



Master of Applied Psychology (MAP)
Graduate School of Applied and Professional Psychology (GSAPP)
Rutgers University
New Brunswick, New Jersey
Summer 2024

18:820:517 Advanced Topics in Applied Behavior Analysis: Teaching Children with Autism and Related Disorders
Credits: 3
Level: Graduate
Tuesdays, 4:00 pm – 8:00 pm
Room – NH-D340

Instructor: Debra Paone, PhD, BCBA-D

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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.

MAP Statement: The program embraces the mission of the school by offering instruction that has an emphasis on civic and global citizenship, social justice and cultural diversity. This course of study provides 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.

The MAP degree will 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 programs (see examples of concentration areas listed below). In addition to completing the required coursework (36 credits), completion of the MAP degree will be marked by a culminating academic experience—Capstone project (either a research project/presentation (3 credits) and experiential learning activity (6-credit practicum training). 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 OVERVIEW

This course begins by introducing students to methods for identifying and evaluating evidence-based strategies for teaching children with autism spectrum disorder (ASD), within and outside of ABA. This framework is used throughout the remainder of the course to evaluate state-of-the-art methods in teaching children with ASD. Specifically, the student will learn to identify different models of ABA instruction, including the use of the analysis of verbal behavior in the education of children with ASD and related disorders. The student will develop an understanding of additional teaching strategies such as visual supports, methods of teaching discrimination, and strategies for increasing social skills. Finally, the student will learn about the effective components of consultation in classrooms for children with ASD and collaboration with families of individuals with ASD across diverse settings. The goal of this course is to develop an understanding of the unique applications of a variety of ABA instructional techniques for learners with ASD, and to consider the influence of culture on choice of effective treatment for children with autism and their families. The students should be able to readily identify effective, evidence-based teaching strategies, and be able to apply specific methodologies to address specific skill deficits while taking into account the cultural context of the student, family, and/or school.

Objectives for the course:

The student will be able to:

1. understand the nature and relevance of evidence-based practice
2. describe levels of evidence for interventions inside of ABA and outside of ABA
3. compare and contrast naturalistic strategies with discrete trial instruction
4. articulate the environmental variables responsible for language
5. understand a behavioral analysis of language
6. describe teaching procedures appropriate for given language-based skills, considering multilingual backgrounds
7. understand the steps necessary to teach simple and conditional discriminations
8. describe the use of visual supports, such as video modeling, activity schedules, and social stories, to promote independence
9. describe a variety of strategies that can be used to build social skills
10. describe the important elements in effective consultation across diverse school settings
11. understand family experience and factors related to coping, and the impact of culture and diversity on family experience
12. describe the important components of effective collaboration with families

STUDENT RESOURCES

Statement on Disabilities: 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 on the ODS web site at: <https://webapps.rutgers.edu/student-ods/forms/registration>.

Statement on Academic Integrity: The University's academic integrity policy, to which this class will adhere, can be reviewed at: <http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers/>

Title IX: <https://nbttitleix.rutgers.edu/>

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.

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

CLASSROOM CULTURE

Names and Pronouns: Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.

Respect for Diversity: I intend for students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class through the multimodal teaching approach, 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. It is my expectation that students in this class maintain respect the diversity of their classmates in action and word. We will discuss content related to diversity and cultural awareness in this course. Students who experience discomfort or feel uninvited in discussions should contact me to identify ways in which class meetings may be restructured to be more inclusive.

ATTENDANCE

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.). Only students with approved documentation can be given an excused absence.

Religious Holidays: Students who will miss class due to a religious holiday not observed by the University should notify me prior to their absence so we can arrange for alternative arrangements for missed content or assignments.

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.

ASSIGNMENTS AND EVALUATION METHOD

A mixed method of pedagogy will be used as a means of instruction in this course. These techniques may include the use of lectures, class discussions, small group activities, individual activities, and the use of videos, web resources etc. The methods used to assess student performance may also be mixed. These methods may include written assessment including test items involving multiple choice, short answer, essay, or true/false responses in addition to other performance-based methods of assessment.

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

Activity	Due Date	Points
Participation	Ongoing	5
Application Activities	Specific Dates	45 (5 pts each x 9 activities)
Exam 1		25
Exam 2		25
	Maximum Point Total	100

- 1. Application activities.** Throughout the semester, application activities will be assigned that ask you to apply what you have read and learned in class to the development of a permanent product. These activities include an response regarding non-evidenced based treatment, the development of written skill acquisition programs, behavioral skills training, and group essay responses related to consultation and working with families. Instructions for these application activities will be given in the modules for each week, and scoring rubrics will be provided. Group meetings will allow for peer feedback on application activities before submission/grading.
- 2. Exams.** Exams are non-cumulative.

Grades and Grading Policy

<u>Grade</u>	<u>Description</u>	<u>Numerical Equivalent</u>
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 do not count toward graduation
F	Failure	69 or below (0.0)
INC	Incomplete	

Program requirement: All MAP and Graduate Certificate in ABA students must achieve a grade of B or better and maintain a GPA of 3.0, or academic remediation will be enforced.

READINGS

Required Texts:

Assigned articles listed on syllabus. All readings will be provided in Canvas.

CLASS SCHEDULE

Week 1

Class Meeting 5/21

Content: Introduction to Course

- Review of Syllabus
- Review of Canvas
- Expectations for Course
- Group Assignments

Lecture:

- Evidence-Based Practice Introduction

Readings: None

Week 2

Class Meeting 5/28

Content: Evidence Based Treatment

- Science, pseudoscience, antiscience
- Evaluating ABA and non-ABA treatments
- Impact of culture on diagnosis and treatment

Lectures:

- Evidence-Based Practice Introduction
- Defining Evidence-Based Practice
- Evaluating the Evidence

Readings:

- Saez, C.M., Davies, M.S., Kazemi, E. *et al.* (2023) Factors Affecting Parent Treatment Decisions for Children with Autism Spectrum Disorders: A Brief Review. *Behav Analysis Practice* **16**, 93–101 <https://doi.org/10.1007/s40617-022-00716-6S>
- Mandell (2005). The role of culture in families of children with ASD.
- Ward SC, Whalon K, Rusnak K, Wendell K, Paschall N. (2013) The association between therapeutic horseback riding and the social communication and sensory reactions of children with autism. *J Autism Dev Disord.* 43(9):2190-8. doi: 10.1007/s10803-013-1773-3. PMID: 23371511.

Activity:

- Contribute to group discussion on the impact of culture on an ASD treatment and diagnosis. Why might families use non-ABA treatment?
- Score Ward article using Reichow guidelines (will review in class)
- Complete and upload a response to family considering non-evidence based treatment

Group Work:

Group discussion of Ward article to prepare for assignment

Assignment Due - 6/4: Non-evidence-based treatment response to family (5 points)**Week 3****Class Meeting 6/4****Content:** Assessing Verbal Behavior

- Review of verbal operants
- Assessing verbal behavior
- Models of instruction: DTI and naturalistic teaching

Lectures:

- Verbal Behavior Classification
- Assessment of Verbal Behavior
- Intervention Goals
- Models of ABA Instruction

Readings:

- Sundberg, M. L., & Michael, J. (2001). The benefits of Skinner's analysis of verbal behavior for children with autism. *Behavior modification*, 25(5), 698-724.
- Valentino, A.L., LeBlanc, L.A, Veazey, S.E., Weaver, L.A., & Raetz, P.B. (2019). Using a prerequisite skills assessment to identify optimal modalities for mand . *Behavior Analysis in Practice*, 12, 22-32.
- Fong (2016) Developing the Cultural Awareness Skills of the BA

Activity:

- Complete verbal operant worksheet (in-class)
- Discussion: How will you incorporate Cultural Awareness in clinical practice

Group Work 6/4:

- Review assessment of verbal behavior

- Use assessment data to identify language goals
 - Discuss goals that might be appropriate for DTI and naturalistic programs that you will write next week (may be manding or other language skills)
 - Begin writing goals
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Week 4

Class Meeting 6/11

Content: Teaching Verbal Behavior

- Language instruction/teaching verbal operants
- Selection-based v. topography based verbal behavior
- Considering cultural practices of others when programming for behavior change

Lectures:

- Pairing
- Cooperation and Mand Training
- Imitation, Echoics, Receptive, & Tacting
- RFFCs and Early Intraverbals
- Designing Skill Acquisition Programs

Readings:

- Bondy, A. S., & Frost, L. A. (2001). The picture exchange communication system. *Behavior Modification, 25*, 725-744.
- Charlop-Christy, M. H., Carpenter, M., Le, L., LeBlanc, L. A., & Kellet, K. (2002). Using the picture exchange communication system (PECS) with children with autism: Assessment of PECS acquisition, speech, social-communicative behavior, and problem behavior. *Journal of Applied Behavior Analysis, 35*(3), 213-231.

Activity:

- Draft a DTI program (verbal operant) for group discussion
- Draft a naturalistic teaching program (verbal operant) for group discussion

Group Work:

- Share drafts of DTI and naturalistic teaching programs
- Offer positive and constructive feedback

Assignment due 6/25: Upload final versions of DTI (5 points) and Naturalistic (5 points) teaching programs

Week 5**No class meeting - 6/18****Content:** Exam 1**Lectures:** None**Readings:** None**Activity:** None**Due 6/18:**

- Exam 1 available on Canvas from 4:00 to 8:00 PM on 6/18 (25 points)
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Week 6**6/24-6/28 (Class Meeting 6/25)****Content:** Visual Cues in Instruction

- Activity Schedules
- Video Modeling

Lectures:

- Activity Schedules
- Video Modeling

Readings:

- MacDuff, G. S., Krantz, P. J., & McClannahan, L. E. (1993). Teaching children with autism to use photographic activity schedules: Maintenance and generalization of complex response chains. *Journal of Applied Behavior Analysis*, 26(1), 89-97.
- Ezzeddine, E. W., DeBar, R. M., Reeve, S. A., & Townsend, D. B. (2020). Using video modeling to teach play comments to dyads with ASD. *Journal of Applied Behavior Analysis*, 53(2), 767-781.
- Schroeder, C., Ragotzy, S. and Poling, A. (2023), Young adults with intellectual and other developmental disabilities acquire vocational skills with video prompting. *Journal of Applied Behavior Analysis*, 56: 181-200. <https://doi.org/10.1002/jaba.963>

Activity:

- Draft task analysis for either video model or activity schedule
- Write skill acquisition program for either a video model or activity schedule

Group Work 6/25:

- Share drafts of task analyses for activity schedule or video model
- Offer positive and constructive feedback

Assignment due 7/2:**Upload activity schedule or video model program and task analysis (5 points)**

Week 7**Class Meeting 7/2****Content:** Social Skills Instruction

- Social Stories
- Script Fading
- Social Skills Groups
- Cultural Views of Social Skills

Lectures:

- Teaching Social Skills
- Methods for Social Skills Instruction

Readings:

- Krantz, P. J., & McClannahan, L. E. (1998). Social interaction skills for children with autism: A script-fading procedure for beginning readers. *Journal of applied behavior analysis*, 31(2), 191-202.
- Leaf, J. B., Oppenheim-Leaf, M. L., Call, N. A., Sheldon, J. B., Sherman, J. A., Taubman, M., ... & Leaf, R. (2012). Comparing the teaching interaction procedure to social stories for people with autism. *Journal of applied behavior analysis*, 45(2), 281-298.
- Mann, C. C., & Karsten, A. M. (2020). Efficacy and social validity of procedures for improving conversational skills of college students with autism. *Journal of applied behavior analysis*, 53(1), 402-421.
- Perepa, P. (2014). Cultural basis of social 'deficits' in autism spectrum disorders. *European Journal of Special Needs Education*, 29(3), 313-326.

Activity:

- Identify a social skill you would like to teach a client/learner
- Draft social skills program using any of the procedures we covered in class and data collection method.

Group Work 7/2:

- Share drafts of social skills program and data collection method
- Offer positive and constructive feedback

Assignment due 7/9: Upload final version of social skills program (5 points)

Week 8

Class Meeting 7/9

Content: Discrimination

- Simple discrimination
- Conditional discrimination
- Stimulus equivalence

Lectures:

- Intro and Simple Discrimination
- Conditional Discrimination
- Stimulus Equivalence

Readings:

- Cihon, J.H., Ferguson, J.L., & Leaf, J.B. (2023). Conditional Discrimination: What's in a Name. Handbook of Applied Behavior Analysis.
- Keintz KS, Miguel CF, Kao B, Finn HE. (2011) Using conditional discrimination training to produce emergent relations between coins and their values in children with autism. J Appl Behav Anal. 44(4):909-13. doi: 10.1901/jaba.2011.44-909

Activity:

- Complete discrimination worksheet
- Contribute to discussion on discrimination
- Equivalence Activity

Group Work:

- Identify discrimination skills that will be important to teach your learners
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Week 9

Class Meeting 7/16

Content: Teaching Discrimination

- Optimizing stimulus control
- Auditory-visual discrimination

Lectures:

- Troubleshooting Identity Matching
- Teaching Arbitrary Matching
- Learning for Free Activity

Readings:

- Green, G. (2001). Behavior analytic instruction for learners with autism: Advances in stimulus control technology. *Focus on Autism and Other Developmental Disabilities*, 16(2), 72-85.
- Grow, L., & LeBlanc, L. (2013). Teaching receptive language skills. *Behavior Analysis in Practice*, 6(1), 56-75.
- Halbur (2021). Stimulus Control Research and Practice: Considerations of Stimulus Disparity and Salience for Discrimination Training

Activity:

- Complete Learning for Free activity
- Draft a discrimination program and data sheet

Group Work:

- Share draft of discrimination program and data sheet
- Offer positive and constructive feedback

Assignment due 7/30:

- Upload final version of discrimination program (5 points)

Week 10**No class meeting – 7/23****Content:** Exam 2**Lectures:** None**Readings:** None**Activity:** Study Exam 2 Content**Group Work 7/23:** None**Due 7/23/24:**

- Exam 2 available on Canvas from 4:00 to 8:00 PM on 7/23 (25 points)

Week 11

Class Meeting 7/30

Content: Collaboration and Consultation

- Building rapport with staff and families
- Training caregivers and staff
- Considering school and family culture and diversity

Lectures:

- School-based Consultation
- Evidence-Based Training

Readings:

- Cowan, L.S., & Kodak, T. (2024). Professional Skills for Behavior Analysts. *Behavior Analysis in Practice*. 17:199-211.
- Max C, Lambright N. Board certified behavior analysts and school fidelity of Applied Behavior Analysis services: qualitative findings. *Int J Dev Disabil*. 2021 May 24;68(6):913-923. doi: 10.1080/20473869.2021.1926854.
- Bahry, S., Gerhardt, P.F., Weiss, M.J. *et al*. The Ethics of Actually Helping People: Targeting Skill Acquisition Goals That Promote Meaningful Outcomes for Individuals with Autism Spectrum Disorder. *Behav Analysis Practice* **16**, 672–695 (2023).
<https://doi.org/10.1007/s40617-022-00757-x>

Activity: Collaboration in consultation and barriers to adherence (Essay)

Group Work 7/30:

- Complete and upload essay

Assignment due 7/30:

- Upload essay (collaboration in consultation and barriers to adherence) (5 points)

Week 12

Class meeting 8/6

Content: Working with Families

Building rapport with families
 Designing contextual interventions
 Cultural awareness and compassion

Lectures:

- Supporting families – contextual interventions
- Compassionate care in ABA/Soft skills
- Integrating Cultural Awareness in Practice

Readings

- Moes, D. R., & Frea, W. D. (2002). Contextualized behavioral support in early intervention for children with autism and their families. *Journal of autism and developmental disorders*, 32(6), 519-533.
- Fryling, M. (2014) Contextual Intervention for Caregiver Non-Adherence With Behavioral Intervention Plans, *Child & Family Behavior Therapy*, 36:3, 191-203. DOI: 10.1080/07317107.2014.93
- Fong, E.H., Caragnus, R.M., Brodhead, M.T., Quigley, S., & Field, S. (2016). Developing Cultural Awareness Skills of Behavior Analysts. *Behavior Analysis in Practice*, 9, 84-94.

Group Work 8/6:

- Complete and upload group assignment – essay on collaborating with families

Assignment due 8/6:

- Upload group essay on collaborating with families (5 points)