REHB 508: Basic Behavior Analysis (Off-Campus)

Spring 2017 Course Syllabus and Calendar

Instructor Information
Instructor: Mark R. Dixon, PhD, BCBA-D
Email: mdixon@siu.edu
Chat date: TBD
Chat time: TBD

Teaching Assistant: Jordan Belisle, MS, BCBA
Email: jbelisle@siu.edu
Chat date: TBD
Chat time: TBD

Course Materials
Texts can be purchased on Amazon or directly from the publisher’s website.

5. Solutions’ BCBA Exam Prep program. This will be offered to you through BDS. Please ensure that your instructors have a correct email address as you will be contacted by BDS with ordering information. Extensions for this program can be purchased once the license is about to expire.
6. Additional readings will be accessible online through the library’s website at http://lib.siu.edu

Course Description and Objectives
The objective of this course is to provide an in-depth examination of the complex nature of the field of behavior analysis. We will explore the history, the conceptual foundations, experimental analyses, and practical implementation of a post-contingency driven field. To attain this objective, you will be required to (1) read each of the assigned chapter(s) and research articles each week, (2) be able to discuss the points of each assigned chapter/article during chats, (3) respond appropriately to questions provided on examinations based on the text and class discussion, (4) conduct and present behavioral research in five experiential research targets, and (5) complete BDS modules.

Upon successful completion of this class, you will know how to:
- Describe the history of analytical and empirical approaches to understanding complex aspects of human behavior
- Describe the philosophical assumptions of functional contextualism and evaluate new information through a pragmatic perspective
- Apply behavior-analytic procedures derived from complex learning principles to solve problems of social importance or improve conditions for dependent, or at-risk populations
- Become a more competent consumer of behavioral research
- Appreciate the complexity of causes and consequences
- Develop an ethic of social responsibility and citizenship.

General Course Format
The course is designed to provide a rigorous and in-depth evaluation of the complex principles of behavior analysis as a contextual behavioral science, as well as to develop the skills necessary for success in graduate school. Each week, you will be provided access to a 2-hour lecture on the course material, and 2 online synchronous chats will be held on D2L each week. Each weekend (as specified in the course calendar below), you will also complete a 50-minute quiz on the material covered earlier that week. The course will additionally include: Online Participation, 2 Unit Examinations (i.e., midterm and final), 5 Experiential Targets, and BACB Preparatory Homework.
Course Grades

Your course grade will be calculated based on the number of points that you can earn on the Weekly Quizzes, Unit Examinations, Experiential Targets, BACB Preparatory Homework, and Participation. The total number of possible points is 1000, and is broken down as follows:

- Weekly Quizzes (10 @ 20) = 200 points
- Participation (5 @ 20) = 100 points
- Experiential Targets (2 @ 75, 3 @ 50) = 300 points
- BDS Homework Assignment (1 @ 100) = 100 points
- Unit Examinations (2 @ 150) = 300 points

Total: 1000 Points

Grades will be determined according to the following point distribution:

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<th>Percent</th>
<th>A</th>
<th>90</th>
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Note: A grade of an 80% or higher is considered passing for this course. A grade of a 79% or lower is not considered passing for this course.

Students with Disabilities

If you have a documented disability and need reasonable accommodations, please contact me during the first week of class so that I can ensure that your needs are met in a timely manner. Students with disabilities must contact the University’s Disability Support Services at the beginning of the semester to inform them of the disability and obtain information about services that can facilitate learning. Refer to the DSS website for further information: [http://disabilityservices.siuc.edu/](http://disabilityservices.siuc.edu/).

Other Relevant Information

1. If you wish to drop this course for any reason, SIUC designates a final date by which you can do this. It is your responsibility to ensure that the drop process is officially completed.

2. A grade of incomplete will be given only under the conditions specified in the Undergraduate Catalog. That is, a grade of incomplete can only be given if a student has completed more than HALF of the semester and is PASSING the course. An incomplete exists to help those students who would have passed the course had they been able to continue, but EXTREME circumstances exist such that the student cannot continue.

3. Re-grade requests: If you receive a grade that you believe to be incorrect for any reason, I will be glad to review the grade to allot additional points, under the following conditions:
   a. You have 1 week after the work has been returned to you to submit a re-grade request to me.
   b. Requests should include the original work, a written explanation of why you think the grade you received was inaccurate, and specific evidence from class materials to support your original response.
Course Items:

Weekly Quizzes (10 @ 20 pts. = 200 pts.)

There will be 11 weekly quizzes given during the semester, corresponding to the materials covered in class during the week, and information provided during the lecture (all indicated in the course calendar). Materials covered each week will include chapters from the course texts, and scholarly peer-reviewed journal articles. Occasionally, there will be information on an exam from an earlier week. Quizzes will consist of a single long answer essay question, and you will have access to your books and notes during the quiz. No make-up quizzes will be provided. If you cannot complete a quiz for any reason, you must notify Dr. Dixon or Jordan prior to the quiz being made available, so that you can take an alternative version of the quiz prior to the rest of the class. If there is an unexpected absence, we will need medical documentation in order for it to be excused unless otherwise discussed with Dr. Dixon. If we do not receive a message regarding your absence before the quiz, then you will receive a 0 for that quiz. No exceptions. Your lowest quiz grade will be dropped in the final calculation.

Participation (5 @ 20 pts. = 100 pts.)

Participation this semester will be completed online, and will correspond with each of the 5 experiential targets. For participation points, you will have one week to respond to three video links that were posted on the D2L platform. Responses should be made on the comments section on YouTube, where the videos will be uploaded. You will have exactly 1-week to post comments. Your comments will be graded based on their precision and depth, and relevance to the presented material. You may either comment on the video, or provide a reply comment to a comment made by another classmate. This participation task is designed to provide an opportunity to engage in an increasingly online professional system. Feedback will be provided on all comments, and comments are expected to be constructive and professional. All comments that are not constructive or professional will be assigned a grade of 0.

Experiential Targets (2 @ 75, 3 @ 50 = 300 pts.)

This semester, you will complete 5 experiential research projects, or Student Centered Learning Activities. You will be provided part of an abstract, and will be expected to fulfill the specifications of the abstract and generate results that show experimental control of behavior. The abstracts are provided to you below, and groups will be assigned in class. In addition to conducting the research study, you will be required to submit a JABA quality brief or full report, and prepare an online presentation of the methods and results for each target, totaling no greater than 10-minutes. Additional video requirements are also specified along with the targets below Reports and video links will be due on Friday the week specified in the course calendar below. No late assignments will be accepted.

BDS Homework Assignment (1 @ 100 = 100 pts.)

The Behavior Development Solutions BCBA Exam Prep program allows students to access additional support materials and reinforces the topics being presented in class. You will be required to complete 100% of the BDS modules to receive full credit for the assignment. Any assignments that do not meet this criterion will receive 0 points. You will submit proof of the completion of the BDS homework assignments at the final Unit Examination. No late assignments will be accepted.

Unit Examinations (2 @ 150 = 300 pts.)

There will be 2 Unit Examinations given during the semester. The exams will cover all material presented prior to the examination, including readings and information discussed in class. Exams will consist of multiple choice questions (50 pts.), short answer essay questions (50 pts.), and a long answer essay question (50 pts.). No make-up examinations will be provided. If you cannot complete an exam for any reason, you must notify Dr. Dixon or Jordan prior to the exam being made available, so that you can take an alternative version of the exam prior to the rest of the class. If there is an unexpected absence, we will need medical documentation in order for it to be excused unless otherwise discussed with Dr. Dixon. If we do not receive a message regarding your absence before the exam, then you will receive a 0 for that exam. No exceptions.
Additional Considerations:

Academic Dishonesty

You are responsible for making yourself aware of understanding the policies and procedures in the University Catalog that pertain to Academic Integrity. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. If there is a reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Judicial Affairs. Your will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with me if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

If I have evidence of any form of academic dishonesty, I will charge the student with violating the Academic Honesty Policy of the University in a report to the Office of Student Judicial Affairs. A student who is found responsible for an act of academic dishonesty will receive a failing grade in the course.

Cheating consists of, but is not limited to, looking at another student’s quiz/exam, using external aids (such as books, notes, conversation with others) when taking a test, or plagiarizing the work of another person and submitting it as your original work. No course books or materials should be within the student’s view during quizzes or exams. NOTE: Changing the size of characters and/or spacing between paragraphs to make your paper appear longer is WIDELY APPARENT to those grading them. Do NOT attempt to do so or your efforts will be publicly acknowledged.
**Experiential Target Abstracts**

**Experiential Target 1 - Fish**

Abstract: Contextual control of environmental events on the operant responding of a North American fish was demonstrated in the current experiment. Baseline results demonstrated that two discriminative stimuli failed to produce differential responding across the contextual conditions, when reinforcement was not provided contingent upon the operant responses. In the training phase, reinforcement was provided differentially for two target operant behaviors in each of the contextual conditions. Reinforcement schedules were identical across the conditions, but were arranged for the two different operant behaviors dependent on the condition. Results and discussion are provided from a contextual behavioral perspective on animal behavior.

*Presentation requirement:* Show the fish responding differentially to the contextual conditions with replication.

**Experiential Target 2 - PEAK**

Abstract: The **PEAK – Transformation module** (PEAK-T) is a curriculum designed to develop the relational repertoire of individuals with- and without- developmental disabilities. The purpose of the current investigation was to demonstrate the efficacy of a program from the PEAK-T module in establishing simple or complex arbitrary relations (Level 3 or 4 from PEAK-T), across three children. Entailment probes across each of the participants showed derived mutual or combinatorial entailment across 5 relational stimulus classes, and a transformation of stimulus functions in a novel context was also demonstrated. The results are discussed consistent with a Relational Frame Theory account of human language and cognition.

*Presentation requirement:* Show baseline performance on transformation probe and successful performance of transformation probe following training.

**Experiential Target 3 - Discounting**

Abstract: Discounting has been described temporally, probabilistically, and socially, and may have implications for health behaviors of at-risk populations. The purpose of the current investigation was to evaluate discounting of health-choice behaviors of college students. Discounting surveys were developed and administered to 15 college students. Linear, exponential, hyperbolic, and hyperboloid functions were fit to the data to provide a predictive model of the participants’ temporal, probabilistic, or social discounting as it pertains to making healthy choices, and AUC values were compared with demographic variables. The results are reported, and discussion is provided regarding potential contextual variables that may influence the health-discounting behavior of college students.

*Presentation requirement:* For the best fit mathematical model, describe precisely what the model suggests about the behavior.

**Experiential Target 4 - Gambling**

Abstract: The purpose of the current investigation was to evaluate the influence of programmed contextual variables on choice allocation of college students during a simulated slot-machine task. The simulated slot-machine task was programmed on Visual Basic or another computer programming software. Eight participants were presented with two concurrent slot-machines differing along a single contextual dimension, where the overall rate of reinforcement was held constant across both machines. Choice allocation was presented in terms of the matching law, and baseline results suggested that participant choice allocation was not under contextual control. Following a relational training procedure, the results indicated a greater bias towards one contextual slot-machine, as demonstrated as a deviation from matched responding. The results are reported and discussed in terms of potential implications for problem gamblers.

*Presentation requirement:* Show a video of a person playing the simulated slot machine that you developed, as well as completing the relational training procedure (make sure computer monitor can be seen in the video).
Experiential Target 5 - ACT

Abstract: Acceptance and Commitment Therapy (ACT) has shown strong efficacy with many clinical populations; however, more research is needed in terms of ACT with children. The purpose of the current investigation was to evaluate the efficacy of ACT procedures presented in *Acceptance and Commitment for Children with Autism and Emotional Challenges* in improving the psychological flexibility of 5 children with- or without- developmental disabilities. Psychological flexibility assessments were administered at pre- and post- time periods. ACT in the current study involved the administration of 10 programs from *Acceptance and Commitment for Children with Autism and Emotional Challenges*. The results showed improvements in psychological flexibility across participants, and the results are discussed in terms of more global school-wide adaptations that could be made to improve the psychological flexibility of students.

*Presentation requirement:* Show a video of a child completing the ACT activity guided by the therapist, as well as a subset of their responses to the psychological flexibility probes after receiving ACT.
### Course Calendar:

**Note:** * = material will be provided to you, † = will not be covered in test

<p>| Unit 1: Historical Developments, Functional Contextualism, and Relational Frame Theory |
|---------------------------------|---------------------------------|
| <strong>HOLIDAY</strong>                      | <strong>Course Content</strong>              |
| 1/23 QUIZ 1                      | <strong>Historical Analysis of Complex Behavior Part I</strong> |
| <em>Receive Syllabus</em>              | *Skinner (1957) – CH 18, 19      |
| <em>Receive BDS Assignment</em>        | *Skinner (1974) – CH 2, 6, 7, 9  |
| 1/30 QUIZ 2                      | <strong>Historical Analysis of Complex Behavior Part II</strong> |
| <em>Receive Target 1 Groups</em>       | *Kantor &amp; Smith (1975) – CH 1, 19-21 |
|                                 | Dixon, Belisle, Stanley, Daar, et al. (2016) |
|                                 | Dixon, Belisle, Stanley, Speelman, et al. (2016) |
|                                 | Dixon, Rehfeldt, et al. (2006) |
|                                 | Sidman (1971) |
|                                 | Sidman &amp; Tailby (1982) |
|                                 | †Kieffer &amp; Colgan (1992) |
| 2/6 QUIZ 3                       | <strong>Contextual Behavioral Science: A Contemporary Account</strong> |
|                                 | Zettle et al. (2016) – CH 1-4    |
|                                 | Hayes, Barnes-Holmes, &amp; Wilson (2012) |
|                                 | Vilaradaga et al. (2009)         |
|                                 | †Thompson &amp; Sturm (1965)         |
| 2/13 QUIZ 4                      | <strong>Functional Contextualism and Pragmatism</strong> |
| TARGET 1 DUE FRIDAY             | Zettle et al. (2016) – CH 5-7    |
|                                 | *Skinner (1951) – CH 1-3         |
|                                 | Barnes &amp; Holmes, (1991)          |
|                                 | Hayes &amp; Brownstein (1986)        |
|                                 | Morris (1988)                    |
|                                 | †Elcoro, Silva, &amp; Lattal (2008)  |
| 2/20 QUIZ 5                      | <strong>Relational Frame Theory: Part I</strong> |
| <em>Receive Target 2 Groups</em>       | Zettle et al. (2016) – CH 8      |
|                                 | Hayes, Barnes-Holmes, &amp; Roche (2001) CH 1-6 |
|                                 | Barnes (1994)                    |
|                                 | Barnes-Holmes &amp; Barnes-Holmes (2000) |
| 2/27 QUIZ 6                      | <strong>Relational Frame Theory: Part II</strong> |
|                                 | Zettle et al. (2016) – CH 9      |
|                                 | Hayes, Barnes-Holmes, &amp; Roche (2001) CH 9-12 |
|                                 | †Dymond &amp; Roche (2013) CH 4      |
|                                 | Dixon, Branon, et al. (2009)     |
|                                 | Zlomke &amp; Dixon (2006)            |
| 3/6 TARGET 2 DUE FRIDAY          | <strong>Applications of RFT in Education</strong> |
|                                 | Zettle et al. (2016) – CH 10, 11, 21 |
|                                 | Dixon (2016) – Introduction      |
|                                 | Belisle et al. (2016)            |
|                                 | Dixon, Speelman, et al. (2016)   |</p>
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<th>Date</th>
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<tbody>
<tr>
<td>3/20</td>
<td>MIDTERM EXAM All readings up to date</td>
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<tr>
<td><strong>Unit 2: Choice, the Self, Acceptance and Commitment Therapy, and Cultural Selection</strong></td>
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| 3/27 | QUIZ 7 TARGET 3 DUE FRIDAY Contextual Analysis of Quantitative Choice Behavior *Kantor & Smith (1975) – CH 26*
| 4/10 | QUIZ 9 The Concept of Self and the Generation of Self-Rules *Hayes, Barnes-Holmes, & Roche (2001) CH 7, 13*
| | *Hayes (2004) – CH 10*
| | *Skinner (1951) – CH 18*
| | *Skinner (1974) – CH 10, 11*
| | Hayes, Strosahl, & Wilson (1999) – CH 1-3
| 4/24 | QUIZ 11 Acceptance and Commitment Therapy Part II Zettle et al. (2016) – CH 16-18
| 5/1 | TARGET 5 DUE FRIDAY Cultural Evolution from a Contextual Science Perspective Zettle et al. (2016) – CH 16-18
| | *Skinner (1951) – CH 27-28 |
| 5/8 | FINAL EXAM All readings up to date |
Materials References:


