



Department of Applied Psychology
Graduate School of Applied and Professional Psychology (GSAPP)
Rutgers University
New Brunswick, New Jersey
Fall 2021

18:820:513:02 Basic Principles of Behavior Analysis
Credits: 3
Level: Graduate
Tuesdays, 3:35-6:05pm
Smithers Hall, Rm. 200

Instructor: Meghan A. Deshais, Ph.D., BCBA-D

Office: Nelson D313

Phone:

E-mail: m.deshais@rutgers.edu

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: 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, contributions of different learning mechanisms on the development of unconscious bias, evidence-based strategies for decreasing bias.

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 synthesizing research through writing and presenting.

Assignments and Evaluation Method:

This class will employ an interteaching approach (Boyce & Himeline, 2002) with experiential learning opportunities and frequent assessment. Interteaching is an evidence-based teaching approach based on dyadic discussion and has been demonstrated to produce better learning outcomes than traditional, lecture-based instruction (Saville et al., 2011). Not all components of interteaching will be in place, as research suggests that not all interteaching components are necessary to produce positive learning outcomes.

Prep Guides - You are responsible for completing assigned readings and the provided prep guide for each class period. Prep guides will be posted on Canvas prior to class. They are designed to help guide your reading, direct your attention to important concepts, and will be directly linked to material in exams. Thus, providing high-quality, thoughtful responses in your prep guides is to your advantage. Your prep guides will be collected and graded during a portion of class periods. Graded prep guides will be worth 5 points each.

Interteach Discussion Participation - During each class period, you and a partner will discuss each item on your prep guides. Your job is to have an in-depth, thorough discussion with minimal reference your prep guide and should not consist of you each reading your answers to each other. My job is to help facilitate your discussions and provide support as needed.

Record Sheets – After you complete your interteach discussion during class, you and your partner will complete a record sheet and submit it on Canvas. The record sheet will provide you an opportunity to reflect on your discussion and topics that you are still finding challenging. Your completed record sheet will be used for your interteach participation score for each class period, worth 5 points each.

Clarifying Lectures - Topics you identify in your record sheets as being in need of additional attention will be covered in a brief lecture the following class period.

Experiential learning activities – Activities to support key concepts will take place during class and will be done in pairs or small groups.

Exams – Exams will be frequent to encourage regular interaction with course material. Although not required, I highly encourage you to complete corrections on any exam items you lose points on. Exams will be worth 20 points each (5 exams, 100 points total).

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

Maximum Point Total	----- 200 points
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a) Interteach participation: 35% (70 points)

- b) Graded prep guides: 10% (20 points)
- c) Activity participation: 5% (10 points)
- d) Exams: 50% (100 points)

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:

- Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press. <https://www.routledge.com/Behavior-Analysis-and-Learning-A-Biobehavioral-Approach-Sixth-Edition/Pierce-Cheney/p/book/9781138898585>
- Articles and chapters have been (or will be) placed in a shared folder available on Canvas.

Core Texts:

American Psychiatric Association (2014). *Diagnostic and statistical manual of mental disorders (5th ed., Text)*. Washington, DC: Author.

American Psychological Association. (2020). *Publication manual of the American Psychological Association (7th ed., Text)*. Washington, DC: Author.

Supplemental Readings/Resources:

- Textbook Resources - <https://routledgetextbooks.com/textbooks/9781138898585/students.php>
- Learning Tutorials - www.scienceofbehavior.com

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

Week 1 (9/7/21): Introduction/Syllabus Review

Submit Getting To Know You form

Week 2 (9/14/21): A Science of Behavior

Chapter 1 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.

Chapter 1.

Skinner, B. F. (1966). What is the experimental analysis of behavior? *Journal of the Experimental Analysis of Behavior*, 9, 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, 973–991.

Week 3 (9/21/21): The Experimental Analysis of Behavior

Chapter 2 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.

Skinner, B. F. (1956). A case history in scientific method. *American Psychologist*, 11(5), 221.

Week 4 (9/28/21): Reflexes and Classical Conditioning

Exam 1 (weeks 2, 3)

Chapter 3 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.

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

Week 5 (10/5/21): Reinforcement and Extinction

Chapter 4 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.

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 6 (10/12/21): Schedules of Reinforcement

Chapter 5 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.

Roll, J. M., Higgins, S. T., & Badger, G. J. (1996). An experimental comparison of three different schedules of reinforcement of drug abstinence using cigarette smoking as an exemplar. *Journal of Applied Behavior Analysis*, 29(4), 495-505.

Week 7 (10/19/21): Aversive Control and Ethics Surrounding its Use

Exam 2 (weeks 4, 5, 6)

- Chapter 6 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.
- Fontes, R. M., & Shahan, T. A. (2020). Punishment and its putative fallout: A reappraisal. *Journal of the Experimental Analysis of Behavior*, *115*, 185–203.
- Vollmer, T. R. (2002). Punishment happens: Some comments on Lerman and Vorndran's review. *Journal of Applied Behavior Analysis*, *35*(4), 469-473.

Week 8 (10/26/21): Operant–Respondent Interrelationships

- Chapter 7 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.
- Friman, P. C., Hayes, S. C., & Wilson, K. G. (1998a). Why behavior analysts should study emotion: The example of anxiety. *Journal of Applied Behavior Analysis*, *31*(1), 137-156.
- Lamal, P. A. (1998). Advancing backwards. *Journal of Applied Behavior Analysis*, *31*(4), 705-706.
- Friman, P. (1998b). Behavior Analysis Of Private Events Is Possible, Progressive, And Nondualistic: A Response To Lamal. *Journal of Applied Behavior Analysis*, *31*(4), 707.

Week 9 (11/2/21): Stimulus Control

- Chapter 8 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.
- 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.
- Poling, A., Weetjens, B. J., Cox, C., Beyene, N., Bach, H., & Sully, A. (2010). Teaching giant African pouched rats to find landmines: Operant conditioning with real consequences. *Behavior Analysis in Practice*, *3*(2), 19-25.

Week 10 (11/9/21): Choice and Preference

Exam 3 (weeks 7, 8, 9)

- Chapter 9 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.
- Higgins, S. T., & Petry, N. M. (1999). Contingency management: Incentives for sobriety. *Alcohol research & health*, *23*(2), 122.

Week 11 (11/16/23): Conditioned Reinforcement

- Chapter 10 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.
- 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 12 (11/23/21): Imitation and Rule-Governed Behavior

- Chapter 11 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.
- Sidener, D. W. (2006). Joint control for dummies: An elaboration of Lowenkron's model of joint (stimulus) control. *The Analysis of Verbal Behavior*, 22(1), 119-122.
- Young, J. M., Krantz, P. J., McClannahan, L. E., & Poulson, C. L. (1994). Generalized imitation and response-class formation in children with autism. *Journal of Applied Behavior Analysis*, 27(4), 685-697.

Week 13 (11/30/21): Verbal Behavior

Exam 4 (weeks 10, 11, 12)

- Chapter 12 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.
- Harman, M. J., Kodak, T., Bohl, L., & Mayland, T. (2021). The Effects of Competing Verbal Behavior on Performance in a Math Task. *The Analysis of Verbal Behavior*, 1-20.

Week 14 (12/7/21): Three Levels of Selection: Biology, Behavior, and Culture

- Chapter 14 — Pierce, W. D., & Cheney, C. D. (2017). *Behavior analysis and learning: A biobehavioral approach*. Routledge Press.
- Chapter 27 – Skinner (1953). Culture and Control. *Science and Human Behavior*.

Week 15 (12/14/21): Bias and Evidence-Based Strategies for Change

- Matsuda, K., Garcia, Y., Catagnus, R., & Brandt, J. A. (2020). Can Behavior Analysis Help Us Understand and Reduce Racism? A review of the Current Literature. *Behavior Analysis in Practice*, 13, 336-347

Finals Week

Exam 5 (weeks 13, 14, 15)

RUBRICS

Participation Analysis (Activity Participation)

Criteria/Grade	A	B	C	F
Regular Attendance	Attends all classes	Misses 1 class	Misses 2 classes	Misses 3 or more classes
Lateness	Always on time	Lateness is neither often nor extensive	More than 3 lateness or lateness that accumulate for more than an hour	More than 4 lateness or lateness that accumulate for more than 2 hours
Participation	Actively participates, contributing appropriately to class discussions, shows evidence of	Generally attentive and participatory, shows evidence of reading texts. Generally, remains throughout class –	Inattentive as evidenced by distracting behaviors. Little participation or evidence of	Takes frequent or long breaks, engages in alternate activities in class, little or no participation or

	reading texts, rarely leaves class	breaks, if used, are limited in time and number	reading. Takes frequent or long breaks	evidence of reading
Group Participation	Fully actively engages in group work and discussion.	Generally attentive and participatory.	Poor participation, misses one of two experiential group activities.	No group participation.

GSAPP and Applied Dept. Policies

Important Dates:

Add/Drop ends 9/14/2021

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 5%-point deduction for each additional day of absence from your final grade point.* If you are forced to miss an excessive amount 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. The only excused absences are those are serious or required (e.g., personal medical emergencies or serious illness/injury; death or serious illness in the family; military duties; jury duty). They will always require some form of documentation: Examples include a doctor's note (on letterhead and signed by the doctor); obituary or funeral program; court order/notice; etc.). You must always supply me with the original or a copy of your documentation, which I will keep on file. Only students with approved documentation can be given an excused absence.

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 (6 ed.).

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*.

Mask policy

To protect the health and well-being of all members of the University community, masks must be worn by all persons on campus when in the presence of others (within six feet) and in buildings in non-private enclosed settings (e.g., common workspaces, workstations, meeting rooms, classrooms, etc.). Masks must be worn during class meetings; any student not wearing a mask will be asked to leave. Masks should conform to CDC guidelines and should completely cover the nose and mouth: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-facecoverings.html> Each day before you arrive on campus or leave your residence hall, you must complete the brief survey on the My Campus Pass symptom checker self-screening app. If you have questions about Rutgers University policies and practices, please see [Navigating Our Classrooms and Student Spaces](#)

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

Land Acknowledgement

We acknowledge that the land on which we stand is the ancestral territory of the Lenape People. We pay respect to Indigenous people throughout the Lenape diaspora- past, present, and future- and honor those that have been historically and systemically disenfranchised. We also acknowledge that Rutgers University, like New Jersey and the United States as a nation, was founded upon the exclusions and erasures of Indigenous peoples.

Preferred Pronouns

My preferred pronouns are she/her/hers. On the first day of the semester, I will pass around a form that provides an opportunity to share your preferred pronouns with me. 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.