# Principles of Experimental Analysis of Behavior EAB 3002

<b>Class Information</b>	Instructor	<b>Teaching Assistants</b>
T 1:55-2:45 PM	Hailey Donohue, MA, BCBA	Antonella Benavides
R 1:55-3:50 PM	Room 095, Psychology	Email:
PSY 0130	Email: hailey.donohue@ufl.edu	benavides.a@ufl.edu
	Office phone: 352-273-2151	
	Office Hours	Office Hours
	T 11:00 AM-1:00 PM or by appointment	By appointment

#### WELCOME AND OVERVIEW

The three main objectives in this course are: (1) To think critically about the causes of behavior, human and non-human, using tools of scientific thinking; (2) To understand how a natural science of behavior, especially respondent and operant conditioning, can help us understand behavior and experience; and (3) To apply this knowledge to solve socially important problems.

### **COURSE DESCRIPTION**

We will use a variety of activities to analyze the complex and provocative issues raised during this class. A behavioral approach to teaching and learning will be used in this class. You will be provided with study guides for each unit, quizzed frequently, receive feedback on your performance, and you will be given opportunities to improve on your prior performance on make-up/remedial quizzes.

#### WHAT YOU'LL NEED

- 1. Reliable access to UF's Canvas Computer System (Google Chrome recommended) If you're not familiar with the Canvas environment, check out this tutorial: <a href="https://www.youtube.com/watch?v=Zzl">https://www.youtube.com/watch?v=Zzl</a> PRt3M-U&feature=youtu.be.
- 2. The Course Textbook

Madden, G. J., Reed, D. D., & Digennaro Reed, F. D. (2021). *An Introduction to Behavior Analysis*. Wiley.

## **COMMUNICATION**

Email is the best way to contact me (<a href="mailto:hailey.donohue@ufl.edu">hailey.donohue@ufl.edu</a> or via Canvas email). Expect me to respond within 24 hours during the week (M-F) and 48 hours during the weekend. You can also email me to set up a meeting within or outside of office hours. Check Canvas and your email daily for course updates during the week.

## **HOW YOU'LL BE GRADED**

#### **Quizzes**

For each unit, there will be a 10-minute, 10-point quiz based on the study guide. The quiz questions will emphasize the study guides in Canvas, but other questions may be included. The format will be multiple choice, short answer, and fill in the blank.

#### Remedials

You will have several opportunities to improve on your prior performance. During the midterm, you will be able to take one remedial quiz. During the final, you will have the opportunity to take a second remedial. Remedials can replace a missed quiz or a poor grade. Ten quizzes and two remedials are planned (12 total). Only your ten highest scores will count toward your grade.

## **Participation**

At the end of class each day, you will have a five-minute reflection question. You will be required to incorporate what we discussed in class that day into the reflection question. Each reflection is worth 2 points. Your two lowest grades will be dropped.

## **Written Assignments**

You will have four, brief written assignments that will form a cohesive unit by the end of the semester. Written assignments are worth 20 points each and will be due by 11:59 PM ET.

#### **Exams**

You will have two exams, worth 40 points each. I will give you a study guide for both tests. The main goals of these tests are to help you integrate, think deeply, and think critically about the material. I want you to be able to "put it together." The tests will contain multiple choice, true/false, fill in the blank, and short answer. On the days of these two exams, you will not be required to come to class in person. You will take the exam using Honor Lock on Canvas. Exams are due by 11:59 PM ET on their respective due date.

## **SONA Participation**

Learning about Psychology requires reading, listening, and doing. As a supplement to lecture, you are required to participate in 7.5 hours of experimental research studies, or to complete an equivalent alternate assignment (see assignment on CANVAS for more details). There is a Psychology Department requirement that all students enrolled in Gen Psych, Personal Growth, or any 3000 level class participate in the SONA participation pool. Please see the CANVAS assignment for very detailed instructions about this assignment. There is also a file uploaded to CANVAS called "SONA Participation Pool". The deadlines for this requirement will be posted on the research requirement document and in the instructions in the assignment. Completion of this requirement affects your course grade based on the amount 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 need! When you complete the research experience, you will receive 15 points that are added into your final grade. If you do NOT complete the full number of credits by the deadline, you will receive points at a rate of 1 point per credit completed. If you do not wish to participate in research then you may "opt in" for an alternative assignment, please see the Canvas assignment for more details.

#### **GRADING**

Assignment	Points	% grade	Grade	%
Quizzes	100	31%	A	93.5% - 100%
Exams	80	25%	A -	89.5% – 93.49%
In-class participation	46	14%	B +	86.5% - 89.49%
Written assignments	80	25%	В	82.5% – 86.49%
SONA participation	15	5%	B -	79.5% – 82.49%
Total:	321	100%	C +	79.5% – 82.49%
			С	72.5% – 76.49%
			C -	69.5% - 72.49%
			D +	66.5% - 69.49%
			D	62.5% - 66.49%
			D -	59.5% – 62.49%
			E (Fail)	< 59.49%

## **COURSE POLICIES AND GUIDELINES**

- 1. If you have a general question about the course, you can post it on the FAQ discussion board. If it is something you would raise your hand to ask in class, it belongs on this board. Feel free to use this board to communicate with each other, set up study groups, say hi, etc. This course is also in-person, so feel free to do all of the above in class.
- 2. If you have a question about your grade, message me or your TA. Please don't post information about your grade on the FAQ board.
- 3. All interactions with instructors and among class members are expected to be professional and appropriate.
- 4. Technology. The use of cellphones in the classroom is prohibited. The use of other electronic devices (e.g., tablets, laptops) is required during quizzes but strongly discouraged at all other times. Exceptions will be clearly stated during class (e.g., group discussion of study guides). Paper-and-pencil note-taking is preferred.
- 5. Online materials. The use of online materials posted by former students in the course is strongly discouraged. Such content may be outdated and incorrect. Please refrain from posting course content online, sharing in group chats, etc.
- 6. Attendance. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click <u>here</u> to read the university attendance policies.
- 7. If you need to leave class early, please tell me before class starts. If you need to leave early, please sit by the nearest exit.
- 8. Announcements will be made periodically about class issues (such as reminders about upcoming assignments, or when assignments are returned). These will be visible on our

- course's home page and announced in class. Students are responsible for all announcements made there.
- 9. This course adheres to all University Policies. See http://www.dso.ufl.edu/ for useful information at the Dean of Students Office webpage.
- 10. Academic Honesty. This course uses the definitions and guidelines for academic honesty as described by the Dean of Students Office. The following is text that is required in every course syllabus regarding academic honesty: "Cheating is defined in the UF Handbook, and it is the student's responsibility to be familiar with its many forms (including plagiarism). If a student is caught cheating, the first offense will result in a zero for that exam or assignment and a record of the event will be placed in a temporary file with the Office of Student Affairs. The second offense will result in an 'E' for the course, and the student will go before the Honor Court. As a result of completing registration at UF, every student has agreed to the following statement: I understand that UF expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."
- 11. Students with disabilities requesting accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. See <a href="http://www.dso.ufl.edu/drc/">http://www.dso.ufl.edu/drc/</a> for details.
- 12. Religious Observances. Please check your calendars against the course syllabus. If you have a conflict due to religious observance you should contact me as soon as possible so that we can make any necessary arrangements.
- 13. 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 <a href="https://gatorevals.aa.ufl.edu/public-results">https://gatorevals.aa.ufl.edu/public-results</a>.
- 14. 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: https://titleix.ufl.edu/. You can also complete a Sexual Harassment Report online (Title IX) at: https://titleix.ufl.edu/title-ix-reporting-form/.
- 15. Syllabus Change Policy. Except for changes that substantially affect the implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change.
- 16. In-class recording. Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Policy on Course Syllabi 3 UF, Academic Affairs, July 28th, 2021, Honor Code and Student Conduct Code.

### **CAMPUS RESOURCES**

#### **Health and Wellness**

U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies. Sexual Assault Recovery Services (SARS): Student Health Care Center, 392-1161. University Police Department: 392-1111 (or 9-1-1 for emergencies).

http://www.police.ufl.edu/

#### **Academic Resources**

E-learning technical support: 352-392-4357 (select option 2) or e-mail to

Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center: Reitz Union, 392-1601. Career assistance and counseling.

http://www.crc.ufl.edu/

Library Support: http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with

respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

http://teachingcenter.ufl.edu/

Writing Studio: 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing

papers. http://writing.ufl.edu/writing-studio/

**Student Complaints Campus:** 

https://www.dso.ufl.edu/documents/UF\_Complaints\_policy.pdf

On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint-process

## **COURSE SCHEDULE**

UNIT	DATE	READINGS*	QUIZ*	OTHER
Chapter 1: Introduction to Behavior Analysis	1/09/24	Syllabus		
		Chapter 1		
		Textbook sections:  What is behavior?		
		What is behavior analysis?		
		The assumptions of behavior analysis		
	1/11/24	Chapter 1		
		Textbook sections:		
		Scientific Method		
		What are the determinants of behavior? The activities of behavior analysts		
Chapter 2: Understanding Behavioral Research	1/16/24	Chapter 2		
Chapter 2. Chucistanung Benavioral Research	1/10/24	Textbook sections:		
		Variables		
		Correlation vs Causation		
	1/10/01	Experiments		
	1/18/24	Chapter 2		
		Textbook sections:  Measuring Behavior		
		Four Direct-Observation Methods		
Chapter 3: Experimental Designs in Behavior	1/23/24	Chapter 3	Q1 (Ch	
Analysis		Textbook sections:	1+2)	
		Group experimental designs		
	1/25/24	Single subject experimental designs		
	1/25/24	Chapter 3 Textbook sections:		
		Did behavior change?		
		Dia senavior enange:		
		Zane (2010)		
Chapter 4: Phylogenetic Behavior and Pavlovian	1/30/24	Chapter 4	Q2 (Ch3)	
Learning		Textbook sections:		
		Phylogenetically Selected Behavior Pavlovian Learning		
		Pavlovian Conditioning of Emotions		
	2/01/24	Chapter 4		
		Textbook sections:		
		Principles of Effective Pavlovian Conditioning		
		Generalization		
		Pavlovian Extinction-Based Therapy		
		Pavlovian Conditioning in Everyday Life		

Chapter 5: Operant Learning I: Reinforcement	2/06/24	Chapter 5 Textbook sections: Operant Behavior Response-Consequence Contingencies Changing Behavior with Contingent Consequences Noncontingent Consequences The Discovery of Reinforcement How to Tell if a Consequence Functions Chapter 5 Textbook Sections: From Puzzle Boxes to Skinner Boxes Response Variability: Exploring and Exploiting The Generic Nature of Operant Behavior Not Every Consequence Functions	Q3 (Ch4)	Assignment 1
Chapter 6: Operant Learning II: Positive and Negative Reinforcement	2/13/24	Reinforcement in Social Media and Video Games  Chapter 6 Textbook sections: Positive Reinforcement Negative Reinforcement		
	2/15/24	Chapter 6 Textbook sections: Positive or Negative Reinforcement: Is there Using Reinforcement to Positively Influence Behavior Reinforcement in the Workplace Three Objections to Reinforcement Theories of Reinforcement Skinner (1981)		
Chapter 7: Extinction and Differential Reinforcement	2/20/24	Chapter 7 Textbook sections: Operant Extinction Following Positive Reinforcement Operant Extinction Following Negative Reinforcement	Q4 (Ch 5+6)	
	2/22/24	Chapter 7 Textbook sections: How Quickly Will Operant Extinction Work? Spontaneous Recovery of Operant Behavior Other Effects of Extinction We Tried It at Home Using Extinction to Positively Influence Behavior Differential Reinforcement		
Exam 1	2/27/24 2/29/24	Q & A Day  No live class  Exam pt. 1: closed-book, closed-note multiple choice questions  Exam pt. 2: take-home open-book, open-note discussion questions		Remedial due

Chapter 8: Primary and Conditioned Reinforcement and Shaping	3/5/24	Chapter 8 Textbook sections: Primary Reinforcers Conditioned Reinforcers The Token Economy		
	3/7/24	Chapter 8 Textbook sections: Arranging Effective Conditioned Reinforcers Clicker Training with Humans Shaping Automated Shaping: Percentile Schedules of Reinforcement		
Spring Break	3/12/24	NO CLASS – UNIVERSITY HOLIDAY		
	3/14/24	NO CLASS – UNIVERSITY HOLIDAY		
Chapter 9: Motivation, Reinforcer Efficacy, and Habit Formation	3/19/24	Chapter 9 Textbook sections: Everyday Concepts of Motivation From Motivation to Motivating Operations	Q5 (Ch8)	
	3/21/24	Chapter 9 Textbook sections: Identifying Effective Reinforcers: The "Liking" Strategy Measuring Reinforcer Efficacy Dimensions of Effective Reinforcers Habit Formation  Fogel (2010) Holtyn (2020)		
Chapter 10: Punishment	3/26/24	Chapter 10 Textbook sections: Punishers and Punishment Two Kinds of Punishment – Both Decrease Behavior When Should We Punish? Six Characteristics of Effective Punishment Interventions	Q6 (Ch9)	Assignment 2
	3/28/24	Chapter 10 Textbook sections: Primary and Conditioned Punishment Some Commonly Used Punishers The Watchful Eye of the Punisher The Role of Reinforcement in the Act of Punishing		
Chapter 11: Complex Contingencies of Reinforcement	4/2/24	Chapter 11 Textbook sections: Schedules of Reinforcement Ratio Schedules of Reinforcement Interval Schedules of Reinforcement Putting It All Together	Q7 (Ch10)	

	4/4/24	Chapter 11 Textbook sections: Why Study Schedules of Reinforcement? Schedule Thinning Scheduling Reinforcers to Enhance Human Performance		
Chapter 12: Antecedent Stimulus Control	4/9/24	Chapter 12 Textbook sections: Phylogenetic and Pavlovian Stimulus Control Discriminated Operant Behavior Discrimination Training Generalization Stimulus-Response Chains	Q8 (Ch11)	Assignment 3
Chapter 13: Choice	4/11/24	Textbook sections: What is Choice? Four Variables Affecting Choice The Rich Uncle Joe Experiment Choosing Between Uncertain Outcomes Extra Box 1 Extra Box 2 Impulsivity and Self-Control	Q9 (Ch12)	
Chapter 14: Verbal Behavior, Rule-Following, and Clinical Behavior Analysis	4/16/24	Textbook sections:  Behavior Approaches to Language Rules and Rule-Governed Behavior Why Follow the Rules?  Persistently Following Incorrect Rules	Q10 (Ch13)	
	4/18/24	Textbook sections:  Are We Hopelessly Compliant?  The Dark Side of Tracking  Breaking the Rules in Clinical Psychology  Skinner (1987)  Chance (2007)		
Exam 2	4/23/24 5/2/24	Q & A Day  No live class  Exam pt. 1: closed-book, closed-note multiple choice questions  Exam pt. 2: take-home open-book, open-note discussion questions		Assignment 4 Remedial due

<sup>\*</sup>I reserve the right to adjust the schedule and readings as needed.