EAB 3764 APPLIED BEHAVIOR ANALYSIS UNIVERSITY OF FLORIDA, FALL 2023 CLASS NUMBER: 11771 SECTION NUMBER: 3724 LOCATION: LARSEN HALL 0239 TUES. 11:45AM-1:40PM AND THURS. 12:50PM-1:40PM

Instructor: Garret Hack Office: Room 392, Psychology Office Hours: Thursday, 10:00-12:00 and by appointment via Zoom Email: gohack@ufl.edu Undergraduate TA: Eli Zemach (ezemach@ufl.edu) Sylvia Roberts (sylvia.roberts@ufl.edu)

Course Description

Applied Behavior Analysis (ABA) is the practical arm of Behavior Analysis, a natural science of behavior that rests on the philosophy of science known as Radical Behaviorism. ABA adopts concepts and principles from this science towards achieving meaningful change in socially significant behavior. The main objective of this course is to introduce students to ABA through assigned readings, lectures, and discussions that describe the application of ABA to a wide range of problem spaces. Lectures will review, supplement, and expand upon these readings, often through exposure to published experimental results.

Course Objectives

By the end of this course, students will:

- Have a fundamental grasp of the history of behaviorism and how it differs from other approaches to understanding human behavior.
- Demonstrate a fundamental understanding of the basic principles involved in promoting behavior change from a behavioral analytic perspective.
- Demonstrate a fundamental understanding of the methodology commonly used in behavior analysis to evaluate behavior change and how it differs from more conventional methods in psychology.
- Understand how behavior analytic principles and procedures can promote beneficial behavior change across a variety of socially meaningful contexts.

Social and Behavioral Sciences General Education Subject Area Objectives

Social and behavioral science courses provide instruction in the history, key themes, principles, terminology, and underlying theory or methodologies used in the social and behavioral sciences. Students will learn to identify, describe, and explain social institutions, structures, or processes. These courses emphasize the effective application of accepted problem-solving techniques. Students will apply formal and informal qualitative or quantitative analysis to examine the processes and means by which individuals make personal and group decisions, as well as the evaluation of opinions, outcomes, or human behavior. Students are expected to assess and analyze ethical perspectives in individual and societal decisions. These objectives will be accomplished through exams and assignments.

General Education Student Learning Outcomes

| Category | Institutional Definition | Institutional SLO |
|-------------------|---|---|
| Content | Content is knowledge of the concepts, principles, terminology, and methodologies used within the discipline. | Students demonstrate competence in the terminology, concepts, methodologies, and theories used within the discipline. This is accomplished through exams and other assignments. |
| Communication | Communication is the development and expression of ideas in written and oral forms. | Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline. This is accomplished through group discussion and student oral responses to questions embedded within each class session. |
| Critical Thinking | Critical thinking is characterized by the comprehensive analysis of issues, ideas, and evidence before accepting or formulating an opinion or conclusion. | Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems. This is accomplished through assessment items that require students to explain difficulties with published research outcomes and describe effective practical implementation of concepts, principles, and procedures of the discipline. |

Course Material

Assigned text:

Miltenberger, R. G. (2023). *Behavior Modification: Principles and Procedures.* (7th ed.). Cengage Learning.

Additional required readings, available in Canvas:

- Gresham, F. M., & Gresham, G. N. (1982). Interdependent, dependent, and independent group contingencies for controlling disruptive behavior. *The Journal of Special Education, 16*, 101-110.
- Hagopian, L.P., Crockett, J.L., & Keeney, K.M. (2001). Multi-component treatment for blood-injuryinjection phobia in a young man with mental retardation. *Research in Developmental Disabilities*, *21*, 141-149.
- Iwata, B. A., Dorsey, M. F., Slifer, K. J., Bauman, K. E., & Richman, G. S. (1994). Toward a functional analysis of self-injury. *Journal of Applied Behavior Analysis*, 27, 197–209. (Reprinted from *Analysis* and Intervention in Developmental Disabilities 2, 3–20, 1982
- Normand, M.P. & Kohn, C. (2013). Don't wag the dog: Extending the reach of applied behavior analysis. *The Behavior Analyst, 35*, 109-122.
- Peters, K.P., & Vollmer, T.R. (2014). Evaluations of the overjustification effect. *Journal of Behavioral Education, 23*, 201-220.
- Piazza, C. C., Roane, H. S., & Karsten, A. (2011). Identifying and enhancing the effectiveness of positive reinforcement. In W. W. Fisher, C. C. Piazza, & H. S. Roane (Eds.), *Handbook of applied behavior analysis* (pp. 151–164). The Guilford Press.

We will be covering the entire textbook, but not in order. The additional readings are research articles that exemplify the processes, principles, and procedures covered in each unit or, at the end of the semester, introduce new topics not directly addressed in the text. The course is divided into seven units; you will be expected to cover 3-5 readings (chapters or research articles) per unit.

This syllabus is subject to change. Periodically, I may come across a paper that I believe to be important to add or substitute for one of the currently listed readings. If this happens, I will alert you far in advance. You are responsible for finding out whether the syllabus has been modified. Changes will be announced in class and an updated syllabus will be posted on Canvas.

Course Format

The class will involve a lecture plus discussion/Q&A format. Lectures will cover critical points of the readings and supplemental information regarding each topic. I expect you to read the assignments carefully and on time. Students should come prepared to answer questions about the readings and offer their own questions/observations about the material to the group.

Quizzes and Exams

Quizzes: A quiz will be given <u>each class (except for exam dates)</u> on the assigned readings beginning on <u>August 31</u>. The quizzes are based on either a) a subset of the practice test questions at the end of each chapter (I will tell you which ones) or b) on a set of objectives that I send you in advance for readings not in the textbook. If you can answer every question on the objectives, you will be able to answer the quiz question(s). Most Tuesday quizzes will be 2 questions (6 pts) because there are two readings; Thursday quizzes will be 1 question (3 pts). Quiz formats will vary. Some will be multiple choice or true/false; others will require a written single word, phrase, or sentence. Written answers will be graded as 3 (correct), 2 (partially correct when applicable), 1 (incorrect), or 0 (quiz not taken). All quizzes will be available to take in Canvas, **but you must be in class to take the quiz.** I will post the quiz at the beginning of each class and the quiz will remain available for 5 minutes.

Exams: There will be 7, non-cumulative, exams. See the class schedule below for exam dates. Questions will consist of short-answer, true/false, matching items, or multiple-choice questions, and will be drawn from material covered in the text, readings, and lectures. Each exam will be worth 30 points. You will receive a **study guide** in advance of each exam. The study guides reflect what I hope you will learn, at minimum, during the semester. If you consistently master the study guide objectives, you will do well on the exams. Exams will be administered via Canvas at the start of the scheduled class time (Thursday at 12:50), **but you must come to class to take the exam, even though it will be taken on Canvas**. Once you launch the exam, you will have 50 minutes to complete it. If you prefer or require a paper-and-pencil exam, I can provide one for you.

Class Attendance and Make-up Policy

Class attendance is expected. <u>Missed quizzes or tests can be made up only if</u>: 1) you missed class because of a university-sanctioned event; or 2) you missed class because of an emergency, illness, or other unavoidable event. **In either case, documentation is required.** In addition, there are two opportunities for students to recover points lost due to missed quizzes/tests or poor scores:

- 1. A 12-pt "allowance" is built into the formula for determining final grades (see below), which covers absences for any reason. Thus, although there are a possible 323 points in the class, I will calculate your final percentage out of 311 points. Thus, for example, you could miss a 6-point quiz and two 3-points quizzes without penalty.
- 2. The scheduled final exam is really just Exam 7. However, students can alternatively take a comprehensive exam on the date that the final is scheduled (you take one or the other, but not both). The comprehensive exam will cover all material in the course. I will give you a separate study guide for this comprehensive exam. If you take this exam and score higher than your lowest prior exam grade, the grade you receive will serve as your grade for Exam 7 and will replace your lowest prior exam grade (or a missed exam grade) with the points earned on the comprehensive final. If you do not score higher on the comprehensive final than in a prior exam, your comprehensive final score will still serve as your grade for Exam 7. but you can keep your higher score on the prior exam.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies: <u>https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</u>

Experimental Participation Requirement

The Psychology Department requires that all students enrolled in a 3000-level psychology course either 1) serve as a participant in 10 hours of ongoing psychological research or 2) complete an effortequivalent research assignment. The deadline for this requirement is posted on the research requirement document found in Canvas. Completion of this requirement affects your course grade based on the number of research credits you earn. Do NOT wait until the last minute to complete this requirement. The longer you wait the harder it will be to get all the credits needed!

| Exams & Quizzes | Points | Grade | Percentage |
|----------------------------------|---------|---------|----------------------|
| Exams | 210 | A | 93-100% |
| 7 x 30 points | | A- | 90-92.9% |
| O maint muime a | <u></u> | B+ | 87-89.9% |
| 6-point quizzes 10 x 6 points | 60 | B B- | 83-86.9% 80-82.9% |
| | | C+ | 77-79.9% |
| 3-point quizzes | 33 | C | 73-76.9% |
| 11 x 3 points | | C- | 70-72.9% |
| | <u></u> | D | 60-69.9% |
| SONA Research 1 point/credit | 20 | E | <60% |
| Total Possible Points | 323 | | |
| Allowance | -12 | | |
| Total for grade calculation | 311 | | |
| | | | |

Grading

Information on current UF grading policies for assigning grade points can be viewed here: <u>https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</u>

Please note that "A minimum grade of C is required for general education credit.

Topics and Reading Assignments

| DAY | DATE | TOPIC | READING ASSIGNMENT | EVALUTION & OTHER INFO |
|-----|--------|--|--|------------------------|
| | | | c Principles & Procedures I | |
| Th | Aug 24 | Syllabus Overview and Professional BA | | |
| Т | Aug 29 | Introduction to BA | Miltenberger 1 | |
| Th | Aug 31 | Observing & Recording Behavior | Miltenberger 2 | Quiz 1 (3 points) |
| Т | Sep 5 | Within-Subject Experimental Design | Miltenberger 3 | Quiz 2 (6 points) |
| Th | Sep 7 | | | Exam 1 |
| | | | c Principles & Procedures II | |
| Т | Sep 12 | Reinforcement and Reinforcer Identification | Miltenberger 4 & Piazza, Roane & Karsten (2011) | Quiz 4 (6 points) |
| Th | Sep 14 | Extinction | Miltenberger 5 | Quiz 5 (3 points) |
| Т | Sep 19 | Punishment and Stimulus Control | Miltenberger 6 & 7 | Quiz 6 (6 points) |
| Th | Sep 21 | | | Exam 2 |
| | | | tablishing New Behavior | |
| Т | Sep 26 | Shaping and Prompting | Miltenberger 9 & 10 | Quiz 7 (6 points) |
| Th | Sep 28 | Chaining | Miltenberger 11 | Quiz 8 (3 points) |
| Т | Oct 3 | Behavioral Skills Training | Miltenberger 12 | Quiz 9 (3 points) |
| Th | Oct 5 | | | Exam 3 |
| | | Unit 4: Decre | easing Undesirable Behavior | |
| Т | Oct 10 | Functional Assessment of Problem Behavior | Miltenberger 13 & Iwata et al. (1982/1994) | Quiz 10 (6 points): |
| Th | Oct 12 | Applying Extinction | Miltenberger 14 | Quiz 11 (3 points) |
| Т | Oct 17 | Differential Reinforcement & Antecedent Interventions | Miltenberger 15 & 16 | Quiz 12 (6 points) |
| Th | Oct 19 | | | Exam 4 |
| | | Unit 5: Punishme | nt and Respondent Conditioning | g |
| Т | Oct 24 | Punishment & Related Ethics | Miltenberger 17 & 18 | Quiz 13 (6 points) |
| Th | Oct 26 | Respondent Conditioning | Miltenberger 8 | Quiz 14 (3 points) |
| Т | Oct 31 | Fear and Anxiety Reduction | Miltenberger 24 & Hagopian, Crockett, & Keeney (2001) | Quiz 15 (6 points) |
| Th | Nov 2 | | | Exam 5 |
| | | | ional Intervention Strategies | |
| Т | Nov 7 | Promoting Generalization and Self-Management | Miltenberger 19 & 20 | Quiz 16 (6 points) |
| Th | Nov 9 | Habit Reversal | Miltenberger 21 | Quiz 17 (3 points) |
| Т | Nov 14 | Token Economies & Behavioral Contracts | Miltenberger 22 & 23 | Quiz 18 (6 points) |
| Th | Nov 16 | | | Exam 6 |
| Т | Nov 21 | Graphing Skills Activity | | |
| | | Unit 7: Additional Intervent | ion Strategies (cont.) and the Bro | oader View |
| Т | Nov 28 | Group Contingencies & Cognitive Behavior Therapy | Gresham and Gresham (1982) & Miltenberger 25 | Quiz 19 (6 points) |
| Th | Nov 30 | Misconceptions about BA | Peters and Vollmer (2014) | Quiz 20 (3 points) |
| Т | Dec 5 | Subspecialty Areas in BA | Normand & Kohn (2013) | Quiz 21 (3 points) |
| Th | Dec 14 | | | Exam 7 |

University Policy on Accommodating Students with Disabilities. Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with

the disability Resource Center. Click here: <u>https://disability.ufl.edu/get-started/</u> to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

University Honesty Policy. UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Click here <u>https://sccr.dso.ufl.edu/process/student-conduct-code/</u> to read the Conduct Code. If you have any questions or concerns, please consult with the instructor or TAs in this class.

University Policy on Course Evaluation. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Sexual Harassment. Sexual Harassment is not tolerated in this class, in the Department of Psychology, or at the University of Florida. Sexual harassment includes: the inappropriate introduction of sexual activities or comments in a situation where sex would otherwise be irrelevant. Sexual harassment is a form of sex discrimination and a violation of state and federal laws as well as of the policies and regulations of the university. All UF employees and students must adhere to UF's sexual harassment policy which can be found here:

https://hr.ufl.edu/forms- policies/policies-managers/sexual-harassment/.

Please review this policy and contact a university official if you have any questions about the policy. As mandatory reporters, university employees (e.g., administrators, managers, supervisors, faculty, teaching assistants, staff) are required to report knowledge of sexual harassment to UF's Title IX coordinator. For more information about UF's Title IX office see: <u>https://titleix.ufl.edu/</u>. You can also complete a Sexual Harassment Report online (Title IX) at: <u>https://titleix.ufl.edu/title-ix-reporting-form/</u>.

Campus Resources

Health and Wellness

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website (<u>https://umatter.ufl.edu/</u>) to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the Counseling and Wellness Center website (<u>https://counseling.ufl.edu/</u>) or call 352-392-1575 for information on crisis services as well as noncrisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website (<u>https://shcc.ufl.edu/</u>).
- University Police Department: Visit UF Police Department website (<u>https://police.ufl.edu/</u>) or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website (https://ufhealth.org/emergency-room-trauma-center)

 GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website (<u>https://gatorwell.ufsa.ufl.edu/</u>) or call 352-273-4450.

Academic Resources

- E-learning technical support: Contact the UF Computing Help Desk (<u>https://helpdesk.ufl.edu/</u>) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- Career Connections Center (<u>https://career.ufl.edu/</u>): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- Library Support (<u>https://uflib.ufl.edu/</u>): Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center (<u>https://academicresources.clas.ufl.edu/</u>): Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.
- Writing Studio (<u>https://writing.ufl.edu/writing-studio/</u>): 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage (<u>https://sccr.dso.ufl.edu/policies/student-honor-%20code-student-conduct-code/</u>) for more information.
- On-Line Students Complaints: View the Distance Learning Student Complaint Process (<u>https://distance.ufl.edu/state-authorization-status/#student-complaint</u>).