its undergraduate, graduate, and continuing education programs;
- conducting the cutting-edge research that contributes to the medical, environmental, social, and cultural well-being of the state, as well as aiding the economy and the state's businesses and industries; and
- performing public service in support of the needs of the citizens of the state and its local, county, and state governments.

Each component of the university's mission reinforces and supports the other two.

As the University of New Jersey®, Rutgers is dedicated to teaching that meets the highest standards of excellence, to conducting research that breaks new ground, and to providing services, solutions, and clinical care that help individuals and the local, national, and global communities where they live.

GSAPP Mission: The mission of GSAPP is threefold: education, research/scholarship, and public service. Its goal is to prepare well-educated, qualified, and competent direct-service psychologists who have a special commitment to direct community involvement and to underserved populations--professionals who can integrate scientific knowledge with innovation in the delivery of psychological services to individuals, families, groups, and organizations. Professionals receiving a doctoral degree in psychology should be capable of extending psychological knowledge and exhibiting the high level of analytic skills and theoretical understanding needed to use existing and emerging psychological knowledge.

Core Values. We are guided by four core values that are apparent in our learning environment, centers, and clinics:

1. **Academic excellence** in preparing students for careers in clinical and school psychology.
2. Commitment to **social justice** and helping **underserved populations**.
3. **Diversity** of students trained, approaches used, theoretical orientations followed, and populations served.
4. **Knowledge generation and dissemination** using contemporary research approaches.

Applied Psychology Statement: The Department of Applied Psychology embraces the mission of the school by offering instruction that has an emphasis on civic and global citizenship, social justice, and cultural diversity. Our programs provide students with knowledge needed to understand individual and collective behaviors; develop quantitative and qualitative statistical analysis and research design needed to analyze the corresponding physical and environmental contributors to human behavior; and a beginning understanding of the analysis and treatment of behavior problems and disorders.

Our programs prepare students with the requisite theoretical knowledge; critical thinking and problem-solving skills needed to successfully participate in employment or scholastic activities. Students will have opportunities to pursue scholarly activities that prepares them to successfully compete for admissions into doctoral level psychology and related academic programs, and pursue master's level career pathways through available concentration and certificate. In general, students will acquire a knowledge base grounded in psychological theory and experiential learning (research or practicum) designed to further advance their personal and professional career development.

Course Description: This course 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 to establish a theoretical foundation for applications in advanced-level courses.

Course Overview: BACB Task List - This course covers the "Concepts and Principles" Section of the Behavior Analyst Certification Board's (BACB's) 5th Edition Task List.

The following concepts will be covered: behavior, response, response class, stimulus, stimulus class, respondent conditioning, operant conditioning, positive reinforcement, negative reinforcement, schedules of reinforcement, automatic reinforcement, socially mediated reinforcement, positive punishment, negative punishment, unconditioned reinforcers/punishers, conditioned reinforcers/punishers, operant extinction, stimulus control, discrimination, generalization, maintenance, motivating operations, rule-governed behavior, contingency-shaped behavior, basic verbal operants, derived stimulus relations.

Objectives for the course:

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 writing.

Assignments and Evaluation Method:

Objectives – Each week you will be given objectives. These will outline key terms you should be able to define, explain, and discuss, as well as key concepts from articles you should be able to explain and discuss. You are responsible for completing assigned readings and the provided objectives for each class period. Objectives will be posted on Canvas prior to class. They are

designed to help guide your reading and direct your attention to important concepts. Answers to objectives will not be collected or graded each week, however they will be directly linked to material covered on quizzes and exams. Thus, providing high-quality, thoughtful responses in the objectives is to your advantage.

Quizzes (30%) – At the start of each class period there will be a quiz. Each quiz will contain about 5 open-ended questions. Quiz questions will be directly linked to the objectives for the relevant week. A practice quiz (ungraded) will be given on week 1 and all subsequent quizzes (starting week 2) will be graded. At the end of the semester the lowest 2 quiz grades will be dropped (if you miss a class, the 0 for that week will be dropped – this will account for up to 2 missed classes).

Participation (10%) – Discussions and activities will occur throughout each class. Participation is expected and will facilitate a more engaging class experience.

Exams (60%) – There will be a mid-term exam on week 8 and a final exam at the end of the semester. Exam questions will be directly linked to the objectives.

Missed Work

If, due to an absence, you miss:

- A quiz – this will count towards your two lowest quiz scores being dropped
- A participation grade – this will count towards your two lowest participation grades being dropped
- An exam – exam makeups will only be offered for extenuating circumstances; you will need to schedule a time with the professor to make it up.

The final grade will be determined and computed based on the following:

- a) Quizzes: 30%
- b) Participation: 10%
- c) Exams: 60%

Grades and Grading Policy

Grade	Description	Numerical Equivalent
A	Outstanding	90-100 (4.0)
B+	Intermediate Grade	87-89 (3.5)
B	Good	80-86 (3.0)
C**	Average	70-79 (2.0)*Grades of C or lower do not count toward graduation
F	Failure	69 or below (0.0)
INC	Incomplete	
S	Satisfactory	
U	Unsatisfactory	
PA	Pass	
NC	No credit given	

Program requirement: All students in Applied Psychology courses must achieve a grade of B or better and maintain a GPA of 3.0, or academic remediation will be enforced.

Required Text (*available on Canvas in Reading List or Files*)

1. Madden, G.J., Reed, D.D., & DiGennaro Reed, F.D. (2021). *An introduction to behavior analysis*. John Wiley & Sons Ltd. <https://www.wiley.com/en-us/An+Introduction+to+Behavior+Analysis-p-9781119126546>
2. Other readings will be placed in a shared folder available on Canvas.

Class Schedule

*Schedule subject to changes, you will be notified of any changes

Week 1 (1/23/25): Introduction to Behavior Analysis

Participation 1 & Quiz 1 (practice quiz; ungraded)

Textbook Reading

Chapter 1 — Madden, G.J., Reed, D.D., & DiGennaro Reed, F.D. (2021). *An introduction to behavior analysis*. John Wiley & Sons Ltd .

Week 2 (1/30/25): Experimental Analysis of Behavior

Quiz 2 & Participation 2

Textbook Reading

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

Article Readings

LeBlanc, L. A., Raetz, P. B., Sellers, T. P., & Carr, J. E. (2016). A proposed model for selecting measurement procedures for the assessment and treatment of problem behavior. *Behavior analysis in practice*, 9(1), 77-83.

Week 3 (2/6/25): Experimental Design

Quiz 3 & Participation 3

Textbook Reading

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

Article Readings

Holtyn, A. F., Koffarnus, M. N., DeFulio, A., Sigurdsson, S. O., Strain, E. C., Schwartz, R. P., & Silverman, K. (2014). Employment-based abstinence reinforcement promotes opiate and cocaine abstinence in out-of-treatment injection drug users. *Journal of applied behavior analysis*, 47(4), 681-693.

Week 4 (2/13/25): Respondent Conditioning

Quiz 4 & Participation 4

Textbook Reading

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

Article Readings

Friman, P.C., Hayes, S.C., & Wilson, K.G. (1998). Why behavior analysts should study emotion: The example of anxiety. *Journal of Applied Behavior Analysis*, 31(1), 137-156.

Week 5 (2/20/25): Reinforcement

Quiz 5 & Participation 5

Textbook Readings

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

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

Week 6 (2/27/25): Extinction and Differential Reinforcement

Quiz 6 & Participation 6

Textbook Reading

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

Article Readings

Vollmer, T. R., Peters, K. P., Kronfli, F. R., Lloveras, L. A., & Ibañez, V. F. (2020). On the definition of differential reinforcement of alternative behavior. *Journal of Applied Behavior Analysis*, 53(3), 1299-1303.

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.

Week 7 (3/6/25): Primary and Conditioned Reinforcement & Shaping

Quiz 7 & Participation 7

Textbook Reading

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

Article Readings

Fiske, K. E., Isenhower, R. W., Bamond, M. J., & Lauderdale-Littin, S. (2020). An analysis of the value of token reinforcement using a multiple-schedule assessment. *Journal of Applied Behavior Analysis*, 53(1), 563-571.

Week 8 (3/14/25): Midterm Exam**Spring Break (3/20/25)****Week 9 (3/27/25): Motivation, Reinforcer Efficacy, & Habit Formation**

Quiz 8 & Participation 8

Textbook Reading

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

Article Readings

DeLeon, I.G., Fisher, W.W., Rodriguez-Catter, V., Maglieri, K., Herman, K., & Marhefka, J. (2001). Examination of relative reinforcement effects of stimuli identified through pretreatment and daily brief preference assessments. *Journal of Applied Behavior Analysis*, 34(4), 463-473.

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(3), 407-414.

Week 10 (4/3/25): Punishment & Ethical Considerations of Its Use

Quiz 9 & Participation 9

Textbook Reading

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

Article Readings

Vollmer, T. R. (2002). Punishment happens: Some comments on Lerman and Vorndran's review. *Journal of Applied Behavior Analysis*, 35(4), 469-473.

Hanley, G.P., Piazza, C.C., Fisher, W.W., & Maglieri, K.A. (2005). On the effectiveness of and preference for punishment and extinction components of function-based interventions. *Journal of Applied Behavior Analysis*, 38(1), 51-65.

Week 11 (4/10/25): Complex Contingencies of Reinforcement

Quiz 10 & Participation 10

Textbook Reading

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

Article Readings

Poling, A., & Normand, M. (1999). Noncontingent reinforcement: An inappropriate description of time-based schedules that reduce behavior. *Journal of Applied Behavior Analysis*, 32(2), 237-238.

Week 12 (4/17/25): Stimulus Control

Quiz 11 & Participation 11

Textbook Reading

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

Article Readings

Sy, J. R., Donaldson, J. M., Vollmer, T. R., & Pizarro, E. (2014). An evaluation of factors that influence children's instruction following. *Journal of applied behavior analysis*, 47(1), 101-112.

Week 13 (4/24/25): Choice

Quiz 12 & Participation 12

Textbook Reading

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

Article Readings

Borrero, C.S.W., Vollmer, T.R., Borrero, J.C., Bourret, J.C., Sloman, K.N., Samaha, A.L., & Dallery, J. (2010). Concurrent reinforcement schedules for problem behavior and appropriate behavior: Experimental applications of the matching law. *Journal of the Experimental Analysis of Behavior*, 93(3), 455-469.

Tiger, J.H., Hanley, G.P., & Hernandez, E. (2006). An evaluation of the value of choice with preschool children. *Journal of Applied Behavior Analysis*, 39(1), 1-16.

Week 14 (5/1/25): Verbal Behavior, Rule-Following, & Clinical Behavior Analysis

Quiz 13 & Participation 13

Textbook Reading

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

Article Readings

Carbone, V.J., Sweeney-Kerwin, E.J., Attanasio, V., & Kasper, T. (2010). Increasing the vocal responses of children with autism and developmental disabilities using manual sign mand training and prompt delay. *Journal of Applied Behavior Analysis*, 43(4), 705-709.

Iannaccone, J.A., Hagopian, L.P., Javed, N., Borrero, J.C., & Zarcone, J.R. (2020). Rules and statements of reinforcer loss in differential reinforcement of other behavior. *Behavior Analysis in Practice*, 13(1), 81-89.

Week 15: Final Exam

GSAPP and Applied Dept. Policies

Important Dates: Add/Drop ends _____

Attendance and Participation:

Attendance and class participation are a major part of this class. You are expected to attend all classes and arrive on time. *Only two (2) excused/unexcused absences are permitted. Missing more than 2 classes will result in a full letter grade reduction of your final grade.* Additional absences will result in additional letter-grade reductions. If you are forced to miss an excessive number of classes, you will be encouraged to withdraw from the class. Students who arrive to class more than 10 minutes after the class has started are considered tardy and will be marked absent if they arrive more than 30 minutes after class has started. After 3 late arrivals, an unexcused absence will be marked in your record. If you miss class, you will be responsible for obtaining any missed material from a classmate (hence the identification of a buddy on the first day of class).

Computer/Cell Phone Use in Class

If students are expected to send or receive urgent e-mails, texts, or calls during class, their unanticipated and urgent needs should be communicated to and approved by the instructor prior to class. All cell phones should be turned off or in silent mode. All computing devices should be used only for the purpose of class-related activities.

Academic Integrity

All Rutgers students should review and adhere to the University principles of academic integrity, available at: <http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers/>

APA Citation Style. All papers MUST be written using the APA style (7th ed.).

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com (directly or via learning management system, i.e. Sakai, Blackboard, Canvas, Moodle) for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

Students who use ChatGPT or similar tools on assignments without permission, or who use them in improper ways, are violating the academic integrity rules of Rutgers University. Any assignments deemed to violate the integrity rules of Rutgers University will receive a zero.

Student Resources

For more information visit: <https://gsapp.rutgers.edu/current-students/important-links>

Accommodations due to Disability

If you seek accommodations due to a documented disability, you may arrange for these through the Office of Disability Services, Kreeger Learning Center, 151 College Avenue; dfoffice@rci.rutgers.edu or you can visit: <https://ods.rutgers.edu/students/documentation-guidelines>.

Title IX: <http://compliance.rutgers.edu/resources/resources-for-facultystaff/>

Counseling services. Students often experience personal problems or difficulties during the term that may interfere with learning and their daily activities. If you or someone you know needs to talk to someone regarding such personal issues, the University provides free counseling services through the Counseling and Psychological Services (CAPS) and their information can be found at: <http://psychologicalservices.rutgers.edu>. They also offer a number of useful workshops for general stress management and techniques for promoting mental health. If you have any questions about CAPS or other services, I am happy to speak with you privately.

Intellectual Property

Lectures and materials utilized in this course, including but not limited to videocasts, podcasts, visual presentations, assessments, and assignments, are protected by United States copyright laws as well as Rutgers University policy. As the instructor of this course, I possess sole copyright ownership. You are permitted to take notes for personal use or to provide to a classmate also currently enrolled in this course. Under no other circumstances is distribution of recorded or written materials associated with this course permitted to any internet site or similar information-sharing platform without my express written consent. Doing so is a violation of the university's [Academic Integrity Policy](#).

Similarly, these copyright protections extend to original papers you produce for this course. In the event that I seek to share your work further, I will first obtain your written consent to do so. Finally, as the instructor for this course, I have the responsibility to protect students' right to privacy. Classroom recordings of students will therefore be treated as educational records under the Family Educational Rights and Privacy Act (FERPA), the U.S. federal law that governs access to educational information and records. Instructors and students must provide notification if any part of online sessions are to be recorded, and such recordings *cannot be circulated outside the course*.

GSAPP Diversity Statement

The Graduate School of Applied and Professional Psychology (GSAPP) at Rutgers University-New Brunswick is committed to diversity, equity, and inclusion (DEI). We view individuals from a variety of backgrounds, lived-experiences, identities, and perspectives across our community members as critical to our threefold mission of world-class education, scholarship, and public service. We aim to honor diversity through a variety of means, such as inclusive groups, events, initiatives, curricula, and our organizational composition. We strive to create and maintain a safe space in which all voices are heard and valued, consistent with Rutgers University's Beloved Community. GSAPP acknowledges the current, historical, and systemic practices that have been used to marginalize and oppress some identities and give power and privilege to others in and beyond the United States. Additionally, we are keenly aware of the destructive effects, including on mental health and personal well-being, of prejudice, stigma, microaggressions, and violence in all its forms. We engage in a critical examination of our own biases and behaviors, both past and present. We utilize evolving methods to address, incorporate, and celebrate DEI through our scholarship, service, and training of future health service professionals.

Respect for Diversity

It is my goal that students from all backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength, and benefit. It is my intent to present materials and activities that are respectful of diversity: gender identity, sexuality,

disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups.

Important Note: It is imperative that there be an atmosphere of trust and safety in the classroom. I will attempt to foster an environment in which each class member is able to hear and respect each other. It is critical that each class member show respect for all worldviews expressed in class. It is expected that some of the material in this course may evoke strong emotions, please be respectful of others' emotions and be mindful of your own. Please let me know if something said or done in the classroom, by either myself or other students, is particularly troubling or causes discomfort or offense. While our intention may not be to cause discomfort or offense, the impact of what happens throughout the course is not to be ignored and is something that I consider to be very important and deserving of attention. If and when this occurs, there are several ways to alleviate some of the discomfort or hurt you may experience:

1. Discuss the situation privately with me. I am always open to listening to students' experiences and want to work with students to find acceptable ways to process and address the issue.
2. Discuss the situation with the class. Chances are there is at least one other student in the class who had a similar response to the material. Discussion enhances the ability for all class participants to have a fuller understanding of context and impact of course material and class discussions.
3. Notify me of the issue through another source such as your advisor, a trusted faculty member, or a peer. If for any reason you do not feel comfortable discussing the issue directly with me, I encourage you to seek out another, more comfortable avenue to address the issue.

-This statement was adapted from Lynn Hernandez, Behavioral and Social Sciences, School of Public Health, Brown University

Pronouns

My pronouns are she/her/hers. You will have an opportunity to share your pronouns with me on our first day of class. If you would prefer to be called by your name only (no pronouns), please share that with me. If your preference changes at any point during the semester, please feel free to let me know.