



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

Fall 2013

EDSE 621 DL1: Applied Behavior Analysis: Empirical Bases

CRN: 77839, 3 - Credits

Instructor: Dr. Theodore Hoch	Meeting Dates: 8/26/2013 - 12/18/2013
Phone: 703.987.8928 / 703.993.5245	Meeting Day(s): 5 Synchronous Meetings on Tuesdays - 9/3, 9/10, 11/12, 11/26, & 12/03 from 5:30 – 6:30 pm
E-Mail: thoch@gmu.edu	Students must access course each week throughout the semester and work on asynchronous assignments
Office Hours: Mondays and Thursdays from 1:30 pm – 3:45 pm US Eastern Time	Meeting Location: Synchronous meetings in Blackboard Collaborate; Asynchronous work through Blackboard

***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): 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) 993-3145 for assistance. All other students should refer to their faculty advisor.

Nature of Course Delivery

[Instructors, please revise in accordance with your specific course format]

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 Option

The Pearson textbook(s) for this course is available as part of the **George Mason University Division of Special Education and disAbility Research Digital Library**. The division and Pearson have partnered to bring you the Digital Library; a convenient, digital solution that can save you money on your course materials. The Digital Library offers you access to a complete digital library of **all Pearson textbooks** and MyEducationLabs used across the Division of Special Education and disAbility Research curriculum at a low 1-year or 3-year subscription price. Access codes are available in the school bookstore. Please visit <http://gmu.bncollege.com> and search the ISBN.

- 1 year subscription \$200 ISBN-13: 9781269541411
- 3 years subscription \$525 ISBN-13: 9781269541381
- Individual e-book(s) also available at the bookstore link above or at <http://www.pearsonhighered.com/>. Search by author, title, or ISBN.

Recommended Textbooks

None, although those wishing to complete the optional, extra credit assignment listed on page 6 of 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.

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.PI, 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., Haberman, 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, 43* (4), 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., Regeher, 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 8: Assessment.

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/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 the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [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/>]

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.

Students are expected to be present for the duration of every synchronous discussion, and to participate in every synchronous discussion. Students may not reschedule missed Synchronous Discussions or Research Profile presentations.

Late Work.

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 are strongly encouraged to complete all assignments during the weeks they first become available in order to keep up with the course. Discussion Board items will be available for only two weeks (from 12:00 am on the first Monday of availability to 11:59 pm of the last Monday of availability). Lesson recordings and their embedded quizzes will remain available for the duration of the course once they become available. Problem sets submitted after the due date listed on the syllabus will be assessed a 10% possible point penalty. No work may be edited or submitted after 18 December 2013 at 11:59 pm, US Eastern Time.

The Final Exam is available only between midnight on 9 December 2013 and 11:59 pm on 18 December 2013, both US Eastern Time. Students will not have access to this exam before or after those times.

TaskStream Submission

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

If you have never used TaskStream before, you **MUST** use the login and password information that has been created for you. This information is distributed to students through GMU email, so it is very important that you set up your GMU email. For more TaskStream information, go to <http://cehd.gmu.edu/api/taskstream>

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
Synchronous Disucssions	5 points per discussion	5 discussions	25 points possible	77 points possible
Problem Sets	10 points per set	8 sets	80 points possible	157 points
Research Worksheets	10 points per worksheet	5 worksheets	50 points possible	207 points
Make Your Own Experiment	16 points per experiment	2 experiments	32 points possible	239 points
Final Exam	50 points per exam	1 exam	50 points possible	289 points
A = 275 – 289 points	A- = 260 – 274 points	B = 231 – 259 points	C = 202 – 230 points	F < Fewer than 202 points

Assignments

NCATE/TaskStream Assignments.

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

Final Examination. This test will consist of 50 items, and will be given as a pretest on the in the first week of class, and a parallel form as a final exam in the last week 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 Taskstream.

Make Your Own Experiment. The each class member will be assigned to a group. Each group will be assigned two scenarios: one applied scenario and one basic research scenario. For each, you will be asked to:

- A- develop a Declaration of Professional Practice (for the applied scenario) based on the sample provided or an informed consent form for participants, based on the BACB Guidelines for Responsible Conduct (2 points);
- B- develop a behavioral definition for the identified problem behavior (1 point); select a measure for the behavior of interest (and give the rationale for selecting this measure) (1 point);
- C- develop a recording form for collecting data (2 points);
- D- write step by step instructions for collecting data (2 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- Each group will present their experiments to the class for peer review during a Synchronous Discussion. A total of 16 points is possible for each experiment presented.

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.

Common Assignments.

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.

Problem Sets. You will complete these per instructions contained on each problem set, and submit them by e-mail 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 will be accepted up to the time of the final examination; none will be accepted afterward.

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.

Other Assignments.

Synchronous Class Discussion. You are expected to participate in each of the live class discussions held through Blackboard Collaborate. If you have questions, ask them. If you have a response to another student's question, offer it. If you have a comment, make it. You will only learn by doing, and the more you do, the more you'll learn. You will earn five points for attending and participating in a discussion. Missed Discussion points may not be made up.

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 18 December 2013, for up to 4 points per worksheet. Should one choose this option, one must complete a research worksheet for each of the five articles in the content area, and must submit all five, for a total of 20 possible points.

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.

Date	Topics	Assignments / Activities
Week of 8.26.13 Week 1	Review Syllabus Pretest	Complete all activities in Week 1 folder
Week of 9.2.13 Week 2	Introduction to Single-subject design	Read <u>CT</u> Ch 1 and 2, <u>ABA</u> Ch 1, pp. 65 – 69 Complete all activities in Week 2 folder
Week of 9.9.13 Week 3	Measurement – Why bother? Direct Measures of Behavior: count, cumulative count, duration, rate, latency, interresponse time, extensity, intensity	Read <u>CT</u> Ch 3 and , <u>ABA</u> pp. 73 – 80, 83 - 90 Complete all activities in Week 3 folder
Week of 9.16.13 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	Problem Set 1 Due Read <u>CT</u> Ch 5 and 6, <u>ABA</u> pp. 81 – 82, 85 – 87, 90 – 100 Complete all activities in Week 4 folder
Week of 9.23.13 Week 5	Data Management: Graphic data display and graph preparation; maintaining data tables; data summary; equal interval graphs; cumulative count graphs	Problem Set 2 Due Read <u>CT</u> Ch 7 and 8, <u>ABA</u> Ch 6 Complete all activities in Week 5 folder
Week of 9.30.13 Week 6	Standard Behavior Charts	Problem Set 3 Due Read <u>CT</u> Ch 9 and 10, <u>ABA</u> Ch 7 Complete all activities in Week 6 folder
Week of 10.7.13 Week 7	Withdrawal Designs (AB, ABA, ABAB, BAB, etc.); Component Analysis; Parametric Analysis	Problem Set 4 Due Read <u>CT</u> Ch 11 and 12, <u>ABA</u> pp. 177 – 186 Complete all activities in Week 7 folder

Date	Topics	Assignments / Activities
Week of 10.14.13 Week 8	Alternating Treatments Designs and Pairwise Comparison Designs	Problem Set 5 Due Read <u>CT</u> Ch 13 and 14, <u>ABA</u> pp. 187 - 194; Watson et al. (1985), Sindelar et al. (1985), & McGonigle et al. (1987) Complete all activities in Week 8 folder
Week of 10.21.13 Week 9	Multiple Baseline Designs	Problem Set 6 Due Read <u>CT</u> Ch 15 and 16, <u>ABA</u> Ch 9; Complete all activities in Week 9 folder
Week of 10.28.13 Week 10	Measuring choice, preference, and other phenomena; Combining measurement and design elements to solve complex problems	Problem Set 7 Due Read <u>CT</u> Ch 17 and 18, <u>ABA</u> Ch 5, 10 Complete all activities in Week 10 folder
Week of 11.4.13 Week 11	General Issues in Measurement and Experimental Design – Review of Designs and Functional Control	Problem Set 8 Due Read <u>CT</u> Ch 19 and 20; Complete all activities in Week 11 folder
Week of 11.11.13 Week 12	Empirically supported interventions; Using measurement and experimental design in everyday situations and settings	Read <u>CT</u> Ch 21 and 22 Complete all activities in Week 12 folder
Week of 11.18.13 Week 13	Make Your Own Experiment Week!	Read <u>CT</u> chapters 23 and 24 Complete all activities in Week 13 folder
Week of 12.2.13 Week 14	Measuring psychiatric symptoms and medication effects Review course objectives	Read <u>CT</u> Chapters 25 and 26 Complete all activities in Week 14 folder
Week of 12.9.13 Week 15	Final Exam – must complete online no later than 11:59 pm US Eastern Time on 12.16.13.	EXTRA CREDIT! Read <u>CT</u> Ch 27 and 28; Respond to DB Items 27 and 28 on Blackboard Submit all Research Worksheets and all revised problem sets by 11:59 pm on 12.16.13. Submit Make Your own Experiments documents to Taskstream no later than 11:59 pm on 12.16.13

Appendix

There is no appendix!