

BEHV 3440
DATA COLLECTION & ANALYSIS
Fall 2016

Instructor:

Meranda O'Gorman, M.S.

Office Hours:

Monday 2:30-5:00 pm

And by appointment

Room 361E Chilton Hall

Meranda.Ogorman@unt.edu

Course Meeting Information:

Tuesday & Thursday 2:00-3:20 pm

GATE 131

Course Tutoring:

Haven Niland

Tuesday 10:00-12:00 pm; 2:00-4:00 pm

Wednesday 4:45-5:45 pm

Thursday 10:00-1:00 pm; 3:30-4:30 pm

Friday 1:00-2:00 pm

Room 361E Chilton Hall

HavenNiland@my.unt.edu

ADA Statement

The Department of Behavior Analysis, in cooperation with The Office of Disability Accommodation, complies with the Americans with Disabilities Act. Please present your written request to me before the 3rd class meeting.

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.

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 before each test.

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) **LAB PARTNERS:** You are required to complete all observation assignments with a lab partner. You must use your UNT email address to contact one another.
- 2) **LAB MANUAL:** You are required to purchase a lab manual from CopyPro (1300 W. Hickory, Denton, TX 76201). All in-class activities, lab notes, and projects descriptions 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 time students will engage in a variety of activities designed to extend concepts and practice technical skills related to observation and measurement of behavior. Students will define behaviors, record behavior with different observational systems, calculate the reliability of their observations, make and read scatterplots of behavior, cumulative records, and linear graphs. <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
System 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. Each student will write up their own report, but data development and collection should be completed with partners.	25
Synthesis Paper	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, and reflection.	30
Final Exam	Accurately record using seven methods, write a complete behavioral definition, identify basic experimental designs, and describe data paths across treatment conditions.	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 **November 21st** to provide you with an opportunity to evaluate how this course is taught. For the spring 2016 semester you will receive an email on **November 21st (12:01 a.m.)** 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.



COURSE SCHEDULE FALL 2016

Date	Topics	Readings	Assignments Due
Aug. 30	Course Overview	Syllabus	
Sept. 1	Basic Issues in Measurement	Reading 1: Basic issues in measurement	
Sept. 6	Behavior as a Scientific Datum	Reading 2: A system of behavior	
Sept. 8	Descriptive vs. Interpretative of Behavior	Reading 3: Selection and definition of behavior	
	Synthesis Paper Instructions		
Sept. 13	Creating Behavioral Definitions	Reading 4.1: Target behavior Reading 4.2: Behavioral definitions in applied behavior analysis: Explicit or Implicit	
Sept. 15	Writing a Behavioral Definition	Reading 5: Observation methods in applied behavior analysis	
Sept. 20	Increasing Accuracy of Observations	Reading 6: Improving Observation	
Sept. 22	Increasing Accuracy of Observations		Submit Part 1 Synthesis Paper to Blackboard by 2:00pm
Sept. 27	Dimensional Properties of Behavior	Reading 7: Dimensional quantities and units of measurement	
Sept. 29	Dimensional Properties of Behavior		
Oct. 4	Frequency Introduction	Reading 8.1: Frequency of a performance as a fundamental datum Reading 8.2: Frequency measures	
Oct. 6	Frequency in the Field (Observation Period)		Submit Lab Manual to my office by 4:30pm
Oct. 11	Duration Introduction	Reading 9: Duration Measures	
Oct. 13	Duration in the Field (Observation Period)		

Oct. 18	Opportunity-Based Recording Introduction	Reading 10: The effects of behavioral training on staff implementation of discrete- trial teaching.	
Oct. 20	Opportunity-Based in the Field (Observation Period)		Submit Part 2 Synthesis Paper to Blackboard by 2:00pm
Oct. 25	Interval Recording Introduction	Reading 11: Continuous interval methods	
Oct. 27	Interval Recording in the Field (Observation Period)		Submit Lab Manual to my office by 4:30pm
Nov. 1	Systems Project Instructions		
Nov. 3	Sampling Recording Introduction	Reading 12: Planned activity check: Materials for training observers	
Nov. 8	Momentary-Time Sampling in the Field (Observation Period)		
	PLA-Check in the Field (Observation Period)		
Nov. 10	Quantified-Self	Reading 13.1: Counting every moment Reading 13.2 The perfected self	
Nov. 15	Scatterplot	Reading 14: A scatter plot for identifying stimulus control of problem behavior	Submit Part 3 Synthesis Paper to Blackboard by 2:00pm
	Cumulative Record	Reading 15: The Cumulative Record	
Nov. 17	Graphing	Reading 16.1. Graphing Reading 16.2: Graphs Reading 16.3: ... and rackets Reading 16.4 In the beginning, there was the response	
Nov. 22	No Class		
Nov. 24	No Class	Thanksgiving Break	
Nov. 29	Standard Celeration Chart	Reading 17: Precision Teaching: The Standard Celeration Chart	
Dec. 1	Experimental Design and Visual Analysis	Reading 18: Single Subject Design	Manuals DUE during class

Dec. 6	Systems Project Presentations		Submit Systems Project to Blackboard by 2:00 pm
Dec. 8	Systems Project Presentations		Submit Synthesis Paper to Blackboard by 2:00pm
Dec. 15 (Thurs)	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.
- D. M. Baer (1975). **In the beginning, there was the response.** In E. Ramp & G. Semb. Behavior Analysis Areas of Research and Application (pp. 16-30). Englewood Cliffs, NJ: Prentice Hall, Inc.
- 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