

College of Education and Human Development Division of Special Education and disAbility Research

Fall 2016

EDSE 621 001: Applied Behavior Analysis: Empirical Bases CRN: 72927, 3 - Credits

Instructor: Dr. Theodore Hoch	Meeting Dates: 09/1/16 - 12/15/16
Phone: 703-987-8928 / 703-993-3670	Meeting Day(s): Thursday
E-Mail: thoch@gmu.edu	Meeting Time(s): 4:30 pm - 7:10 pm
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Campus	
Office Hours: Mondays and Thursdays 2:30 –	Meeting Location: Fairfax Campus, 15 Krug
4:30, and by appointment. Available through	Hall
skype, text, phone, or email most times.	

Note: This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.

Course Description

Focuses on basic content of applied behavior analysis. Teaches how to implement behavioral procedures and develop behavioral programs for clients with fundamental behavioral needs. Prerequisite(s): B- or higher in EDSE 619 must be completed prior to or concurrently with EDSE 621.

Prerequisite(s) enforced by registration system.

Corequisite(s): EDSE 619 Schedule Type: LEC

Hours of Lecture or Seminar per week: 3

Hours of Lab or Studio per week: 0

Prerequisite(s): EDSE 619

Co-requisite(s): EDSE 619

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Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

Advising Tip

Have you met with an advisor? All students should make an appointment to meet with an advisor to outline a plan for completing coursework and non-course requirements such as testing. To make an appointment by phone or in person, go to http://gse.gmu.edu/special-education/advising/.

Nature of Course Delivery

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Application activities
- 3. Small group activities and assignments
- 4. Video and other media supports
- 5. Research and presentation activities
- 6. Electronic supplements and activities via Blackboard

Learner Outcomes

Upon completion of this course, students will be able to:

- 1. Describe philosophical assumptions underlying data-based decision making in applied behavior analysis.
- 2. Define, describe, identify, exemplify, and use direct measures of behavior.
- 3. Define, describe, identify, exemplify, and use indirect measures of behavior.
- 4. Construct and interpret equal interval graphs.
- 5. Construct and interpret standard celeration charts.
- 6. Describe, identify, and exemplify single subject experimental design.
- 7. Describe and exemplify data-based decision making using visual inspection of graphically presented behavioral data in the context of single subject experimental designs.
- 8. Describe and identify utility and factors affecting use of single subject designs for evaluating instructional, behavioral, and other interventions in applied settings.
- 9. Describe, identify, and exemplify ethical factors regarding data collection, data management, and data based decision making as described by the Guidelines for Responsible Conduct and the Disciplinary Standards.
- 10. Read, interpret, and evaluate articles from the behavior analytic literature.

Required Textbooks

Cooper, J.O., Heron, T.E., & Heward, W.L. (2007). *Applied behavior analysis* (2nd Ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall. ISBN 0-13-142113-1

Foxx, R.M., & Mulick, J.A. (2015). *Controversial therapy for autism and intellectual disabilities: Fad, fashion, and science in professional practice* (2nd Edition). New York, NY: Routledge. ISBN 978-1-138-80223-0

Required Resources

Given the possibility of computer or internet difficulties some students may experience from time to time, students must consider and identify alternative availability of computers and internet access (e.g., public libraries, their employer (if permissible by the employer), internet cafes, etc.) within the first week of this course to ensure that they will be able to complete their assignments in a timely manner.

Students will need to have access to a scanner in order to scan and upload their completed assignments. Each assignment must be scanned into a single document and saved as a pdf file. No photographs will be accepted. Likewise, multiple one page scans (e.g., 5 single page pdf files instead of a single 5-page file) will also not be accepted. Many home printers have scanning capability, and one can also scan at FedEx Office, Staples, or other stores. Finally, one's employer may be able to make scanning available on request.

Additional Readings

Articles listed below published in the *Journal of Applied Behavior Analysis* may be downloaded directly from the journal's website at

<u>http://www.ncbi.nlm.nih.gov/pmc/journals/309/</u>. To obtain articles from the list published in other journals:

- 1. Go to the GMU library website at http://library.gmu.edu/.
- 2. Click on Databases.
- 3. Scroll down to, and click on Psych Info.
- 4. Type in the title or other relevant information in the search term boxes.
- 5. Hit Search.
- 6. Locate the reference for the article in the resulting list.
 - a. If there is a doi number with the reference, click on it. A pdf of the article will appear shortly.
 - b. If there is no doi number, click on MasonLink.
 - i. Select the article from the information that pops up next, or
 - ii. Request a copy of the article through interlibrary loan if it is not available through our library.
- 7. Alternatively, you may visit or phone the Fenwick library (703.993.2250) on the GMU Fairfax, Virginia campus and ask a librarian for assistance.

Single subject design methodology:

- Dermer, M.L., & Hoch, T.A. (1999). Improving descriptions of single-subject experiments in research texts written for undergraduates. *Psychological Record*, 49 (1), 49-66.
- McGonigle, J.J., Rojahn, J., Dixon, J., & Strain, P.S. (1987). Multiple treatment interference in the alternating treatments design as a function of the intercomponent interval length. *Journal of Applied Behavior Analysis*, 20 (2), 171-178.
- Sindelar, P.T., Rosenberg, M.S., & Wilson, R.J. (1985). An adapted alternating treatments design for instructional research. *Education and Treatment of Children*, 8 (1), 67-76.
- Watson, J.E., Singh, N.N., & Winton, A.S. (1985). Comparing interventions using the alternating treatments design. *Behaviour Change*, 2 (1), 13-20.

Automatically reinforced behavior:

- Contrucci Kuhn, S.A., & Triggs, M. Analysis of social variables when an initial functional analysis indicates automatic reinforcement as the maintaining variable for self-injurious behavior. *Journal of Applied Behavior Analysis*, 42 (3), 679-683.
- Falcomata, T.S., Roane, H.S., Hovanetz, A.N., Kettering, T.L., & Keeney, K.M. (2004). An evaluation of response cost in the treatment of inappropriate vocalizations maintained by automatic reinforcement. *Journal of Applied Behavior Analysis*, 37 (1), 83-87.
- Groskreutz, M.Pl, Groskreutz, N.C., & Higbee, T.S. (2011). Response competition and stimulus preference in the treatment of automatically reinforced behavior: A comparison. *Journal of Applied Behavior Analysis*, 44 (1), 211 215.
- Ing, A.D., Roane, H.S., & Veenstra, R.A. (2011). Functional analysis and treatment of coprophagia. *Journal of Applied Behavior Analysis*, 44 (1), 151 155.
- Rapp, J.T. (2006). Toward an empirical method for identifying matched stimulation for automatically reinforced behavior: A preliminary investigation. *Journal of Applied Behavior Analysis*, 39 (1), 137-140.

College instruction:

Critchfield, T.S., & Fienup, D.M. (2010). Using stimulus equivalence technology to teach statistical inference in a group setting. *Journal of Applied Behavior Analysis*, 43 (4), 763-768.

- Fienup, D.M., Hamelin, J., Reyes-Giordano, K., & Falcomata, T.S. (2011). College-level instruction: Derived relations and programmed instruction. *Journal of Applied Behavior Analysis*, 44 (2), 413-416.
- Perrin, C.J., Miller, N., Haberlin, A.T., Ivy, J.W., Meindl, J.N., & Neef, N.A. (2011). Measuring and reducing college students' procrastination. *Journal of Applied Behavior Analysis*, 44 (3), 463-474.
- Saville, B.K., Zinn, T.E., Neef, N.A., Van Norman, R., & Ferreri, S.J. (2006). A comparison of interteaching and lecture in the college classroom. *Journal of Applied Behavior Analysis*, 39 (1), 49-61.
- Walker, B.D., Rehfeldt, R.A., & Ninness, C. (2010). Using the stimulus equivalence paradigm to teach course material in an undergraduate rehabilitation course. *Journal of Applied Behavior Analysis*, 43 (615-633.

Community applications:

- Belfiore, P.J., Browder, D.M., & Mace, F.C. (1993). Effects of community and center-based settings on the alertness of persons with profound mental retardation. *Journal of Applied Behavior Analysis*, 26 (3), 401-402.
- Cope, J.G., & Allred, L.J. (1991). Community intervention to deter illegal parking in spaces reserved for the physically disabled. *Journal of Applied Behavior Analysis*, 24 (4), 687-693.
- Ledgerwood, D.M., Alessi, S.M., Hanson, T., Godley, M.D., & Petry, N.M. (2008). Contingency management for attendance to group substance abuse treatment administered by clinicians in community clinics. *Journal of Applied Behavior Analysis*, 41 (4), 517-526.
- Manuel, J.C., Sunseri, M.A., Olson, R., & Scolari, M. (2007). A diagnostic approach to increase reusable dinnerware selection in a cafeteria. *Journal of Applied Behavior Analysis*, 40 (2), 301-310.
- O'Connor, R.T., Lerman, D.C., Fritz, J.N., & Hodde, H.B. (2010). Effects of number and location of bins on plastic recycling at a university. *Journal of Applied Behavior Analysis*, 43 (4), 711-715.

Compliance:

Normand, M.P., & Beaulieu, L. (2011). Further evaluation of response-independent delivery of preferred stimuli and child compliance. *Journal of Applied Behavior Analysis*, 44 (3), 665 – 669.

- Normand, M.P., Kestner, K., & Jessel, J. (2010). An analysis of stimuli that influence compliance during the high-probability instruction sequence. *Journal of Applied Behavior Analysis*, 43 (4), 735-738.
- Scjhiff, A., Tarbox, J., Lanagan, T., & Farag, P. (2011). Establishing compliance with liquid medication administration in a child with autism. *Journal of Applied Behavior Analysis*, 44 (2), 381-385.
- Stephenson, K.M., & Hanley, G.P. (2010). Preschoolers' compliance with simple instructions: A descriptive and experimental evaluation. *Journal of Applied Behavior Analysis*, 43 (2), 229-247.
- Wilder, D.A., Allison, J., Nicholson, K., Abellon, O.E., & Saulnier, R. (2010). Further evaluation of antecedent interventions on compliance: The effects of rationales to increase compliance among preschoolers. *Journal of Applied Behavior Analysis*, 4 (43), 601-613.

Driver safety:

- Arnold, M.L., & Van Houten, R. (2011). Increasing following headway with prompts, goal setting, and feedback in a driving simulator. *Journal of Applied Behavior Analysis*, 44(2), 245-254.
- Clayton, M., Helms, B., & Simpson, C. (2006). Active prompting to decrease cell phone use and incrase seat belt use while driving. *Journal of Applied Behavior Analysis*, 39 (3), 341-349.
- Crowley-Koch, B.J., Van Houten, R., & Lim, W. (2011). Effects of pedestrian prmpts on motorist yielding at crosswalks. *Journal of Applied Behavior Analysis*, 44 (1), 121-126.
- Van Houten, R., Hilton, B., Schulman, R., & Reagan, I. (2011). Using accelerator pedal force to increase seat belt use of service vehicle drivers. *Journal of Applied Behavior Analysis*, 44 (1), 41 49.
- VanWagner, M., Van Houten, R., & Betts, B. (2011). The effects of a rectangular rapid-flashing beacon on vehicle speed. *Journal of Applied Behavior Analysis*, 44 (3), 629-633.

Education:

Hofstadter-Duke, K.L., & Daly, E.J. (2011). Improving oral reading fluency with a peer mediated intervention. *Journal of Applied Behavior Analysis*, 44 (3), 641-646.

- Lannie, A.L., & Martens, B.K. (2004). Effects of task difficulty and type of contingency on students' allocation of responding to math worksheets. *Journal of Applied Behavior Analysis*, 37 (1), 53-65.
- Melchiori, L.E., deSouza, D.G., & deRose, J.C. (2000). Reading, equivalence, and recombination with students with different learning histories. *Journal of Applied Behavior Analysis*, 33 (1), 97-100.
- Moore, J.W., & Edwards, R.P. (2003). An analysis of aversive stimuli in classroom demand contexts. *Journal of Applied Behavior Analysis*, *36* (3), 339-348.
- Resetar, J.L., & Noell, G.H. (2008). Evaluating preference assessments for use in the general education population. *Journal of Applied Behavior Analysis*, 41 (3), 447-451.

Functional analysis methodology:

- Bloom, S.E., Iwata, B.A., Fritz, J.N., Roscoe, E.M., & Carreau, A.B. (2011). Classroom application of a trial based functional analysis. Journal *of Applied Behavior Analysis*, 44 (1), 19-31.
- Dicesare, A., McAdam, D.B., Toner, A., & Varrell, J. (2005). The effects of methylphenidate on a functional analysis of disruptive behavior: A replication and extension. *Journal of Applied Behavior Analysis*, 38 (1), 125-128.
- Langthorne, P., & McGill, P. (2011). Assessing the social acceptability of the functional analysis of problem behavior. *Journal of Applied Behavior Analysis*, 44 (2), 403-407.
- Piazza, C.C., Fisher, W.W., Brown, K.A., Shore, B.A., Patel, M.R., Katz, R.M., Sevin, B.M., Gulotta, C.S., & Blakely-Smith, A. (2003). Functional analysis of inappropriate mealtime behaviors. *Journal of Applied Behavior Analysis*, *36* (2), 187-204.
- Rispoli, M., O'Reilly, M., Lang, R., Machalicek, W., Davis, T., Lancioni, G., & Sigafoos, J. (2011). Effects of motivating operations on problem behavior and academic behavior in classrooms. *Journal of Applied Behavior Analysis*, 44 (1), 187-192.

Geriatrics:

Buchanan, J.A., & Fisher, J.E. (2002). Functional assessment and noncontingent reinforcement in the treatment of disruptive vocalization in elderly dementia patients. *Journal of Applied Behavior Analysis*, *35* (1), 99-103.

- Burgio, L.D., & Burgio, K.L. (1986). Behavioral gerontology: Application of behavioral methods to the problems of older adults. *Journal of Applied Behavior Analysis*, 19 (4), 321-328.
- Dwyer-Moore, K.J., & Dixon, M.R. (2007). Functional analysis and treatment of problem behavior of elderly adults in long-term care. *Journal of Applied Behavior Analysis*, 40 (4), 679-683.
- Gallagher, S.M., & Keenan, M. (2000). Independent use of activity materials by the elderly in a residential setting. *Journal of Applied Behavior Analysis*, 33 (3), 325-328.
- Trahan, M.A., Kahng, S.W., Fisher, A.B., & Hausman, N.L. (2011). Behavior analystic research on dementia in older adults. *Journal of Applied Behavior Analysis*, 44 (3), 687-691.

Parenting:

- Allen, K.D., & Warzak, W.J. (2000). The problem of parental nonadherence in clinical behavior analysis: Effective treatment is not enough. *Journal of Applied Behavior Analysis*, 33 (3), 373-391.
- Gortmaker, V.J., Daly, E.J., McCurdy, M., Persampieri, M.J., & Hergenrader, M. (2007). Improving reading outcomes for children with learning disabilities: Using brief experimental analysis to develop parent-tutoring interventions. *Journal of Applied Behavior Analysis*, 40 (2), 203-221.
- Lafasakis, M., & Sturmey, P. (2007). Training parent implementation of discrete-trial teaching: Effects on generalization of parent teaching and child correct responding. *Journal of Applied Behavior Analysis*, 40 (4), 685-689.
- Phaneuf, L., & McIntyre, L.L. (2007). Effects of individualized video feedback combined with group parent training on inappropriate maternal behavior. *Journal of Applied Behavior Analysis*, 40 (4), 737-741.
- Thompson, R.H., Bruzek, J.L., & Cotnoir-Bichelman, N.M. (2011). The role of negative reinforcement in infant caregiving: An experimental simulation. *Journal of Applied Behavior Analysis*, 44 (2), 295 304.

Psychiatric issues:

Dozier, C.L., Iwata, B.A., & Worsdell, A.S. (2011). Assessment and treatment of foot-shoe fetish displayed by a man with autism. *Journal of Applied Behavior Analysis*, 44 (1), 133-137.

- Lang, R., Regester, A., Mulloy, A., Rispoli, M., & Botout, A. (2011). Behavioral intervention to treat selective mutism across multiple social situations and community settings. *Journal of Applied Behavior Analysis*, 44 (3), 623-628.
- Reyes, J.R., Vollmer, T.R., & Hall, A. (2011). Replications and extensions in arousal assessment for sex offenders with developmental disabilities. *Journal of Applied Behavior Analysis*, 44 (2), 369-373.
- Sparling, J., Wilder, D.A., Kondash, J., Boyle, M., & Compton, M. (2011). Effects of interviewer behavior on accuracy of children's responses. *Journal of Applied Behavior Analysis*, 44 (3), 587-592.
- Travis, R., & Sturmey, P. (2010). Functional analysis and treatment of the delusional statements of a man with multiple disabilities: A four-year follow-up. *Journal of applied Behavior Analysis*, 43 (4), 745-749.

Sports applications:

- Reed, D.D., Critchfield, T.S., & Martens, B.K. (2006). The generalized matching law in elite sport competition: Play calling as operant choice. *Journal of Applied Behavior Analysis*, 39 (3), 281-297.
- Smith, S.L., & Ward, P. (2006). Behavioral interventions to improve performance in collegiate football. *Journal of Applied Behavior Analysis*, *39* (3), 385-391.
- Stokes, J.V., Luiselli, J.K., & Reed, D.D. (2010). A behavioral intervention for teaching tackling skills to high school football athletes. *Journal of Applied Behavior Analysis*, 43 (3), 509 512.
- Stokes, J.V., Luiselli, J.K., Reed, D.D., & Fleming, R.K. (2010). Behavioral coaching to improve offensive line pass-blocking skills of high school athletes. *Journal of Applied Behavior Analysis*, 43 (3), 463-472.
- Vollmer, T.R., & Bourret, J. (2000). An application of the matching law to evaluate the allocation of two-and three-point shots by college basketball players. *Journal of Applied Behavior Analysis*, 33 (2), 137-150.

Course Relationships to Program Goals and Professional Organizations

This course is part of the George Mason University, Graduate School of Education (GSE), Special Education Program for Applied Behavior Analysis Graduate Certificate. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization. The CEC Standards are listed on the following website:

http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStanda

rds/. The content of the courses in this program is derived from the Task List published by the national Behavior Analyst Certification Board (BACB) as well as the Board's Guidelines for Responsible Conduct. The BACB Standards are listed on the following website: For more information on the Board and the examination, please visit the Board's website at www.bacb.com. The CEC standard that will be addressed in this class is Standard 4: Assessment. (Updated Fall 2014 to align with the revised CEC Standards)

GMU Policies and Resources for Students:

- a. Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/the-mason-honor-code/].
- b. Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/].
- c. Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See http://caps.gmu.edu/].
- e. Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services and inform their instructor, in writing, as soon as possible. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor. [See http://ods.gmu.edu/].
- f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See http://writingcenter.gmu.edu/].

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times.

Core Values Commitment

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See http://cehd.gmu.edu/values/]

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For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/]

Course Policies & Expectations

Attendance.

All class sessions begin at 4:30 pm. All students are expected to be present, in the classroom, and ready to work, at 4:30 pm. Some sessions will include point earning activities. Only those students who are present may participate in those point earning activities; absent students will not have an opportunity to make up point earning opportunities missed due to absence. Should a student be absent, it is that student's responsibility to secure notes and other materials from the missed session from a classmate.

Late Work.

There is much to be done in this course, and it is very easy for one to become behind if one doesn't keep up. All work is due by the dates listed in the schedule, below. Late submissions will be assessed a 10% possible point penalty. Late discussion board posts will be assessed a 50% possible point penalty. No work will be accepted after the final exam has been submitted.

Tk20 Performance-Based Assessment Submission Requirement

Every student registered for any Special Education course with a required performance-based assessment is required to submit the <u>Make Your Own Experiment and Final Exam Feedback</u> to Tk20 through Blackboard (regardless of whether the student is taking the course as an elective, a onetime course or as part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in Tk20 through Blackboard. Failure to submit the assessment to Tk20 (through Blackboard) will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Tk20 submission, the IN will convert to an F nine weeks into the following semester.

Grading Scale

Assignment	Possible Points	Number of	Points Possible	Cumulative
Type	per Instance	instances	for Assignment	Points
			Type	
Discussion	2 points per item	26 items	52 points	52 points
Board items	2 points per item	20 100 1115	possible	possible
			-	
SAFMEDS	10	10 opportunities	50 points	102 points
	demonstrations			
Problem Sets	10 points per set	8 sets	80 points	182 points
			possible	_
Research	10 points per	5 worksheets	50 points	232 points
Worksheets	worksheet	3 worksheets	possible	232 points
Worksheets	Worksheet		possible	
CITI Human	10 points	1 module	10 points	242 points
Subjects Module				
Make Your Own	20 points per	2 experiments	40 points	282 points
Experiment	experiment	1	possible	1
7	100		100	202
Final Exam	100 points per	1 exam	100 points	382 points
	exam		possible	
A =	A- =	B =	C =	F < 267 points
363 - 382 points	344 - 362 points	305 - 343 points	267 - 304 points	

Assignments

Performance-based Assessment (Tk20 submission required).

There are two TK20 Assignments for this course. They are:

Final Examination. This test will consist of 50 items (worth 2 points each), and will be given as a pretest on the first night of class, and a parallel form as a final exam on the last night of class. Credit toward your final score will only be given for your performance on this test on the last night of class. After you have completed your final exam, you'll be emailed a document that details your performance by content area covered by the exam. You'll need to upload this document to TK20 after receiving it.

Make Your Own Experiment. You will be provided with 10 scenarios. You will choose two scenarios for which you will complete this project. You will use a different

experimental design and a different data collection method for each of the two scenarios you choose. For each of these scenarios, instructions are as follows:

- A- develop a behavioral definition for the identified problem behavior (2 points);
- B- select a measure for the behavior of interest (and give the rationale for selecting this measure) (2 points);
- C- develop a recording form for collecting data (2 points);
- D- write step by step instructions for collecting data, ensuring that these instructions:
 - a. are bulleted
 - b. use active voice
 - c. specify only one implementer behavior per step
 - d. instruct the implementer what to do
 - e. use only as many words as is necessary
 - f. provide steps in linear order
 - g. include only necessary steps (necessary)
 - h. include all necessary steps (sufficient) (8 points);
- E- select a design that will best answer the question asked (and give the rationale for that design) (2 points);
- F- describe, step by step, how you will implement that design, indicating:
 - a. How you will begin baseline data collection (1 point);
 - b. Decision rules for introducing your intervention (1 point)
 - c. Decision rules for withdrawing and for reintroducing your intervention (if appropriate) or for introducing your intervention in another setting (or for another therapist, subject, behavior, etc.) (if appropriate) (1 point); and
 - d. How you will control for relevant threats to internal validity (1 point)
- G- Construct a graph of possible data that would show functional control of the intervention over the behavior, using the design you chose (2 points).
- H- Scan all of this into a single document, and submit, in PDF form.

Each group member will submit the written document for both the applied and basic experiments, with each group member's name atop the first page, through Taskstream for grading.

A total of 40 points (20 for each scenario selected) is possible.

Performance-based Common Assignments (No Tk20 submission required).

Blackboard Discussion Board Items. For weeks indicated below, in conjunction with your readings from *Controversial therapies for developmental disabilities*, respond to the week's two Discussion Board items. To respond, first do the assigned reading. Next, go to the week's Discussion Board items on Blackboard. Read your instructor's question and respond directly to that question for one point. Then, go back later that day or on another day and read your classmates' posts. Respond to one or more of those posts for a second point. Making posts on time earns up to 2 points per discussion board forum. Late posts earn only up to 1 point per discussion board forum.

Problem Sets. You will complete these per instructions contained on each problem set, and submit them through Blackboard no later than at the end of the dates for which they are indicated as due in the schedule below. A total of 10 points is possible for each correctly completed Problem Set submitted on time; up to 9 points for those submitted late. *Incorrect responses may be corrected and resubmitted once, for up to ½ credit for each corrected response.* Corrected problem sets must be submitted within two weeks of the original due date.

Research Worksheets. The Research Worksheet outline will be available on Blackboard, in Course Documents. You will select one set of articles from the list appearing earlier in this syllabus (other than the Single Subject Design Methodology articles) and complete a research worksheet for each article in that set (completing five research worksheets in all). Research worksheets are due no later than at the beginning of the course sessions indicated below. Worksheets turned in on time or early can earn a total of 10 possible points each; those turned in late can earn up to 9 points each.

CITI Training Module. You will access and complete the CITI Human Subjects Protections training module during Week 12, and upload the certificate of completion in the link provided in that module. You will earn 10 points for completing this module.

Other Assignments.

SAFMEDS Demonstrations. At the beginning of class sessions 2 - 11, you will privately demonstrate fluency with the SAFMEDS terms assigned for that week by responding correctly to each card within the specified time limit. Five points are earned for responding correctly to all cards within the specified time limit; four points for responding correctly to each card in more than the specified amount of time.

Extra Credit – Research Worksheets. Alternatively, one may complete research worksheets for an additional content area from the content areas listed earlier in this syllabus, submitting them through Blackboard (Extra Credit tab) no later than midnight on 15 December 2016, for up to 4 points per worksheet. No more than 5 extra credit Research Worksheets may be submitted.

Schedule

In the table below, <u>ABA</u> refers to the Cooper, Heron, and Heward text (Applied Behavior Analysis), and <u>CT</u> refers to the Controversial Therapies text. NLT means No Later Than, RBNR means Recommended But Not Required, and EC means Extra Credit. Note: All extra credit assignments are optional, and not participating or completing them will have no impact on your final grade.

Date	Topics	Assignments / Activities
1 Sept 16 Week 1	Review Syllabus Review Honor Code Pretest	☐ Complete pretest online NLT 4:30 pm 9/8/16
8 Sept 16 Week 2	Introduction to Single-subject design	 □ Read <u>CT</u> Ch 1 and 2 □ Read <u>ABA</u> Ch 1, pp. 65 – 69 □ Complete DB 1 and 2 NLT 4:30 pm 9/15/16 □ SAFMEDS Set 1
15 Sept 16 Week 3 Entire online this week – no class meeting	Measurement – Why bother? Direct Measures of Behavior: count, cumulative count, duration, rate, latency, interresponse time, extensity, intensity	 □ Read <u>CT</u> Ch 3 and 4 □ Read <u>ABA</u> pp. 73 – 80, 83 – 90 □ Complete DB 3 and 4 NLT 4:30 pm 9/22/16 □ Complete Problem Set 1 NLT 4:30 pm 9/22/16 □ SAFMEDS Set 2
22 Sept 16 Week 4	Measurement – Indirect Measures of Behavior: accuracy, intensity, trials to criterion, percentage, percentage occurrence, percentage intervals occurrence, permanent products, and other estimates; Selecting appropriate measures; General data collection issues	 □ Read <u>CT</u> Ch 5 and 6 □ Read <u>ABA</u> pp. 81 – 82, 85 – 87, 90 – 100 □ Complete DB 5 and 6 NLT 4:30 pm 9/29/16 □ Complete Problem Set 2 NLT 4:30 pm 9/29/16 □ SAFMEDS Set 3
29 Sept 16 Week 5	Data Management: Graphic data display and graph preparation; maintaining data tables; data summary; equal interval graphs; cumulative count graphs	□ Read CT Ch 7 and 8 □ Read ABA Ch 6 □ Complete DB 7 and 8 NLT 4:30 pm 10/6/16 □ Complete Problem Set 3 NLT 4:30 pm 10/6/16 □ SAFMEDS Set 4
6 Oct 16 Week 6	Standard Behavior Charts	 □ Read <u>CT</u> Ch 9 and 10 □ Read <u>ABA</u> Ch 7 □ Complete DB 9 and 10 NLT 4:30 pm 10/13/16 □ Complete Problem Set 4 4:30 pm NLT 10/13/16 □ SAFMEDS Set 5
13 Oct 16 Week 7	Withdrawal Designs (AB, ABA, ABAB, BAB, etc.); Component Analysis; Parametric Analysis	 □ Read <u>CT</u> Ch 11 and 12 □ Read <u>ABA</u> pp. 177 – 186 □ Complete DB 11 and 12 NLT 4:30 pm 10/20/16 □ Complete Problem Set 5 NLT 4:30 pm 10/20/16 □ SAFMEDS Set 6

Date	Topics	Assignments / Activities
20 Oct 16 Week 8	Alternating Treatments Designs and Pairwise Comparison Designs	 □ Read <u>CT</u> Ch 13 and 14 □ Read <u>ABA</u> pp. 187 – 194 □ Read Watson et al. (1985), Sindelar et al. (1985), & McGonigle et al. (1987) □ Complete DB 13 and 14 NLT 4:30 pm 10/27/16 □ Complete Problem Set 6 NLT 4:30 pm 10/27/16 □ SAFMEDS Set 7
27 Oct 16 Week 9	Multiple Baseline Designs	 □ Read <u>CT</u> Ch 15 and 16 □ Read <u>ABA</u> Ch 9 □ Complete DB 15 and 16 NLT 4:30 pm 11/3/16 □ Complete Problem Set 7 NLT4:30 pm 11/3/16 □ SAFMEDS Set 8
3 Nov 16 Week 10	Measuring choice, preference, and other phenomena; Combining measurement and design elements to solve complex problems	 □ Read <u>CT</u> Ch 17 and 18 □ Read <u>ABA</u> Ch 5, 10 □ Complete DB 17 and 18 NLT 4:30 pm 11/10/16 □ Complete DB 8 NLT 4:30 pm 11/10/16 □ SAFMEDS Set 9
10 Nov 16 Week 11	General Issues in Measurement and Experimental Design – Review of Designs and Functional Control	□ Read CT Ch 19 and 20 □ Complete DB 19 and 20 NLT 4:30 pm 11/17/16 □ SAFMEDS Set 10 □ RW 1 Due NLT 4:30 pm today □
17 Nov 16 Week 12	Make Your Own Experiment Week! Discussion and peer review	 □ Read <u>CT</u> Ch 21 and 22 □ Complete DB 21 and 22 NLT 12/1/16 □ CITI Training Certificate due by 4:30 pm today □ RW 2 and 3 due by 4:30 pm today
1 Dec 16 Week 13	Make Your Own Experiment Week! Discussion and peer review	□ Read <u>CT</u> chapters 23 and 24 □ Complete DB 23 and 24 NLT 4:30pm 12/8/16 □ RW 4 and 5 due by 4:30 pm today
8 Dec 16 Week 14	Measuring psychiatric symptoms and medication effects Final Make Your Own Experiment discussion and peer review	□ Read <u>CT</u> Chapters 25 and 26 □ EXTRA CREDIT: Complete DB 25 and 26 NLT 4:30 pm 12/15/16

Date	Topics	Assignments / Activities
15 Dec 15	Final Exam	☐ EXTRA CREDIT Read CT Ch 27 and 28 and Respond to
		DB Items 27 and 28 on Blackboard before 7:30 pm today
Week 15		☐ Submit Make Your own Experiments documents to TK20 no
		later than 4:30 pm today
		☐ Complete your final exam online by 7:30 pm today