Observational Methods and Functional Assessment  
Fall 2013  
Monday 1:00-3:43 pm – Room MHC 1635

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Office hours: Blair: Monday, 11:00-12:00 & Tuesday, 12:00-1:00  
Miller: Tuesday, 12:30-1:30 & Wednesday, 11:00-12:00  
Other times by appointment  
Office Room Number: MHC 2336 (Blair); MHC 2322A (Miller)

Course Prerequisites

Enrollment in the Master's program in Applied Behavior Analysis, Special Education, or instructor permission.

Course Description

This course is designed to meet the total academic requirements for board certification in behavior analysis. The course focuses on identifying and using appropriate observational methods based on individual cases, assessing individuals using functional assessment procedures, displaying and interpreting behavioral data, and designing behavior support plans. This course will cover Task A – Measurement, Task I – Assessment, and Task J - Intervention of the Behavior Analysis Task List – Fourth Edition.

Course Objectives

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

1. Describe the role and methods of assessment in applied behavior analysis
2. Identify measurable dimensions of behavior and define behavior
3. Use various measurement procedures to collect reliable, direct observational data
4. Use graphs to display and interpret data
5. Describe functions of problem behavior
6. Conduct indirect and descriptive functional assessment
7. Interpret functional assessment results and formulate hypotheses
8. Test hypotheses
9. Design intervention plans

Texts


Other valuable text on this topic:

**Readings (Journal Articles)**

**Week 1**


**Week 3**


**Week 4**


**Week 5**


**Week 6**


**Week 7**


Week 8


Week 9


Week 10


Week 11


Week 13


Week 14


# Topics and Readings

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<tr>
<th>Class Date</th>
<th>Topics and Assignments</th>
<th>Readings</th>
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| **Week 1 (8/26)** | • Overview of syllabus and course requirements  
• Role and methods of assessment in ABA  
• Prioritizing and defining target behaviors | Hawkins (1979)  
Nelson & Hayes (1979)  
Cooper et al. Ch. 3 (pp. 47-71) |
| **Week 2 (9/2)** | **No Class (Labor Day)** | |
| **Week 3 (9/9)** | Measuring behavior  
- Measurable dimensions  
- Procedures for measuring behavior  
*Quiz 1* | Meany-Daboul et al. (2007)  
Sanson-Fisher et al. (1980)  
Cooper et al. Ch. 4 (pp. 72-101) |
| **Week 4 (9/16)** | Improving and assessing the quality of behavioral measurement  
*Quiz 2* | Riley-Tillman et al. (2011)  
Rapp et al. (2011)  
Cooper et al. Ch. 5 (pp. 102-124) |
| **Week 5 (9/23)** | Constructing and interpreting graphic displays of behavioral data  
*Quiz 3*  
*Case study participant approval deadline 9/23* | Lo & Starling (2009)  
Kahng et al. (2010)  
Lieberman et al. (2010)  
Cooper et al. Ch. 6 (pp. 126-157) |
| **Week 6 (9/30)** | • Overview of functional behavior assessment (FBA)  
• Conducting indirect FBA  
*Quiz 4* | Carr (1994)  
Stage et al. (2006)  
Cooper et al. Ch.24 (pp. 500-506; 509-511)  
O'Neill et al. Ch.1 (pp.1-34) |
| **Week 7 (10/7)** | Conducting descriptive FBA  
*Quiz 5* | Bijou et al. (1968)  
Touchette et al. (1985)  
Tarbox et al. (2009)  
Cooper et al. Ch.24 (pp.506-509)  
O'Neill et al. Ch.2 (pp.35-54) |
| **Week 8 (10/14)** | Testing hypotheses: Functional analysis 1 - ABC manipulation  
*Quiz 6* | Iwata et al. (1994)  
Northup et al. (1991)  
Volkert et al. (2005)  
Cooper et al. Ch.24 (pp. 512-513)  
O'Neill et al. Ch.2 (pp.54-64) |
| **Week 9 (10/21)** | Testing hypotheses: Functional analysis 2 – AB manipulation  
*Quiz 7*  
*Functional assessment report due 10/21*  
*Hypothesis testing plan approval deadline 10/25* | Dunlap et al. (1991)  
Kennedy & Itkonen, (1993)  
McCord & Iwata, (2001)  
Cooper et al. Ch.24 (pp. 512-513)  
O'Neill et al. Ch.2 (pp.54-64) |
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<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading Material</th>
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<tbody>
<tr>
<td>10</td>
<td>Developing function-based intervention 1</td>
<td>Carr et al. (1993)</td>
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<td>Sears et al. (2012)</td>
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<td>Quiz 8</td>
<td>O’Neill et al. Ch.3</td>
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<td>Blair &amp; Fox. Section 6 (pp. 101-110)</td>
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<td>11</td>
<td>• Developing function-based intervention 2</td>
<td>Piazza et al. (2002)</td>
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<td>• Writing behavior intervention plans</td>
<td>Vollmer et al. (2001)</td>
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<td>*Quiz 9</td>
<td>Cooper et al. Ch.24</td>
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<td>(pp.513-524)</td>
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<td>O’Neill et al. Ch.4</td>
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<td>(pp.85-89)</td>
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<td>Blair &amp; Fox: Section 6 (pp. 111-127)</td>
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<td>12</td>
<td>No Class (Veteran’s Day)</td>
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<td>13</td>
<td>Team-based process for problem solving and intervention planning</td>
<td>Benazzi et al. (2006)</td>
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<td>*Quiz 10</td>
<td>Midon et al. (2008)</td>
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<td>*Hypothesis testing report due 11/18</td>
<td>Schwartz &amp; Baer (1991)</td>
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<td>14</td>
<td>Staff and parent training</td>
<td>Hundert &amp; Hopkins (1992)</td>
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<td>*Quiz 11</td>
<td>Lutzker &amp; Whitaker (2005)</td>
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<td>Lucyshyn et al. (1997)</td>
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<td>15</td>
<td>Poster presentation of the case study project</td>
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<td>*Behavior Intervention Plan due 12/5</td>
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Course Format

The students will participate in lecture, discussion, article presentation, application activities, and case study project presentation. Prior to each class, a PowerPoint presentation will be posted on Canvas under Modules to aid in note taking during class. A 15-minute break will be provided from 2:15-2:30.

Course Requirements

Students are expected to check Canvas regularly for general information and updates concerning assignments, quizzes, and classes.

Course Assignments and Grade

Grades will be based upon the following assignments:

A. Case study project (43%)
B. Quizzes (37%)
C. Journal article review and discussion (5%)
D. Class attendance and participation (9%)
E. Application activities (7%)
A. Case Study Project (Total 130 Points)

This class involves completing a case study project, during which students will submit 4 assignments. The case study project includes: (1) functional assessment, (2) hypothesis testing, (3) poster presentation, and (4) behavior intervention plan design. In addition, each student will review an assigned research article and present it in class.

1. Functional Assessment (30 points): Each student will identify an individual with a developmental disability who has behavioral challenges, and conduct functional assessment of the individual’s problem behavior using indirect and descriptive functional assessment procedures. Sample indirect and descriptive assessment tools provided on Canvas can be used for this assignment. Students will write and submit a 4-5 page (double-spaced) report on the assessment project. The report should provide the following information:
   a. Introduction (4 pts.): purpose or reasons for functional assessment with the individual assessed.
   b. Participant (4 pts.): background information on the individual assessed including name (pseudonym), age, gender, diagnosed condition, target problem behavior (types, history, and characteristics), educational or intervention services being received, and other relevant information that will help understand characteristics and needs of the individual.
   c. Functional assessment procedures (8 pts.): (1) Indirect assessment (when, where, how, and with whom the functional assessment interview was conducted and the interview form used; other indirect assessment instruments used) and (2) Descriptive assessment (setting or target routines where the observations were conducted, number of observational sessions, and duration of each session).
      *Note: The observation should occur on a minimum of 3 separate occasions during targeted routines or situations.
   d. Functional assessment results (8 pts.): (1) identified problematic routines or situations; (2) identified environmental events that are associated with problem behavior (setting events, antecedents, and consequences); (3) identified function(s) of the problem behavior, and (4) summary statement or hypotheses of the problem behavior.
   e. Discussion (6 pts.): reflective comments on the assessment activity or learning experiences through the assignment.

Students will submit the report with copies of the completed interview, observation, and other indirect assessment forms (raw data) to Canvas. Hard copies of the completed forms can be submitted in class.

   *Note: The case study participant will be identified and approved by the instructor not later than 9/23.
   Report due: Week 9 (10/26).

2. Hypothesis Testing (40 points): Students will define target behaviors of the individual assessed, select a data recording procedure, test hypotheses (using a functional analysis or structural analysis procedure), and summarize and display data in a graph(s). Students will write and submit a 4-5 page report (double spaced) on the testing procedures and results. The written report will include the following information:
   a. Definitions of target behaviors (5 pts.)
   b. Data recording procedures (5 pts.)
   c. Design and hypothesis testing procedures (10 pts.): setting, design, experimental analysis conditions, duration and number of sessions, and individuals involved
   d. Results (10 pts.): descriptive summary and graphical data
   e. Discussion (10 pts.): recommendations for developing a behavior intervention plan and lessons learned from the project.
*Note: Testing hypotheses should occur during a minimum of 6 sessions for a period of 2-3 weeks. The hypothesis testing plan (design, experimental conditions, and testing procedures) should be submitted for approval by the instructor no later than 10/23. *Draft report can be submitted for feedback, if submitted by 11/12. Report due: Week 13 (11/18).

3. **Poster Presentation (30 points):** The students will present the case study to the class using a poster format. The focus will be on presenting the results of indirect and descriptive functional assessment and hypothesis testing. The poster should include information on the participant and target behaviors, brief descriptions of function assessment and hypothesis testing procedures and results (graphical data), and discussion or recommendation for intervention strategies. Students will use a tri-fold poster board (35” x 48”) to present the case study.

*Note: Draft poster content (PowerPoint slides) can be submitted for feedback, if submitted by 11/25. Presentation: Week 15 (12/4).

4. **Behavior Intervention Plan (30 points):** Students will design a behavior intervention plan (2-3 page, single-spaced) for the case study participant based on the functional assessment results. The plan should include at least the following components:
   a. Identifying information: name of the individual assessed (pseudonym)
   b. Problem behavior: description of the target problem behavior
   c. Intervention goals
   d. Target setting(s) where the intervention plan will be implemented
   e. Multicomponent intervention strategies
   f. Monitoring and evaluation procedures

Specific components of the behavior intervention plan will be described in class. Assignment due: Week 15 (12/7).

**B. Quizzes (Total 110 points):**

Instructor will administer 11 short answer and multiple-choice quizzes on required reading materials (text books and articles) and lecture. Each quiz will cover materials from each week, except for Quiz 1, which will cover materials from Weeks 1-2. The quizzes will be delivered via Canvas and available for one day each week (Monday, 3:45 pm through 11:59 pm). The quizzes will be timed, and the students will have 1 hour to complete them. No make-up quizzes will be given unless prior arrangements are made with the instructor. (11 quizzes at 10 points each = 110 points total).

**C. Journal Article Review and Discussion (14 points):**

Each student will lead one class discussion on one of the weekly journal article readings. Students will present a summary of the article and facilitate discussion based on what they found most interesting, the questions they have, and the applicability of the research, topical concepts, or principles to their professional work.

The students will be responsible for preparing a PowerPoint presentation to help with the discussion process. The presentation should be maximum 10-minutes long, including time to address questions from students. Presentations are to include tables or graphs (if applicable) from the article along with the textural slides. In most cases, 5 to 8 slides are sufficient. Students will be responsible to post the presentation material into Discussions of Canvas at least one day before the class. Due: Weeks 3-14.
**D. Attendance/Participation (Total 26 points):**

Students are expected to be on time for class. There will be a class sign-in sheet for each class. It is the student’s responsibility to sign in at the beginning of each class. When a student misses class, he/she will lose percentage points for attendance, participation in discussion, application activities, and presentation for that day. Students are expected to engage in professional behavior in the classroom, which is defined as: attending to lecture (e.g., taking notes, asking appropriate questions, commenting on lecture, etc.) and being respectful of other students, instructor, and teaching assistant.

Only if an emergency arises (e.g., student illness, death in the family, etc.) and the student notifies the instructor at least an hour before class (more notice is preferred), can the student earn the percentage points for that class. However, the student must do the following assignment: Write a three-page double spaced summary of the assigned readings. The summary must be emailed to the instructor before the beginning of the next class. Summaries that are late will not count.

**E. Application Activities (Total 20 points)**

Application activities will occur during class throughout the course. All activities will consist of hands-on activities in which individual students or small group of students will apply techniques that were discussed in lecture, texts, and articles and receive feedback from the instructor. Students will submit the application activities to instructor at the end of each class.

**Total possible course points = 300**

**Missing Work**

Missing work requires an excuse of illness or extenuating circumstances. In this event, the student must work with the instructor to arrange within an agreed upon time frame, a time to complete the assignment. For unexcused missing assignments, the student will lose 10 pts. each week. No grade below “C” will be accepted toward a graduate degree.

**Re-grade Policy**

If a student thinks a quiz item has been graded inaccurately he/she can ask that the item be re-graded. Re-grade requests must be made within 1 week of when the test or quiz in question is returned.

**Right to Change Syllabus**

Adjustments to the content, timeline, and due dates for assignments may be required during the semester. If this is necessary, some components of this syllabus may change. However, any such changes will be announced to the students in class and posted on Canvas. The students are responsible for any such announced changes.

**Canvas**

Canvas will be used during the course. All course materials, handouts, and PowerPoint presentations will be posted on Canvas. Students’ grades will also be recorded on Canvas. Students should check Canvas regularly for announcements related to the class.
Grading System

The course will use a percentage of points out of 300 possible points. Each required assignment has been assigned points and deadlines. All written assignments will be submitted to Canvas by the specified date. The evaluation system is:

A+ = 98 - 100%
A = 93 – 97%
A- = 90 - 92%
B+ = 88 – 89%
B = 83 – 87%
B- = 80 - 82%
C+ = 78 - 79%
C = 73 – 77%
C- = 70 – 72%
D = 60 - 69%
F = < 60%

Scoring Rubrics

Functional Assessment, Hypothesis Testing, and Behavior Intervention Plan

30 pts or 30 pts each - All elements present; paper is well organized; no spelling or grammatical errors; each element reflects good understanding of the task; provides thoughtful discussion (functional assessment and hypothesis testing); and shows mastery of the concepts in application to the assignment.

Point loss:
-5 points for each missing element
-5 points for disorganization
-2 points for each grammatical or spelling error

Article Presentation

14 points - PowerPoint is used effectively (font size 24+, not too wordy); article summary is clear and concise; shows an understanding of the material; facilitates discussion; able to answer questions from audience; and presents in efficient and organized manner.

Point loss:
-2 points for failing to attend to each presentation element (up to 5 pts based on % missed)

Poster Presentation

30 points – Title is clear and enhances the readability; poster contains all required information; layout of the poster is organized and easy to follow; easily readable from 4 ft away; has excellent visual appeal; facilitates participation of audience; and participates in peer presentations.

Point loss:
-5 points for each missing required item
-5 points for disorganization of the poster
-5 points for disengagement in interaction with audience
-2 points for inappropriate poster format
Institutional Policies

The most recent version of the Institutional Policies information can be found on the Office of Academic and Student Affairs webpage at: http://health.usf.edu/publichealth/academicaffairs/

1. Student Handbook:

May be found at: http://www.sa.usf.edu/handbook/

2. Student Conduct:

USF Student Rights/Responsibilities: http://www.sa.usf.edu/srr/page.asp?id=81
USF Student Code of Conduct: http://www.sa.usf.edu/srr/page.asp?id=88

3. Academic Integrity:

Disruption of the academic process and violations of the policies regarding academic integrity will not be tolerated. Review USF policies on Disruption of the Academic Process and the Academic Integrity of Students at: http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf3.025.pdf

4. Academic Dishonesty/Plagiarism:

Plagiarism will not be tolerated and is grounds for failure. Review USF Academic Dishonesty and Disruption of Academic Process Policy at:
http://www_grad.usf.edu/inc/linked-files/USF_Grad_Catalog_2010_2011.pdf#page=42
Plagiarism tutorial: http://www.cte.usf.edu/plagiarism/plag.html
USF uses an automated plagiarism detection service that allows instructors and students to submit student assignments to be checked for plagiarism. See the policy on the system – Turnitin:
http://media.c21te.usf.edu/pdf/student/bbstud_subsafeassgn.pdf

5. Cheating

USF expects students to maintain academic honesty in all courses. By virtue of being registered in this course, students agree to refrain from cheating. If cheating in any form (academic dishonesty) is detected, appropriate action will be taken. (Refer to USF Academic Dishonesty Policy). Graduate:
http://www_grad.usf.edu/inc/linked-files/USF_Grad_Catalog_2010_2011.pdf#page=42

6. Students with Disabilities/Special Accommodations:

USF is committed to providing support for students with disabilities. Students in need of academic accommodations for a disability may consult with the Office of Students with Disabilities Services to arrange appropriate accommodations. Students are required to give reasonable notice prior to requesting an accommodation.
Students with Disabilities Services: http://www.sds.usf.edu/

7. Holidays and Religious Observances:

Policies may be found at:
8. Emergency Suspension of University Operations (required language).

In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Elluminate, Skype, and email messaging and/or an alternate schedule. It’s the responsibility of the student to monitor Canvas site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

9. Incomplete Grade:

Definition: An Incomplete grade (“I”) is exceptional and granted at the instructor’s discretion only when students are unable to complete course requirements due to illness or other circumstances beyond their control. This applies to all gradable courses, including pass/fail (S/U). Students may only be eligible for an “I” when:

- the majority of the student’s work for a course has been completed before the end of the semester the work that has been completed must be qualitatively satisfactory
- the student has requested consideration for an “I” grade as soon as possible but no later than the last day of finals week.

Policy may be found at: http://www.grad.usf.edu/policies_Sect7_full.php#incomp

10. Student Grievance Procedure:

Review USF Academic Grievance Policy at:
http://www.grad.usf.edu/inc/linked-files/USF_Grad_Catalog_2010_2011.pdf#page=50

Student assistance is provided by Division of Student Affairs, Office of the Student Ombudsman.
http://www.sa.usf.edu/ombudsman