



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

Applications of Behavior Analytic Principles: Functional Assessment and Treatment  
Development  
18:820:516  
Credits: 3  
Level: Graduate  
Mondays 6:15 pm to 8:45 pm  
Nelson D340

Instructor: Robert H. LaRue, Ph.D.

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Office Hours: By appointment

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

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**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 Description/Overview:**

This course will present the student with information on observation, data collection, and data interpretation. Students will learn the methods for obtaining descriptive data and the procedures for conducting systematic manipulations. Specific single subject experimental designs will be discussed. The ethical considerations inherent in behavioral assessment, treatment and research will be reviewed.

**Objectives for the course:**

The student will be able to:

1. State the ethical principles in behavioral assessment, intervention and research
2. Identify the characteristics and rationale of different interview techniques
3. Identify the characteristics and rationale of descriptive analysis
4. Describe methods for gathering, organizing and interpreting descriptive data
5. Identify the characteristics and rationale of different preference assessment techniques.
6. Describe methods for conducting preference assessments
7. Identify the characteristics and rationale for conducting functional analyses
8. Describe various methods for conducting functional analyses
9. Identify the rationale for linking assessment to treatment
10. Identify common procedures used to match treatment to function based on functional analysis results

**Assignments and Evaluation Method:**

Mid-Term Exam	30%
Final Exam (cumulative)	40%
Paper/Report	20%
Attendance	5%
Homework	5%

**Homework:**

Rather than submitting a homework question each week prior to class, you will complete homework questions assigned by the instructor. These questions are based on the readings assigned for the upcoming class. Students can bring hard copies of their questions to class or email them to me.

**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 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 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.

**Required Text (either the second or third edition is fine):**

Steege, M. W. & Watson, T. S. (2009). *Conducting School-Based Functional Behavioral Assessments: A Practitioners Guide (2<sup>nd</sup> Edition)*. The Guilford Press. New York.

Steege, M., Pratt, J., Wickerd, G., Guare, R., & Watson, T. S. (2019). *Conducting School-Based Functional Behavioral Assessments: A Practitioners Guide (3<sup>rd</sup> Edition)*. The Guilford Press. New York.

**Course Outline:**

- Week 1 (9/13): Overview of course, assignments, & text
- Introduction to Functional Assessment
- Week 2 (9/20): Introduction to Functional Assessment/Legal Aspects of Functional Assessment and Behavioral Intervention
- Assigned Readings
    - Steege & Watson (2<sup>nd</sup> edition), Chapters 1-3 pp. 1-42.
    - Steege, et al. (3<sup>rd</sup> edition), Chapters 1-3 pp. 1-44.
  - Optional Reading
    - Drasgow, E. & Yell, M. L. (2001). Functional behavioral assessments: Legal requirements and challenges. *School Psychology Review*, 30(2), 239-251.
- Week 3 (9/27): Motivating Operations and Discriminative Stimuli
- The difference between SDs and MOs
  - Implications for assessment and treatment
  - Assigned Readings
    - McGill, P. (1999). Establishing operations: Implications for the assessment, treatment and prevention of problem behavior. *JABA*, 32, 393-418.
    - Rispoli, M., O'Reilly, M., Lang, R., Machalicek, W., Davis, T., Lancioni, G., & Sigafos, J. (2011). The effects of motivating operations on problem and academic behavior in classrooms, *JABA*, 44(1), 187-192.
  - Optional Reading
    - Iwata, B. A., Smith, R. G., Michael, J. (2000). Current research on the influence of establishing operations on behavior in applied settings. *JABA*, 33, 411-418.
- Week 4 (10/4): Functional Assessment Interviewing Methods
- Key Elements of Functional Assessment
  - Structured Interviews and Surveys
  - Behavior Rating Scales
  - Assigned Readings:
    - Steege & Watson (2<sup>nd</sup> edition), Chapter 5 pp. 66-82.

- Steege & Watson (2<sup>nd</sup> edition), Chapter 7 pp. 97-127.
- *Steege, et al. (3<sup>rd</sup> edition), Chapters 6-7 pp. 79-129.*
- Kelley, M. E., LaRue, R. H., Gadaire, D., & Roane, H. S. (2011). Indirect Behavioral Assessments: Interviews and Rating Scales. In Fisher, Piazza, & Roane (eds.). *Handbook of Applied Behavior Analysis*. New York: Guilford Publications. 182-190.

Week 5 (10/11):

#### Descriptive Assessment

- Observational Data Collection, Scatter Plots, ABC data
- Assigned Readings
  - Steege & Watson (2<sup>nd</sup> edition), Chapter 6 pp. 83-96.
  - Steege & Watson (2<sup>nd</sup> edition), Chapter 8 pp. 128-161.
  - *Steege, et al. (3<sup>rd</sup> edition), Chapters 8 pp. 130-163.*
  - Touchette P.E., MacDonald R.F., Langer S.N. (1985). A scatter plot for identifying stimulus control of problem behavior. *JABA, 18(4)*, 343-51.
  - Thompson, R. H. & Iwata, B. A. (2001). A descriptive analysis of social consequences following problem behavior. *JABA, 34(2)*, 169-178.
  - Herscovitch, B., Roscoe, E., Libby, M., Bourret, J., & Ahearn, W. (2009). A procedure for identifying precursors to problem behavior, *JABA, 42(3)* 697-702.

Week 6 (10/18)

#### Functional Analysis I

- Systematic Environmental Manipulations
- Assigned Readings
  - Carr, E. G. (1977). The motivation of self-injurious behavior: A review of some hypotheses. *Psychological Bulletin, 84*, 800-816.
  - Iwata B. A., Dorsey M. F., Slifer K. J., Bauman K. E., Richman G. S. (1982/1994). Toward a functional analysis of self-injury. *JABA, 27(2)*, 197-209.
- Optional Reading
  - Beavers, G. A., Iwata, B. A., & Lerman, D. C. (2013). Thirty years of research on the functional analysis of problem behavior. *JABA, 46(1)*, 1-21.
  - Hanley G. P., Iwata B. A., McCord B. E. (2003). Functional analysis of problem behavior: a review. *JABA, 36(2)*, 147-85.

Week 7 (10/25)

#### Midterm Review

Week 8 (11/1)

#### Midterm Examination

## Week 9 (11/8)

## Functional Analysis II

- Interpreting graphs
- Clarifying unclear functional analyses
- Procedural variations
- Assigned Readings
  - Steege & Watson, Chapter 9 pp.162-175.
  - *Steege, et al. (3<sup>rd</sup> edition), Chapter 9 pp. 164-181.*
  - Henry, J. E., Kelley, M. E., LaRue, R. H., Kettering, T. L., Gadaire, D. M., & Sloman, K. N. (2021). Integration of functional analysis procedural advancements: Progressing from brief to extended experimental analyses. *Journal of Applied Behavior Analysis*.  
<https://doi.org/10.1002/jaba.841>
  - Payne, S., Dozier, C., Neidert, P., Jowet, E., Newquist, M. (2014). Using additional analyses to clarify the functions of problem behavior: An analysis of two cases. *Education and Treatment of Children, 37(2)*, 249-275.
- Optional Reading
  - Northup, J., Wacker, D., Sasso, G., Steege, M., Cigrand, K., Cook, J., DeRaad, A. (1991). A brief functional analysis of aggressive and alternative behavior in an outclinic setting. *JABA, 24(3)*, 509-22.
  - Derby, K.M., Hagopian, L., Fisher, W.W., Richman, D., Augustine, M., Fahs, A., Thompson, R. (2000). Functional analysis of aberrant behavior through measurement of separate response topographies. *JABA, 33(1)*, 113-117.
  - Iwata, B.A., & Dozier, C.L. (2008). Clinical application of functional analysis methodology. *Behavior Analysis in Practice, 1*, 3-9.
  - Roane, H. S., Lerman, D. C. Kelley, M. E. & Van Camp, C. M. (1999). Within-session patterns of responding during functional analyses: The role of establishing operations in clarifying behavioral function. *Research in Developmental Disabilities, 20 (1)*, 73-89.

## Week 10 (11/15): Linking Assessment to Treatment I

- Review of basic types of treatments: antecedent-based (fading, NCR) and consequence-based (DR, extinction, punishment)
- Antecedent based treatments
  - Stimulus fading, NCR
- Assigned Readings
  - Steege & Watson, Chapter 11 pp. 196-211.
  - *Steege, et al. (3<sup>rd</sup> edition), Chapter 11 pp. 189-211.*
  - Vollmer, T.R., Iwata B.A., Zarccone J.R., Smith R.G., Mazaleski J.L. (1993). The role of attention in the treatment of attention-maintained self-injurious behavior:

noncontingent reinforcement and differential reinforcement of other behavior. *JABA*, 26(1), 9-21.

- Optional Reading
  - Asmus, J., Ringdahl, J., Sellers, J., Call, N., Andelman, M. & Wacker, D. (2004). Use of a short-term inpatient model to evaluate aberrant behavior: Outcome data summaries from 1996 to 2001. *JABA*, 37, 283-304.
  - Piazza, C. C., Adelinis, J. D., Hanley, G. P., Goh, H., & Delia, M. D. (2000). An evaluation of the effects of matched stimuli on behaviors maintained by automatic reinforcement. *JABA*, 33, 13-27.

Week 11 (11/22): Linking Assessment to Treatment II

- Consequence based treatments
  - Extinction, DR, FCT, Punishment (TO, Response Cost)
- Breakdown of treatments by function – escape, attention, tangible, automatic
- Generalization
- Assigned Readings
  - Vollmer, T. R. & Athens, E. (2011). Developing Function-Based Extinction Procedures for Problem Behavior. In Fisher, Piazza, & Roane (eds.). *Handbook of Applied Behavior Analysis*. New York: Guilford Publications. 317-334.
  - Carr E. G. & Durand V. M. (1985). Reducing behavior problems through functional communication training. *JABA*, 18, 111-126.
- Optional Reading
  - Hagopian L. P., Fisher W. W., Sullivan M. T., Acquisto, J., LeBlanc, L. A. (1998). Effectiveness of functional communication training with and without extinction and punishment: a summary of 21 inpatient cases. *JABA*, 31(2), 211-35.
  - Iwata, B.A., Pace, G.M., Cowdery, G.E., Miltenberger, R.G. (1994). What makes extinction work?: An analysis of procedural form and function. *JABA*, 27(1), 131-44.
  - Fisher, W. W. & Bouxsein, K. (2011). Developing Function-Based Reinforcement Procedures for Problem Behavior. In Fisher, Piazza, & Roane (eds.). *Handbook of Applied Behavior Analysis*. New York: Guilford Publications. 335-347.
  - Fisher, W. W. (2011). Developing Function-Based Punishment Procedures for Problem Behavior. In Fisher, Piazza, & Roane (eds.). *Handbook of Applied Behavior Analysis*. New York: Guilford Publications. 348-369.

- Week 12 (11/29): Treatment Evaluation
- Procedures for evaluating treatment
  - Use of single subject designs
  - Assigned Readings
    - *Steege, et al. (3<sup>rd</sup> edition), Chapter 12 pp. 212-219.*
    - Roane, H. S., Ringdahl, J., Kelley, M. E. & Glover, A. (2011). Single-case experimental designs. In Fisher, Piazza, & Roane (eds.). *Handbook of Applied Behavior Analysis*. New York: Guilford Publications. 132-147.
- Week 13 (12/6): Writing Behavior Plans/Treatment Integrity/Report Writing
- Components of Behavior Plans
  - Treatment Integrity
  - Assigned Readings
    - Steege & Watson, Chapter 12 pp. 212-247.
    - Steege & Watson, Chapter 13 pp. 248-258.
    - Allen, K. D., & Warzak, W. J. (2000). The problem of parental nonadherence in clinical behavior analysis: Effective treatment is not enough. *JABA*, 33, 373-391.
- Week 14 (12/13): **Course Review**
- **PAPER/FBA DUE**
- Week 15 (12/20) **Final Examination**

### **Mock FBA/BIP**

All students will be responsible for completing a mock functional assessment report and behavior intervention plan. The assessment should contain the following components:

1. Assessment instruments used (with graphs/analysis included)
  - a. Interviews/rating scales
  - b. Descriptive assessment procedures
  - c. Functional analyses
2. Treatment recommendations
  - a. Antecedent/preventative strategies
  - b. Replacement skills
  - c. How to respond to problem behavior
3. Behavior intervention plan
  - a. The above components written in an “instruction manual” format.

**Grading:** Grades for the report will be based on whether or not the components listed above were included. The soundness of the recommendations (are the recommendations linked to the function?) will also be considered in the grading. The reports are due on December 13, 2021. If the report is submitted late, 25% of the grade will be subtracted



(12/13 to 12/20). If the report is submitted after 12/20, 50% will be deducted from the paper grade.

### **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](mailto: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.

