



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

Spring 2016

EDSE 621 001: Applied Behavior Analysis: Empirical Bases

CRN: 14480, 3 - Credits

Instructor: Theodore A. Hoch, Ed.D., B.C.B.A.-D., L.B.A.	Meeting Dates: 01/21/16 - 05/5/16
Phone: 703-987-8928 / 703-993-5245	Meeting Day(s): Thursday
E-Mail: thoch@gmu.edu Skype: drtheodorehoch	Meeting Time(s): 4:30 pm-7:10 pm
Office Hours: Available by phone, text, email, and skype most times; in person meetings available by appointment	Meeting Location: Fairfax; Krug Hall 15

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.

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

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.

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:

- Describe philosophical assumptions underlying data-based decision making in applied behavior analysis.
- Define, describe, identify, exemplify, and use direct measures of behavior.
- Define, describe, identify, exemplify, and use indirect measures of behavior.
- Construct and interpret equal interval graphs.
- Construct and interpret standard celeration charts.
- Describe, identify, and exemplify single subject experimental design.
- Describe and exemplify data-based decision making using visual inspection of graphically presented behavioral data in the context of single subject experimental designs.
- Describe and identify utility and factors affecting use of single subject designs for evaluating instructional, behavioral, and other interventions in applied settings.
- 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.
- 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

Jacobson, J.W., Foxx, R.M., & Mulick, J.A. (2005). *Controversial therapies for developmental disabilities: Fad, fashion, and science in professional practice*. Mahwah, NJ: Lawrence Erlbaum Associates. ISBN 0-8058-4192-X.

Digital Library

Effective summer 2015, the Division of Special Education and disAbility Research will discontinue the use of the Pearson Digital Library. No further registrations will be accepted. Students who hold current subscriptions will continue to have access to the library for the remainder of their subscription time. However, no further updates will be made to the digital library. During this time, should a textbook be revised or a new book is adopted for a class where the text is included in the digital library, Pearson will have options available to you and will provide you with an individual e-text or, if there is no e-text, a printed copy. Students, who have purchased a 3-year subscription directly through Pearson Education, will also have an option to obtain a prorated refund. However, 3-year subscription access cards purchased via the GMU bookstore will need to speak with a George Mason Bookstore Representative. Please be aware that the issuance of a refund, in this case, is at the discretion of the George Mason bookstore. Concerns or questions may be directed to Molly Haines at Molly.Haines@pearson.com.

Recommended Textbooks

None, although those wishing to complete the optional, extra credit assignment listed later in this document will need to purchase a subscription to the BCBA Examination Study software, available through Behavior Development Solutions at <http://www.behaviordevelopmentsolutions.com/>.

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 <http://www.ncbi.nlm.nih.gov/pmc/journals/309/> . 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 increase 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 prompts 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., & Sigafos, 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 analytic 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/ProfessionalStandards/>. 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. <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/>]

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 Make Your Own Experiment and Final Exam Feedback 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 Type	Possible Points per Instance	Number of instances	Points Possible for Assignment Type	Cumulative Points
Discussion Board items	2 points per item	26 items	52 points possible	52 points possible
SAFMEDS	10 demonstrations	10 opportunities	50 points	102 points
Problem Sets	10 points per set	8 sets	80 points possible	182 points
Research Worksheets	10 points per worksheet	5 worksheets	50 points possible	232 points
CITI Human Subjects Module	10 points	1 module	10 points	242 points
Make Your Own	20 points per	2 experiments	40 points	282 points

Experiment	experiment		possible	
Final Exam	100 points per exam	1 exam	100 points possible	382 points
A = 363 - 382 points	A- = 344 - 362 points	B = 305 - 343 points	C = 267 - 304 points	F < 267 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 e-mailed 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 – YOU MAY COMPLETE AS MANY EXTRA CREDIT ASSIGNMENTS AS YOU WISH – BUT ONLY 20 POINTS FROM EXTRA CREDIT WILL BE COUNTED TOWARD YOUR FINAL GRADE. ALL EXTRA CREDIT MUST BE COMPLETED AND SUBMITTED PRIOR TO TAKING YOUR FINAL EXAM. NO EXTRA CREDIT SUBMITTED AFTER YOUR FINAL EXAM WILL BE ACCEPTED.

Students may earn 5 points extra credit per 1 day of attendance at any of the following:

- Association for Professional Behavior Analysts Convention, to be held 31 March – 2 April in Washington, D.C. Students will attend at their own expense, and must provide documentation demonstrating their attendance, or must check in with Dr. Hoch at the conference, for each day of attendance. More information is available at www.apbahome.net.
- Virginia Association for Behavior Analysis Conference, to be held on 15 and 16 April in Newport News, VA. Students will attend at their own expense, and must provide documentation demonstrating their attendance, or must check in with Dr. Hoch at the conference, for each day of attendance. More information available at www.virginiaaba.org.

Extra Credit – Behavior Development Solutions. Completing the following Behavior Development Solutions modules:

- Experimental Evaluation of Interventions
- Measurement of Behavior

and the certificates of completion for one or both of these modules to Blackboard (Extra Credit tab) will earn 10 points of extra credit per certificate submitted.

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 5 May 2016, for up to 4 points per worksheet. No more than 5 extra credit Research Worksheets may be submitted.

Schedule

In the table below, ABA refers to the Cooper, Heron, and Heward text (Applied Behavior Analysis), and CT 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
21 Jan 16 Week 1	Review Syllabus Review Honor Code Pretest	<input type="checkbox"/> Complete pretest
28 Jan 16 Week 2	Introduction to Single-subject design	<input type="checkbox"/> Read <u>CT</u> Ch 1 and 2 <input type="checkbox"/> Read <u>ABA</u> Ch 1, pp. 65 – 69 <input type="checkbox"/> Complete DB 1 and 2 NLT 4:30 pm 2/4/16 <input type="checkbox"/> SAFMEDS Set 1
4 Feb 16 Week 3	Measurement – Why bother? Direct Measures of Behavior: count, cumulative count, duration, rate, latency, interresponse time, extensity, intensity	<input type="checkbox"/> Read <u>CT</u> Ch 3 and 4 <input type="checkbox"/> Read <u>ABA</u> pp. 73 – 80, 83 – 90 <input type="checkbox"/> Complete DB 3 and 4 NLT 4:30 pm 2/11/16 <input type="checkbox"/> Complete Problem Set 1 NLT 4:30 pm 2/11/16 <input type="checkbox"/> SAFMEDS Set 2
11 Feb 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	<input type="checkbox"/> Read <u>CT</u> Ch 5 and 6 <input type="checkbox"/> Read <u>ABA</u> pp. 81 – 82, 85 – 87, 90 – 100 <input type="checkbox"/> Complete DB 5 and 6 NLT 4:30 pm 2/18/15 <input type="checkbox"/> Complete Problem Set 2 NLT 4:30 pm 2/18/15 <input type="checkbox"/> SAFMEDS Set 3
18 Feb 16 Week 5	Data Management: Graphic data display and graph preparation; maintaining data tables; data summary; equal interval graphs; cumulative count graphs	<input type="checkbox"/> Read <u>CT</u> Ch 7 and 8 <input type="checkbox"/> Read <u>ABA</u> Ch 6 <input type="checkbox"/> Complete DB 7 and 8 NLT 4:30 pm 2/25/16 <input type="checkbox"/> Complete Problem Set 3 NLT 4:30 pm 2/25/16 <input type="checkbox"/> SAFMEDS Set 4
25 Feb 16 Week 6	Standard Behavior Charts	<input type="checkbox"/> Read <u>CT</u> Ch 9 and 10 <input type="checkbox"/> Read <u>ABA</u> Ch 7 <input type="checkbox"/> Complete DB 9 and 10 NLT 4:30 pm 3/3/16 <input type="checkbox"/> Complete Problem Set 4 4:30 pm NLT 3/3/16 <input type="checkbox"/> SAFMEDS Set 5
3 Mar 16	Withdrawal Designs (AB, ABA, ABAB, BAB, etc.); Component	<input type="checkbox"/> Read <u>CT</u> Ch 11 and 12 <input type="checkbox"/> Read <u>ABA</u> pp. 177 – 186

Week 7	Analysis; Parametric Analysis	<input type="checkbox"/> Complete DB 11 and 12 NLT 4:30 pm 3/17/16 <input type="checkbox"/> Complete Problem Set 5 NLT 4:30 pm 3/17/16 <input type="checkbox"/> SAFMEDS Set 6
17 Mar 16 Week 8	Alternating Treatments Designs and Pairwise Comparison Designs	<input type="checkbox"/> Read <u>CT</u> Ch 13 and 14 <input type="checkbox"/> Read <u>ABA</u> pp. 187 – 194 <input type="checkbox"/> Read Watson et al. (1985), Sindelar et al. (1985), & McGonigle et al. (1987) <input type="checkbox"/> Complete DB 13 and 14 NLT 4:30 pm 3/24/16 <input type="checkbox"/> Complete Problem Set 6 NLT 4:30 pm 3/24/16 <input type="checkbox"/> SAFMEDS Set 7
24 Mar 16 Week 9	Multiple Baseline Designs	<input type="checkbox"/> Read <u>CT</u> Ch 15 and 16 <input type="checkbox"/> Read <u>ABA</u> Ch 9 <input type="checkbox"/> Complete DB 15 and 16 NLT 4:30 pm 3/31/16 <input type="checkbox"/> Complete Problem Set 7 NLT 4:30 pm 3/31/16 <input type="checkbox"/> SAFMEDS Set 8
31 Mar 16 Week 10	Measuring choice, preference, and other phenomena; Combining measurement and design elements to solve complex problems	<input type="checkbox"/> Read <u>CT</u> Ch 17 and 18 <input type="checkbox"/> Read <u>ABA</u> Ch 5, 10 <input type="checkbox"/> Complete DB 17 and 18 NLT 4:30 pm 4/7/16 <input type="checkbox"/> Complete DB 8 NLT 4:30 pm 4/7/16 <input type="checkbox"/> SAFMEDS Set 9
7 Apr 16 Week 11	General Issues in Measurement and Experimental Design – Review of Designs and Functional Control	<input type="checkbox"/> Read <u>CT</u> Ch 19 and 20 <input type="checkbox"/> Complete DB 19 and 20 NLT 4:30 pm 4/14/16 <input type="checkbox"/> RBNR SAFMEDS Set 10 <input type="checkbox"/> RW 1 Due NLT 4:30 pm today <input type="checkbox"/>
14 Apr 16 Week 12	Make Your Own Experiment Week! Discussion and peer review	<input type="checkbox"/> Read <u>CT</u> Ch 21 and 22 <input type="checkbox"/> Complete DB 21 and 22 NLT 4/21/16 <input type="checkbox"/> CITI Training Certificate due by 4:30 pm today <input type="checkbox"/> RW 2 and 3 due by 4:30 pm today
21 Apr 16 Week 13	Make Your Own Experiment Week! Discussion and peer review	<input type="checkbox"/> Read <u>CT</u> chapters 23 and 24 <input type="checkbox"/> Complete DB 23 and 24 NLT 4:30 pm 4/28/16 <input type="checkbox"/> RW 4 and 5 due by 4:30 pm today
28 Apr 16 Week 14	Measuring psychiatric symptoms and medication effects Final Make Your Own Experiment discussion and peer review	<input type="checkbox"/> Read <u>CT</u> Chapters 25 and 26 <input type="checkbox"/> EXTRA CREDIT: Complete DB 25 and 26 NLT 4:30 pm 5/5/16
5 May 15	Final Exam	<input type="checkbox"/> EXTRA CREDIT Read <u>CT</u> Ch 27 and 28 and Respond to DB Items 27 and 28 on Blackboard before 4:30 pm today

Week 15		<input type="checkbox"/> Submit Make Your own Experiments documents to TK20 no later than 4:30 pm today <input type="checkbox"/> Complete your final exam in class today
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