

TIBI Online Syllabus for BEHG 365: Advanced Behaviorology I

Stephen F. Ledoux

SUNY-Canton

[This is another installment in the series of syllabi for TIBI's online courses. Each syllabus appears in *Behaviorology Today* basically in the same form as it appears online. The series continues whenever there are syllabi that have yet to be printed, or that require reprinting due to substantial revisions. Locate additional syllabi through the *Syllabus Directory* at the back of the most recent issue.—Ed.]

Note #1: This syllabus contains some notes that supplement the more traditional syllabus parts. Each note is numbered for convenient reference. Some notes, like this one, have multiple paragraphs.

This syllabus is a long document. It is longer than a syllabus for a face-to-face course as it contains material that the professor would otherwise cover in person. *Hence it was designed to be printed out for reading!* Furthermore, it was designed to be used *as a task check-off list*. Please print it out and use it these ways.

The only activity in this course for which you might need access to a computer is to print this syllabus as a reference for how this course works so you can follow the directions to complete this course. This is a matter of access, student access to education, so that everyone who wants this course can take it regardless of whether they own several computers or only have access to one in their local library or in a friend's home.

Students can, if they wish, study the topics of this course free of charge, perhaps to fulfill their own interests. They would do so simply by completing the activities described in this syllabus.

Students can also study the topics of this course for TIBI (The International Behaviorology Institute) credit, perhaps toward a TIBI certificate. They would do so by paying the necessary fee to be assigned a professor to provide feedback on, and assessment of, their efforts. (This course can be part of several TIBI certificates. Contact TIBI or visit www.behaviorology.org for details.)

Also, students can study the topics of this course for regular academic credit; they would do so by contacting any accredited institution of higher education that offers behaviorology courses accepted by TIBI, such as the State University of New York at Canton (SUNY-Canton) at

www.canton.edu which is SUNY-Canton's web site. TIBI automatically accepts A or B grades from the academic-credit version of this course as equivalent to its own course toward its certificates (and C and D academic-credit grades can be remediated through TIBI for TIBI credit; contact TIBI for details). Alternatively, the work done completing this course, for free or through TIBI, may make taking the course for academic credit easier.

The parts of this syllabus cover many topics. While the headings may be different, these include (a) the course content and objectives, (b) the text, study, and assessment materials, (c) the grading policy, (d) the necessary work-submission methods and professor feedback, and (e) the study-activity sequence and completion timelines.

Note #2: The prerequisites for this course are BEHG 101: Introduction to Behaviorology I, and BEHG 102: Introduction to Behaviorology II. These prerequisites are waived for majors of other natural sciences who hold at least upper-division status. If you are not a major of another natural science holding at least upper-division status, and have not had these prerequisite courses (or their academic-credit equivalents such as SSCI 245: Introduction to the Science and Technology of Behavior, and SSCI 345: Applied Science and Technology of Behavior, from SUNY-Canton), then you need to take them before taking the current course.

Course Description

BEHG 365: Advanced Behaviorology I. "Advanced Behaviorology" is a two-course sequence, for majors in behaviorology or any other natural science, that covers *in detail* most of the major variables of which the behavior of human and other animals is a function, with the emphasis on increasingly complex human behavior. This first course of this sequence covers not only the wide range of pertinent and accessible environment-behavior functional relations, but also the naturalistic philosophical foundations of the discipline as well as the research methodology involved in discovering the independent variables in these relations and engineering them into sophisticated applications and interventions beneficial to humanity. Related course topics include (a) classifying behavior, (b) avoiding explanatory fictions and analytical fallacies, (c) experimentally manipulating independent variables of behavior, (d) measuring, recording, graphing, and interpreting behavior-related data, and (e) turning the prediction and control of behavior into beneficial engineering practices emphasizing postcedent processes. A preview of the contents of the "Advanced Behaviorology II" course is also part of this course.

Note #3: To check out other behaviorology courses offered by TIBI, visit their locations on the TIBI web site

(www.behaviorology.org). To check out other behaviorology courses offered by SUNY-Canton, see the list and descriptions—and in some cases, the syllabi for the asynchronous versions—on the faculty web page of the professor who teaches them (which currently is Dr. Stephen F. Ledoux; click Ledoux in the faculty directory at www.canton.edu).

Course Objectives

The main objective of this course is to *expand the student's behavior repertoire* measurably in relevant areas of behaviorological course content. The student will:

- ✦ Describe the main characteristics of the naturalistic philosophical foundations of behaviorology, comparing the outcomes these foundations promote with the outcomes promoted by the superstitious alternatives;

- ✦ Differentiate between (a) valid scientific analyses and (b) explanatory fictions or (c) analytical fallacies, specifying the problems and dangers inherent in explanatory fictions and analytical fallacies;

- ✦ Account for the origins of explanatory fictions and analytical fallacies, explaining the variables that maintain these problems and designing interventions to curb the effects of the variables originating and maintaining these problems in everyday contexts;

- ✦ Classify the different types of behavior, enumerating the differences that lead to different classifications;

- ✦ Delineate the major variables of which behavior is a function, focusing on complex human behavior in the full range of pertinent and accessible environment-behavior functional relations;

- ✦ Describe the experimental research methodologies involved in discovering the independent variables in environment-behavior functional relations, stressing the variables pertinent to practical interventions;

- ✦ Enumerate the appropriate methods for measuring behavior, including methods for recording, graphing, and interpreting behavior-related data;

- ✦ Demonstrate the experimental manipulation of independent variables in processes that alter behavior frequencies, clarifying any differences between variables in basic and applied research settings;

- ✦ Design engineering applications, beneficial to humanity, of behaviorological principles and practices, emphasizing interventions involving postcedent processes;

- ✦ Investigate the misuse of science (using science against humanity), elaborating a range of practices and interventions to reduce such misuse.

Additional Objectives

- ✦ Successful, A earning students will use (at an accuracy level of 90% or better) basic disciplinary terminology both when discussing behaviorological knowledge,

and when applying behaviorological skills, relevant to basic and applied research and interventions.

- ✦ Such successful students will also ask questions, seek answers, converse about, and act on the uses and benefits of this discipline for humanity.

- ✦ Such successful students will also behave more effectively in other ways with respect to themselves and others.

Required Materials (in their order of use)

- ✦ Fraley, L.E. (in press). *General Behaviorology: The Natural Science of Human Behavior*. Canton, NY: ABCs.

- ✦ Fraley, L.E. (manuscript). *Repertoire Builder for Chapters 1 through 13 of "General Behaviorology: The Natural Science of Human Behavior."*

Recommended Materials

These are references to materials that, while *not* required for the course, may also be of interest to those who wish to go deeper into the course topics and extensions:

- ✦ Ledoux, S.F. (2002). *Origins and Components of Behaviorology—Second Edition*. Canton, NY: ABCs.

- ✦ Skinner, B.F. (1953). *Science and Human Behavior*. NY: The Free Press.

- ✦ Skinner, B.F. (1974). *About Behaviorism*. NY: Alfred A. Knopf.

Note #4: You can order the required *books* through the publisher, ABCs, at 315-386-2684. You may order the recommended materials through the online bookstore at www.behavior.org which is the web site of the Cambridge Center for Behavioral Studies, or at your local bookseller.

Also, this course is grounded in the Shaping Model of Education which is informed by behaviorological science (rather than the Presentation Model of Education which is informed by psychology). In the shaping model, teaching is not seen as mostly talking (nor is learning seen as mostly listening). Instead, teaching is the scientifically grounded design, arrangement, and application of educational materials, methods, and contingencies in ways that generate and maintain small but continuously accumulating behaviors the short and long range consequences of which are successful in producing an ever wider range of effective responding (i.e., learning) on the part of the student.

Grades

Grading policy does not involve curves, for you are not in competition with anyone (except perhaps yourself). That is, all students are expected to produce the academic products demonstrating that they have, individually, achieved at least mastery of the subject matter, if not fluency. Therefore, all students are expected to earn an A or a B (although inadequate products will produce a lower result that requires remediation before it can become a passing grade). Also, all students will receive the

grades they earn. This holds even if the expectation for which the course is designed—that all students earn *As*—is met: If all earn *As*, then all receive *As*.

Passing grades are limited to *A* and *B*, and are earned according to the amount of assigned work that is successfully completed:

✂ Earning an *A* consists mainly of satisfactorily completing 90% or more of the work on all assignments.

✂ Earning a *B* consists mainly of satisfactorily completing more than 80% of the work on all assignments (but not more than 90% on them).

For convenience a point-accumulation system is invoked to keep track of progress through the course. All but one of the 14 assignments (one on each of the chapters numbered 1–13 plus the Introduction Chapter) in the *General Behaviorology* book are worth 15 points each, for a total of 195 points. The assignment on the short Introduction Chapter is worth 5 points. This provides a grand total of 200 possible points. The percentage used to consider what grade you are earning is the percentage of these possible points that you actually earn.

However, point accumulation is not the grade determiner but is merely used as a convenient way to track progress *on the presumption that all course tasks are in progress*. This is because doing work on *all* of the tasks for the course is the more relevant determiner of grades than is the accumulation of points. (For example, a student who tries to accumulate just enough points, on some easier tasks, to get a *B*—while ignoring other course tasks—would not that way actually meet the criteria for a *B* and so would have to continue and complete all the required work satisfactorily to earn one of the passing grades.)

Also, students should expect to be asked occasionally to complete various test-like assessments. The level of success on these assessments helps gauge the extent to which the work on the course assignments is actually producing the learning implied by the completion of that work.

These practices are in place because the scientific research—data based Shaping Model of Education recognizes the student/professor relationship as a professional relationship in which coercive practices (i.e., aversive educational practices) are seen as inappropriate (so long as extreme conditions do not exist making such practices unavoidable). Instead, the more effective, efficient, and productive non-coercive practices of carefully designed and sequenced assignments emphasizing added reinforcement for timely work well done is generally seen as more appropriate. So, your effort and cooperation are expected and presumed; please do not disappoint either your professor or yourself.

About Using the Text & Repertoire Builder Book

Unless specified otherwise, you need to write out your answers in longhand. The reason you are to write

out your answers by hand is that this type of verbal response brings about more learning than merely saying—or even typing—the answer. This is because—as taught in another advanced behaviorology class (i.e., BEHG 355: Verbal Behavior I)—writing the answer in longhand involves both point-to-point correspondence and formal similarity between the stimuli and the response products of the answer.

The General Behaviorology Book

The *General Behaviorology* textbook carefully and comprehensively examines and describes the natural science discipline of behaviorology. Always consistent with the naturalistic philosophical foundations of the discipline, the author not only covers in detail the major variables involved in the wide range of pertinent and accessible environment-behavior functional relations, with the emphasis on increasingly complex human behavior, but also covers the research methodology involved in discovering the independent variables in these relations and engineering them into sophisticated applications and interventions beneficial to humanity.

The Repertoire Builder Book

The *Repertoire Builder* book was prepared to help you master, and even become fluent in, the material from each of the chapters in the *General Behaviorology* text. You are to complete each text chapter's section of the *Repertoire Builder* book in the sequence assigned. Learning occurs when responses are made (like writing question answers) and reinforced, especially responses that automatically provide their own reinforcing consequences (like being right) as does writing out question answers correctly. You complete the assigned sections, *after reading the chapter through*, by *writing out* your responses when you come to the relevant part as you *reread* the chapter. You *write out* the responses right in the *Repertoire Builder* book. Write out your responses in full sentences that incorporate any questions (and preferably in your own words).

The *Repertoire Builder* book starts with a section titled To the Student and Teacher. *Read this section first!* It explains more on how to use the *Repertoire Builder* book successfully. *Repertoire Builder* book assignments are provided in the *Assignment Sequence* section. Submit your work according to the method specified in the *Submitting Your Work* section.

Note #5: Since you are to write out your responses directly in the *Repertoire Builder* book, you need to have your own *Repertoire Builder* book. To assure that this is followed by everyone equally, you need to fill out and send in to your professor (by regular postal mail) the original ownership form in the rear of your *Repertoire Builder* book.

Submitting Your Work

Different assignments have different work submission methods. These only apply if you are taking the course for TIBI credit. (Any addresses and phone/fax numbers that you may need will be clarified upon enrollment.)

To submit your *Repertoire Builder* book responses, which generally must be hand-written, you can scan and fax to your professor the pages that have your responses for each assignment. However, your professor would prefer that you photocopy those pages and send them to your professor by regular postal mail.

For every assignment you are to keep the original of your work. This insures against loss and enables you and your professor to communicate about your work (as you will then both have an identical copy). Note, however, that for the *Repertoire Builder* book responses, email and email attachments are neither reliable enough, nor identical enough, for this purpose, so they are not to be used for this purpose.

Your work will be perused and points will be allocated according to the quality of your work. Should any inadequacies be apparent, you will be informed so that you can make improvements. While sometimes your professor will provide a metaphorical pat on the back for a job well done, if you do not hear of any inadequacies, then pat yourself on the back for a job well done even as you continue on to the next assignment.

Assignment Sequence

Students should work their way through the course by reading and studying the texts and materials, and sending in their work for each assignment. The slowest reasonable self-pacing of the coursework (presuming a typical 15-week semester) is this sequence which can be used as a check-off list:

- Week 1: The *General Behaviorology* book, Preface & Introductory Chapter.
- Week 2: The *General Behaviorology* book, Ch. 1.
- Week 3: The *General Behaviorology* book, Ch. 2.
- Week 4: The *General Behaviorology* book, Ch. 3.
- Week 5: The *General Behaviorology* book, Ch. 4.
- Week 6: The *General Behaviorology* book, Ch. 5.
- Week 7: The *General Behaviorology* book, Ch. 6.
- Week 8: The *General Behaviorology* book, Ch. 7.
- Week 9: The *General Behaviorology* book, Ch. 8.
- Week 10: The *General Behaviorology* book, Ch. 9.
- Week 11: The *General Behaviorology* book, Ch. 10.
- Week 12: The *General Behaviorology* book, Ch. 11.
- Week 13: The *General Behaviorology* book, Ch. 12.
- Week 14: The *General Behaviorology* book, Ch. 13.
- Week 15: (This is a spare week to use to complete any unfinished work.)

Do the assignments in this sequence, even if you do them at a faster pace than the pace presented here. If you go slower than this schedule, assignments could easily back up on you to the point where insufficient time remains to complete them in a satisfactory manner.

Note #6: Be sure that everything you submit is readable and contains your name!

Note #7: The usual higher education workload expectation for a course is about 150 hours. (The typical face-to-face course features about 50 in-class contact hours with the university expecting about 100 more hours of additional study at the average rate of about two hours out of class for each hour in class.) This can be accomplished at rates ranging from about 50 hours per week over three weeks to about ten hours per week over the typical 15 weeks of a semester. Of course, some students may take a little less than 150 hours, while others may take more than 150 hours, to do the work to the same acceptable and expected standard.

You can—and are encouraged to—go through the assignments as rapidly as your schedule allows. This could mean spending a typical 15 weeks on the course. Or it could mean doing the whole course in as little as—but not in less than—three weeks, as one would progress through the *single* allowed course in a three-week summer school term. That is, you could work on the course anywhere from minimum part-time (i.e., at the rate of about ten hours per week, as described in the *Assignment Sequence* section) to maximum full-time (i.e., at the rate of about 50 hours per week).

If you are to be successful, you need to exercise some self-management skills by starting immediately and keeping up a reasonable and steady pace on the course work. You need to do this because your professor will *not* be reminding you that the products of your work are due; all the course work is set forth in this syllabus and so is automatically assigned. You are expected to follow through on your own. You need to set an appropriate pace for yourself (or accept the pace in the *Assignment Sequence* section) and adhere to that pace, and thereby get the sequence of assignments done and submitted to your professor. This will assist your success.

At various points in the course, you will be provided with feedback about your work. Upon completing all the coursework, you will be provided with your earned grade. (The grade is provided solely for the person whose work earned the grade.) We at TIBI are sure that the outcomes of your efforts to study this aspect of behaviorological science will benefit both you and others, and we encourage you to study further aspects. ☺