

BEHV 3440
DATA COLLECTION & ANALYSIS
Spring 2020

Instructor:

Dr. April Becker

Office Hours:

Monday 12 pm -1:40 pm
AND by appointment
Room 360G Chilton Hall
April.Becker@unt.edu

Course Meeting Information:

Tu Th 2:00PM - 3:50PM
Wooten

Course Helper:

Anna Dotson
by appointment
Room 361E Chilton Hall
Amd0431@my.unt.edu

ACCOMMODATIONS

The Department of Behavior Analysis, in cooperation with The Office of Disability Accommodation, complies with the Americans with Disabilities Act. Additionally, I **consider all students to be need an accommodation of some kind** since you are all unique and diverse individuals with complex histories and current situations. I **request that you all submit** a description of your accommodations using the attachment to this syllabus. **If your accommodations need to go through ODA as well, please include ODA paperwork and make sure to get it to me by the 3rd week.** The purpose of this course is to inspire, challenge, and establish knowledge and skills. The assignments and deadlines are designed to reach this goal. However, where called for and compatible with the learning of others, I will problem solve with you so that work, childcare, eldercare and other life responsibilities are compatible with your success.

POLICY ON CHILDREN

Respecting parenting status is part of my overall commitment to respecting the wonderful diversity of our UNT classrooms. All exclusively breastfeeding babies are welcome in class as often as necessary. While it is not meant to be a long-term care solution, bringing an older child or elder to class in response to unforeseen disruptions to life is also perfectly acceptable. I ask that other students work to reasonably create a welcoming environment for such children. If you do bring your child to class I ask that you sit near the door so that if your little one needs special attention or starts behaving in a way that is disruptive to the learning of other students, you may step outside until their needs have been met. Please use good judgement where this is concerned.

SUCCEED AT UNT

succeed.unt.edu

Show Up

Active involvement allows you to make the most of your experience. Participate, ask questions, and engage in BEHV 3440 learning opportunities.

Find Support

Create study groups with your classmates and visit the course tutor for on-going support. Make appointments well ahead of time to edit your papers at the writing center before turning them in.

Take Control

If you feel as if you need greater support after the first observation project, sign up with the course tutor to better structure and analyze your behavior so you can succeed.

Be Prepared

Do the readings before class and study each old material between classes.

Get Involved

Explore areas within behavior analysis by attending BAASA meetings, Friday BARC presentations, and volunteering in DBA labs and service settings.

Be Persistent

“That which we persist in doing becomes easier, not that the task itself has become easier, but that our ability to perform it has improved.

Ralph Waldo Emerson (1803 - 1882)”

BEHV 3440 COURSE OBJECTIVES

In this course, you will learn how to design and implement complete observational systems. You will be able to define behavior, learn about the observer’s behavior during data collection, and use five methods of direct observation to quantify the occurrence of behavior. You will be able to describe the benefits and limitations of each of these data collection methods, and choose an appropriate observational method to record the occurrence of particular behaviors. You will also learn how to read and display data in tables and graphs. The course also includes an introduction to the logic of single subject designs. Students should enroll in this class only after they have taken BEHV 2300, 2700, or 3150.

1. Write a reliable operational definition of behavior.
2. Record behavior with seven different recording methods.
3. Calculate the reliability of data.
4. Put data into table and graph format.
5. Read and describe linear graphs and cumulative records.
6. Design entire observational systems.
9. Enhance skills related to effective professional conduct (self-directed learning, civil and considerate behavior, thoughtful discussion, cooperative project work, polished work products).

THIS IS A FOUR CREDIT HOUR LAB CLASS.

- 1) **PARTNERS:** Many class activities and projects will require a partner. You may change partners as often as you like. You must use your UNT email address to contact one another. Partners outside of class are not allowed.
- 2) **LAB MANUAL:** You are required to purchase a lab manual from CopyPro (1300 W. Hickory, Denton, TX 76201). All in-class activities and lab notes are in this manual. The manual will be collected at the end of the semester for grade recording.

STUDENT ACTIVITIES, REQUIREMENTS, AND POINT ALLOCATIONS

Activity	Requirements	Points
Lab Manual	During class, students will engage in a variety of activities designed to extend concepts and practice technical skills related to observation and measurement of behavior. <i>If there is an excused absence, a copy of the documentation and a verification number should be attached to the missed activity/observation.</i>	25 pts
Systems Project with lab partner	Students will design and carry out one complete observational system (observation of multiple behaviors). They will write a report including definitions of at least three behaviors, data sheets, observation and reliability procedures, a table of the data, a graph of the data, and a description of the data. This project will be completed with partners.	25
Teach Us Presentation	Students will complete a synthesis paper that summarizes course content in the context of activities completed during the semester. Grading is based on accuracy, details, reflection, and writing.	30
Final Exam	The comprehensive exam will cover all materials and skills learned in the class. Reviews and practices will be available.	20
TOTAL POINTS		100

Grading Scale

A= 100-90, B=89-80, C=79-70, D=69-60, F= 59 or below

STUDENT PERCEPTIONS OF TEACHING (SPOT)

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The short SPOT survey will be made available to you with an opportunity to evaluate how this course is taught.



You will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Please look for the email in your UNT email inbox.

ABSENCES

If you must be absent for any reason, you should arrange to submit the written assignments early. No assignments turned in after the due date can be accepted. Students are responsible for making their own arrangements to obtain information from any missed class period. There will be no additional make-up opportunities for missed examinations.

STUDENT CONDUCT

Each student automatically certifies that any material submitted for grading is his/her own **independent work**. UNT policies require reporting of plagiarism or any suspected violations that constitute possible academic misconduct. Students are responsible for being familiar with the Code of Student Conduct.

STUDENT RESOURCES

Office of Disability Accommodation - <http://disability.unt.edu/>

Learning Center - <http://learningcenter.unt.edu/> UNT

Writing Lab - <http://writinglab.unt.edu/>

COURSE SCHEDULE

Date	Topics	Readings	Assignments Due
Jan 14	Course Overview	Syllabus	
Jan 16	Basic Issues in Measurement	Reading 1: Basic issues in measurement	
Jan 21	Behavior as a Scientific Datum	Reading 2: A system of behavior	
Jan 23	Creating Behavioral Definitions	Reading 3.1: Selection and definition of behavior Reading 3.2a: Target behavior Reading 3.2b: Behavioral definitions in applied behavior analysis: Explicit or Implicit	
Jan 28	Writing a Behavioral Definition	Reading 4: Observation methods in applied behavior analysis	
Jan 30	Increasing Accuracy of Observations	Reading 5: Improving Observation	
Feb 4	Dimensional Properties of Behavior	Reading 6: Dimensional quantities and units of measurement	
Feb 6	Review Game	NO reading for class	
Feb 11	Frequency Introduction	Reading 7.1: Frequency of a performance as a fundamental datum Reading 7.2: Frequency measures	
	Teach-Us Presentation Instructions		
Feb 13	Frequency in the Field (Observation Period)		
Feb 18	Duration Introduction	Reading 8: Duration Measures	
Feb 20	Duration in the Field (Observation Period)	NO reading for class	
Feb 25	Opportunity-Based Recording Introduction	Reading 9: The effects of behavioral training on staff implementation of discrete-trial teaching.	
	Systems Project Instructions		
Feb 27	Opportunity-Based in the Field (Observation Period)	NO reading for class	
Mar 3	Review Game	NO reading for class	
Mar 5	Teach Us Presentations Checkups	NO reading for class	Present Teach-Us Presentations to Instructors & Work in Groups on Systems Project

Mar 9-13	Spring Break	NO READING, NO CLASSES	
Mar 17	Sampling Introduction	Reading 10.1: Continuous interval methods Reading 10.2: Use of Discontinuous Methods of Data Collection in Behavioral Intervention: Guidelines for Practitioners	
Mar 19	Sampling in the Field (Observation Period)	NO reading for class	Turn in Systems Project to Canvas by 11:59 pm
Mar 24	Graphing	Reading 11.1. Graphing Reading 11.2: Graphs Reading 11.3: ... and rackets	
Mar 26	Review Game	NO reading for class	
Mar 31	PLA Check	Reading 12.1 and 12.2: Planned activity check: Materials for training observers 1 & 2	
April 2	PLA-Check in the Field (Observation Period)	NO reading for class	
April 7	Quantified-Self	Reading 13.1: Counting every moment Reading 13.2 The perfected self	
April 9	Scatterplot & Cumulative Record	Reading 14a: A scatter plot for identifying stimulus control of problem behavior Reading 14b: The Cumulative Record	
April 14	Standard Celeration Chart	Reading 15: Precision Teaching: The Standard Celeration Chart	
April 16	Experimental Design and Visual Analysis 1	Reading 16: Single Subject Design	
April 21	Experimental Design and Visual Analysis 2	Reading 16: Single Subject Design	
April 23	Teach Us Project Presentations	NO reading for class	Final chance to submit Systems Project to Canvas by 11:59 pm
April 28	Semester Wrap-up	NO reading for class	
April 30	Semester Wrap-up	NO reading for class	
Thursday, May 7	Final Exam 1:30 - 3:30 pm		

BEHV 3440 READINGS

- Basic Issues in measurement.** In Simkins, L. D. The basis of psychology as a behavioral science (pp. 126-137). Englewood Cliffs, NJ: Prentice-Hall.
- A system of behavior.** In Skinner, B. F. (1938). The behavior of organisms: An experimental analysis (pp. 3-8). Englewood Cliffs, NJ: Prentice-Hall.
- Selection and definition of behavior.** In Ayllon, T., & Azrin, N. (1968). The token economy: A motivational system for therapy and rehabilitation (pp. 28-39). New York: Appleton-Century-Crofts.
- Target behavior.** In Ayllon, T., & Azrin, N. (1968). The token economy: A motivational system for therapy and rehabilitation (pp. 45-49). New York: Appleton-Century-Crofts.
- Hawkins, R., Dobes, R. (1977). **Behavioral definitions in applied behavior analysis: Explicit or implicit.** In B.C. Etzel, J.M. LeBlanc, and D.M. Baer (Eds.), New developments in behavioral research: Theory, method, and application (165-171). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Behavior definitions.** In Ruggles, T., & Leblanc, J. (1979). Observation methods in applied behavior analysis (pp. 33-37). Kansas Research Institute for early childhood Education of the Handicapped (ECI Document no. 123). University of Kansas: Lawrence Kansas.
- Dimensional quantities and units of measurement.** In Jonhston, J. & Pennypacker, H. (1993). Strategies and tactics of behavioral research (pp. 91-108). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Frequency of a performance as a fundamental datum.** In Ferster, C., Culbertson, S., & Perrott-Boren, M. (1975). Behavior Principles (pp. 321-327). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Frequency measures.** In Ruggles, T., & Leblanc, J. (1979). Observation methods in applied behavior analysis (pp. 7-17). Kansas Research Institute for early childhood Education of the Handicapped (ECI Document no. 123). University of Kansas: Lawrence Kansas.
- Duration measures.** In Ruggles, T., & Leblanc, J. (1979). Observation methods in applied behavior analysis (pp. 18-23). Kansas Research Institute for early childhood Education of the Handicapped (ECI Document no. 123). University of Kansas: Lawrence Kansas.
- Continuous interval methods.** In Ruggles, T., & Leblanc, J. (1979). Observation methods in applied behavior analysis (pp. 23-33). Kansas Research Institute for early childhood Education of the Handicapped (ECI Document no. 123). University of Kansas: Lawrence Kansas.
- Sarokoff, R.A., & Sturmey P. (2004). **The effects of behavioral skills training on Staff implementation of discrete trial training.** *Journal of Applied Behavior Analysis*, 37, 535-538.
- Risley, T., & Cataldo, M. (1975). **Planned activity check: Materials for training observers.** Unpublished manuscript. University of Kansas.
- Cooper, Heron, & Heward (2007) **Improving and assessing the quality of behavioral measurement.** In Applied Behavior Analysis (pp 102-124) Pearson

- Counting every moment.** (2012). Technology Quarterly. The Economist.
- The perfected self.** Freedman, D.H. (2012). The Atlantic.
- Touchette, P., MacDonald, R., & Langer, S. (1985). **A scatter plot for identifying stimulus control of problem behavior.** Journal of Applied Behavior Analysis, 18, 343-351.
- The cumulative record.** In Ferster, C., Culbertson, S., & Perrott-Boren, M. (1975). Behavior Principles (pp. 329-341). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Graphing Data.** In, Alberto. P.A., & Troutmans A. C., (2013) Applied behavior analysis for teachers. (pp 106-123). Boston, MA: Pearson
- Graphs.** In Hartkopf, R. (1985). Math without tears (pp. 100-113). Boston, MA: G. K. Hall & Co.
- ...and rackets.** In Hartkopf, R. (1985). Math without tears (pp. 114-125). Boston, MA: G. K. Hall & Co.
- Calking, A.B., **Precision Teaching: The Standard Celeration Charts** (2005). *The Behavior Analyst Today*, 6, 207-215.
- Single-Subject Designs.** In, Alberto. P.A., & Troutmans A. C., (2013) Applied behavior analysis for teachers. (pp 124-170). Boston, MA: Pearson

NAME (OPTIONAL):

ACCOMMODATIONS DESCRIPTIONS:

Please describe any points of your unique life that will or may weigh on the logistical implementation of this class. For each, please tell me if it's just something I should be aware of or if there is a particular point of reasonable accommodation or flexibility that can be provided.