

**GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
APPLIED BEHAVIOR ANALYSIS CERTIFICATE PROGRAM**

**EDSE 625 5S1
APPLIED BEHAVIOR ANALYSIS – VERBAL BEHAVIOR
Summer 2010
Thursdays, 4:30 – 10:00
113 Kellar Annex II**

PROFESSOR

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COURSE DESCRIPTION

A Prerequisite

Prior completion of EDSE 619 or consent of instructor.

B Description

This course provides a behavior analytic account of thinking, speaking, feeling, reading, writing, and many other behaviors that define humans as uniquely human; and that are essential to consider when addressing (and oftentimes address or account for) other behavioral difficulties of individuals or groups. Students learn to identify and engineer basic verbal operants and the variables that make them more or less likely to occur. Next, students learn to assess verbal behavior in people with disabilities, and to design instructional procedures to teach various verbal operants. Finally, recent research in the field of verbal behavior is considered.

NATURE OF COURSE DELIVERY

Lecture, discussion, written assignments, in-class exercises, and review and discussion of instructional video.

STUDENT OUTCOMES AND PROFESSIONAL STANDARDS

This course is designed to enable students to perform as described by the following objectives, taken from the Behavior Analyst Certification Board's *Task List and Guidelines for Responsible Conduct*:

| Course Objective Number | Objective | BACB TL or GRC Item |
|-------------------------|---|---------------------|
| 1 | Use the most effective assessment and behavior change procedures within ethical standards taking into consideration the guideline of minimal intrusiveness of the procedure to the client. | TL 1-8 |
| 2 | Ensure that the dignity, health, and safety of one's client are fully protected at all times. | TL 1-11 |
| 3 | Give preference to assessment and intervention methods that have been scientifically validated, and use scientific methods to evaluate those that have not yet been scientifically validated. | TL 1-12 |
| 4 | Explain and behave in accordance with the philosophical assumptions of behavior analysis, such as the lawfulness of behavior, empiricism, experimental analysis, and parsimony. | TL 2-1 |

| Course Objective Number | Objective | TL or GRC Item |
|-------------------------|---|----------------|
| 5 | Distinguish between mentalistic and environmental explanations of behavior. | TL 2-3 |
| 6 | Describe and explain behavior, including private events, in behavior analytic (non-mentalistic) terms. | TL 2-5 |
| 7 | Interpret articles from the behavior analytic literature. | TL 2-7 |
| 8 | Define and provide examples of echoics and imitation. | TL 3-15 |
| 9 | Define and provide examples of mands. | TL 3-16 |
| 10 | Define and provide examples of tacts. | TL 3-17 |
| 11 | Define and provide examples of intraverbals. | TL 3-18 |
| 12 | State the primary characteristics of and rationale for conducting a descriptive assessment. | TL 4-1 |
| 13 | Gather descriptive data. | TL 4-2 |
| 14 | Organize and interpret descriptive data. | TL 4-3 |
| 15 | Identify measurable dimensions of behavior (e.g., rate, duration, latency, or interresponse times). | TL 6-1 |
| 16 | Define behavior in observable and measurable terms. | TL 6-2 |
| 17 | Select the appropriate measurement procedure given the dimensions of the behavior and logistics of observing and recording. | TL 6-4 |
| 18 | Interpret and base decision making on data displayed in various formats. | TL 7-6 |
| 19 | Make recommendations to the client regarding target outcomes based on such factors as: client preferences, task analysis, current repertoires, supporting environments, constraints, social validity, assessment results, and best available scientific evidence. | TL 8-2 |
| 20 | State target intervention outcomes in observable and measurable terms. | TL 8-3 |
| 21 | Make recommendations to the client regarding intervention strategies based on such factors as: client preferences, task analysis, current repertoires, supporting environments, constraints, social validity, assessment results, and best available scientific evidence. | TL 8-4 |
| 22 | Make recommendations to the client regarding behaviors that must be established, strengthened, and/or weakened to attain the stated intervention outcome. | TL 8-5 |
| 23 | When a behavior is to be weakened, select an appropriate alternative behavior to be established or strengthened. | TL 8-6 |
| 24 | Determine and make environmental changes that reduce the need for behavior analysis services. | TL 8-7 |
| 25 | Identify the contingencies governing the behavior of those responsible for carrying out behavior change procedures and design interventions accordingly. | TL 8-8 |
| 26 | Use antecedent-based interventions, such as contextual or ecological variables, establishing operations, and discriminative stimuli. | TL 9-1 |
| 27 | Use positive and negative reinforcement. | TL 9-2 |
| 28 | Use extinction. | TL 9-4 |
| 29 | Use differential reinforcement. | TL 9-6 |
| 30 | Use discrimination training procedures. | TL 9-7 |
| 31 | Use prompts and prompt fading. | TL 9-8 |
| 32 | Use instructions and rules. | TL 9-9 |
| 33 | Use modeling and imitation. | TL 9-10 |
| 34 | Use shaping. | TL 9-11 |
| 35 | Use chaining. | TL 9-12 |
| 36 | Use incidental teaching techniques. | TL 9-13 |
| 37 | Use precision teaching. | TL 9-15 |
| 38 | Use discrete trials. | TL 9-17 |
| 39 | Use stimulus equivalence procedures. | TL 9-21 |
| 40 | Use language acquisition programs that employ Skinner's analysis of verbal behavior. | TL 9-25 |
| 41 | Use language acquisition / communication training procedures. | TL 9-26 |
| 42 | Reliance on scientific knowledge. | GRC 1.01 |
| 43 | Treatment efficacy. | GRC 2.09 |
| 44 | Describing conditions for program success. | GRC 3.08 |
| 45 | Explaining assessment results. | GRC 3.09 |
| 46 | Affirming principles. | GRC 8.01 |
| 47 | Disseminating behavior analysis. | GRC 8.02 |
| 48 | Public statements. | GRC 10.03 |
| 49 | Avoiding false and deceptive statements. | GRC 10.04 |

Additionally, this course is designed to enable students to perform in accordance with the Council for Exceptional Children's Standard 6 (Language). The signature assignments that demonstrate students' achievement with regard to this standard are the Research Worksheets completed as part of this course, and the scoring rubric used to determine whether the objective has been met is as follows:

| Does not meet expectations | Meets expectations | Exceeds expectations |
|--|---|--|
| Submits fewer than three research worksheets with all sections completed, but more than three errors on at least one of the worksheets | Submits three research worksheets with all sections completed, with three or fewer errors per worksheet | Submits three research worksheets with no errors |

Texts

Partington, J.W. (2007). *The assessment of basic language and learning skills (Revised) (ABLLS-R)*. Pleasant Hill, CA: Behavior Analysts, Inc.

Sundberg, M.L. (2008). *Verbal Behavior Milestones Assessment and Placement Program*. Concord, CA: AVB Press. ISBN 978-0-9818356-1-7 and 978-0-9818356-0-0.

Sundberg, M.L., and Partington, J.W. (1998). *Teaching language to children with autism or other developmental disabilities*. Pleasant Hill, CA: Behavior Analysts, Inc.

Winokur, S. (1976). *A primer of verbal behavior: An operant view*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Additional Readings

All of the following articles can be downloaded from the *Analysis of Verbal Behavior* website at <http://www.ncbi.nlm.nih.gov/pmc/journals/609/>.

Barbera, M.L., & Kubina, R.M. (2005). Using transfer procedures to teach tacts to a child with autism. *The Analysis of Verbal Behavior*, 21, 155 – 161.

Cihon, T.M. (2007). A review of training intraverbal repertoires: Can precision teaching help? *The Analysis of Verbal Behavior*, 23, 123 – 133.

Danforth, J.S. (2001). Altering the function of commands presented to boys with oppositional and hyperactive behavior. *The Analysis of Verbal Behavior*, 18, 31 – 49.

Delaney, P.F., & Austin, J. (1998). Memory as behavior: The importance of acquisition and remembering strategies. *The Analysis of Verbal Behavior*, 15, 75 – 91.

Drash, P.W., & Tudor, R.M. (2004). An analysis of autism as a contingency-shaped disorder of verbal behavior. *The Analysis of Verbal Behavior*, 20, 5 – 23.

Drash, P.W., & High, R.L. (1999). Using mand training to establish an echoic repertoire in young children with autism. *The Analysis of Verbal Behavior*, 16, 29 – 44.

- Ewing, C.B., Magee, S.K., & Ellis, J. (2002). The functional analysis of problematic verbal behavior. *The Analysis of Verbal Behavior*, 18, 51 – 60.
- Halvey, C., & Rehfeldt, R.A. (2005). Expanding vocal requesting repertoires via relational responding in adults with severe developmental disabilities. *The Analysis of Verbal Behavior*, 21, 13 – 25.
- Hartman, E.C., & Klatt, K.P. (2005). The effects of deprivation, pre-session exposure, and preferences on teaching manding to children with autism. *The Analysis of Verbal Behavior*, 21, 135 – 144.
- Karmali, I., Greer, R.D., Nuzzolo-Gomez, R., Ross, D.E., & Rivera-Valdes, C. (2005). Reducing palilalia by presenting tact corrections to young children with autism. *The Analysis of Verbal Behavior*, 21, 145 – 153.
- Laraway, S., Snyckerski, S., Michael, J., & Poling, A. (2001). The abative effect: A new term to describe the action of antecedents that reduce operant responding. *The Analysis of Verbal Behavior*, 18, 101 – 104.
- Loewenkron, B. (2004). Meaning: A verbal behavior account. *The Analysis of Verbal Behavior* 20, 77 – 97.
- Matos, M.A., Avanzi, A.L., & McIlvane, W.J. (2006). Rudimentary reading repertoires via stimulus equivalence and recombination of minimal verbal units. *The Analysis of Verbal Behavior*, 22, 3 – 19.
- Moore, J. (2000). Words are not things. *The Analysis of Verbal Behavior*, 17, 143 – 160.
- Newman, B., & Ten Eyck, P. (2005). Self-management of initiations by students diagnosed with autism. *Analysis of Verbal Behavior*, 21, 117 – 122.
- Petursdottir, A.I., Carr, J.E., & Michael, J. (2005). Emergence of mands and tacts of novel objects among preschool children. *The Analysis of Verbal Behavior*, 21, 59 – 74.
- Sautter, R.A., & LeBlanc, L.A. (2006). Empirical applications of Skinner's analysis of verbal behavior with humans. *The Analysis of Verbal Behavior*, 22, - 48.
- Sidener, D.W., & Michael, J. (2006). Generalization of relational matching to sample in children: A direct replication. *The Analysis of Verbal Behavior*, 22, 171 – 181.
- Sundberg, M.L., Endicott, K., & Eigenheer, P. (2000). Using intraverbal prompts to establish tacts for children with autism. *The Analysis of Verbal Behavior*, 17, 89 – 104.
- Sundberg, M.L., Loeb, M., Hale, L., & Eigenheer, P. (2002). Contriving establishing operations to teach mands for information. *The Analysis of Verbal Behavior*, 18, 15 – 29.
- Sweeney-Kerwin, E.J., Carbone, V.J., O'Brien, L., Zecchin, G., & Janecky, M.N. (2007). Transferring control of the mand to the motivating operation in children with autism. *The Analysis of Verbal Behavior*, 23, 89 – 102.

Vignes, T. (2007). A comparison of topography-based and selection-based verbal behavior in typically developing children and developmentally disabled persons with autism. *The Analysis of Verbal Behavior*, 23, 113 – 122.

Yi, J.I., Christian, L.A., vittimberga, G., & Loewenkron, B. (2006). Generalized negatively reinforced manding in children with autism. *The Analysis of Verbal Behavior*, 22, 21 – 33.

Course Schedule

| Session Date | Read Before Class | Session Topic and Activities - Instructor | Point Earning Activities - Students |
|--------------|---------------------------------|---|---|
| 6.10.10 | NA | Review syllabus; begin discussion on basic verbal operants; instructional video / dvd; select articles to present | |
| 6.17.10 | Winokur Ch. 1 – 5 | Lecture, Discussion, Establishing Stimulus control for Basic Verbal Operants – Mand, Tact, Extended Tact | SAFMEDS for Week 2 Quiz 1 |
| 6.24.10 | Winokur Ch. 6 – 11 | Lecture, Discussion, Establishing Stimulus Control for Basic Verbal Operants – Echoic, Intraverbal, Autoclitic; Audience Control | SAFMEDS for Week 3 Quiz 2 |
| 7.1.10 | VB-MAPP | Administering, interpreting, and planning instruction using the VB-MAPP - Practice interpreting VB-MAPPS and developing instructional programming from them | SAFMEDS for Week 4 Quiz 3 |
| 7.8.10 | ABLLS-R | Guest Speaker Administering, interpreting, and planning instruction using the ABLLS-R – Practice interpreting ABLLS-Rs, and developing instructional programming from them | SAFMEDS for Week 5 Quiz 4 |
| 7.15.10 | Sundberg & Partington Ch. 1 – 7 | More on planning and implementing instruction for basic verbal operants – mand, echoic, and tact | SAFMEDS for Week 6 Quiz 5 |
| 7.22.10 | Sundberg & Partington Ch. 8-14 | More on planning and implementing instruction for basic verbal operants – intraverbals and autoclitics; research worksheet presentations | SAFMEDS for Week 7 Quiz 6 Submit three research worksheets (in one Word document – no other format will be accepted) through Taskstream by 10:00 pm on this date. |

Assignments and Point Distribution

Participating in class discussions. This is expected of all students, at all sessions. Students must have completed the assigned reading for the class session, and during the course of the lecture or discussion, raise their comments or questions, or provide examples or clarification when requested by the instructor or discussion leader. As such participation

is necessary if the class discussions are truly to be discussions, and as one generally learns better by participating rather than by spectating, no points are earned for meeting this expectation.

SAFMEDS. No, you're not seeing things. That is an acronym. It stands for Say All Fast for a Minute Each Day, Shuffled, and SAFMEDS are a fixture in precision teaching. The purpose of this exercise is to build fluent responding with regard to the subject matter. You'll receive your SAFMEDS front / back lists, and will need to make you own cards. Practice them as many times as needed prior to the week for which they're assigned. During the class session, you'll have one opportunity to respond at the fluency criterion specified in the table above. You'll get 10 points for each successful SAFMEDS demonstration, with a total of 60 points possible by the end of the course. Late SAFMEDS (e.g., those done after the day for which they were assigned) may earn up to 5 points.

In-class quizzes. Quizzes will be posted on Blackboard several days prior to each class session so identified in the table above, and must be completed prior to the session for which they were assigned. Quizzes will include 20 multiple choice and / or short answer questions based on the previous week's content. Students may earn up to a total of 120 points on quizzes. Students will have two opportunities to master quizzes.

Research Worksheets. Two outlines for these are posted on blackboard – one for data-based studies, and the other for conceptual / philosophical / review papers. Please complete three of these from articles specified to be read for the last night of class, and submit them by Taskstream before 4:30 on the last night of class. 10 points per worksheet may be earned, for a total of up to 30 points. You will also present one of the studies you read to the class on the last evening. Please prepare a 5 – 10 minute presentation on the study to present that evening. **As the research worksheets are your signature assignments, these must be submitted by Taskstream, and will not be accepted if submitted in class, through e-mail, or through Blackboard. Failure to submit these by Taskstream by 4:30 pm on the last evening of class will result in 10 point penalty for this assignment, and a grade of incomplete for the course. Incompletes must be completed by 23 September 2010, or they will convert to an F.**

Point and Grade Distribution. Given this description of assignments and associated point values, the point distribution across assignments is as follows:

| <i>Activity Possible</i> | <i>Points Possible</i> | <i>Total Points</i> |
|--------------------------|------------------------|---------------------|
| SAFMEDS | 60 points | 60 points |
| Quizzes | 120 points | 180 points |
| Research Worksheets | 30 points | 210 points |

A = 189 - 210 points; B = 168 - 188 points; C = 147 - 167 points; F = fewer than 147 points.

ATTENDANCE

You are expected to arrive on time for all class sessions, attend all class sessions, remain in class for the duration of each session, and to participate actively throughout each session. Should you need to be absent, please contact a classmate regarding notes and other activities that took place in your absence.

CONTACTING YOUR INSTRUCTOR

You can contact Dr. Hoch by phone at 703.993.5245 or 703.987.8928, or by e-mail at thoch@gmu.edu.

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS

All students must abide by the following:

Students are expected to exhibit professional behavior and dispositions. See <http://gse.gmu.edu/facultystaffres/profdisp.htm> for a listing of these dispositions.

Students must follow the guidelines of the University Honor Code. See <http://www.gmu.edu/catalog/apolicies/#Anchor12> for the full honor code.

Students must agree to abide by the university policy for Responsible Use of Computing. See <http://www.gmu.edu/facstaff/policy/newpolicy/1301gen.html>. Click on responsible Use of Computing Policy at the bottom of the screen.

Students with disabilities who seek accommodations in a course must be registered with the GMU Office of Disability Services (ODS) and inform the instructor, in writing, at the beginning of the semester. See <http://www2.gmu.edu/dpt/unilife/ods/> or call 703-993-2474 to access the ODS