

# ***TIBI Online Syllabus for BEHG 355: Verbal Behavior I***

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[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.

Indeed, 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](http://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](http://www.canton.edu) which is SUNY-Canton's web site. At SUNY-Canton this course is offered as *SSCI 380: Introduction to Verbal Behavior Analysis and Applications*. 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 through TIBI may make taking the course for academic credit easier; ask the professor who teaches SUNY-Canton's equivalent course about this.

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 prerequisite for this course is BEHG 101: Introduction to Behaviorology I. If you have not had this prerequisite course (or its academic-credit equivalent such as SSCI 245: Introduction to the Science and Technology of Behavior, from SUNY-Canton), then you need to take it before taking the current course.

## ***Course Description***

*BEHG 355: Verbal Behavior I.* Based on natural science of behavior principles and practices, this course introduces students to (a) the behaviorological analysis of verbal behavior/language, (b) the historical context in which verbal behavior analysis arose, and (c) some applications of verbal behavior analysis especially as it is applied to enhance the acquisition of verbal behavior/language either by foreign language learners or by learners with language deficits perhaps from developmental disabilities. Covered analysis topics include such fundamental concepts as (a) differentiating verbal and non-verbal behavior, (b) the verbal community, (c) mediated reinforcement, (d) the basic verbal behaviors called mands, tacts, intraverbals, codics, and duplcs, (e) various extensions of these elementary verbal operants, (f) the most common variables of which verbal operants are a function, (g) some of

the ways these variables combine in the multiple control of complex verbal behaviors, (h) response products, (i) point-to-point correspondence, (j) formal similarity, (k) thematic and formal controls over verbal behavior, and (l) the ways the verbal community teaches speakers appropriate verbal responses to their private experiences.

*Note #3:* To check out other behaviorology courses offered by TIBI, visit their locations on the TIBI web site ([www.behaviorology.org](http://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](http://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:

- ✧ Summarize each of the scientific principles and concepts upon which verbal behavior analysis is based;
- ✧ Summarize each of the additional fundamental concepts specifically relevant to verbal behavior analysis;
- ✧ Analyze verbal operant behaviors and the variables of which they are a function;
- ✧ Classify elementary verbal operants in terms of their evoking stimuli and their maintaining consequences;
- ✧ Systematize the variety of verbal operants;
- ✧ Interpret extensions of elementary verbal operants;
- ✧ Demonstrate the factors that enable the verbal community to teach speakers appropriate responses to private stimuli;
- ✧ Identify the ways variables combine in the multiple control of complex verbal behaviors;
- ✧ Describe the historical context in which verbal behavior analysis and applications arose;
- ✧ Compare some of the basic applications of verbal behavior analysis in various general settings;
- ✧ Formulate explicit examples of how he or she can apply verbal behavior analysis in her or his own work, present and future.

### 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 verbal behavior analysis and applications.
- ✧ 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)

✧ Peterson, N. (1978). *An Introduction to Verbal Behavior*. Grand Rapids, MI: Behavior Associates. [This book may be available online. Contact TIBI regarding this and other options.]

✧ MacCorquodale, K. (1970). On Chomsky's review of Skinner's *Verbal Behavior*. *Journal of the Experimental Analysis of Behavior*, 13 (1), 83-99.

✧ Ledoux, S.F., Michael, J., & Miguel, C. (2002). *An Introduction to the Elementary Verbal Operant Relations in the Verbal Behavior Analysis Component of Behaviorology Plus Some Initial Implications and Applications for Foreign Language Teaching*. Canton, NY: Stephen F. Ledoux. [Contact TIBI for options on obtaining this booklet.]

✧ Chapter 14 of Maurice, C., Green, G., & Luce, S.C. (Eds.). (1996). *Behavioral Intervention for Young Children with Autism*. Austin, TX: Pro-Ed. (Only those not engaged in foreign language or ESL teaching need this material to complete the "area-focused" assignment.) [To read and study this chapter when scheduled, buy the book—the publisher's phone number is in "Note #4"—or borrow it from your local library, or contact TIBI for other options on obtaining this material.]

✧ Chapter 14 of Ledoux, S.F. (2003). *Study Questions for Maurice et al's "Behavioral Intervention for Young Children with Autism."* Canton, NY: ABCs. (Only those not engaged in foreign language or ESL teaching need this material to complete the "area-focused" assignment.) [Contact TIBI for options on obtaining this material.]

### 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:

✧ Cautela, J.R. (1994). General level of reinforcement II: Further elaborations. *Behaviorology*, 2 (1), 1-16.

✧ Chomsky, N. (1959). *Verbal Behavior* by B.F. Skinner. *Language*, 35, 26-58.

✧ Eshleman, J.W. & Vargas, E.A. (1988). Promoting the behaviorological analysis of verbal behavior. *The Analysis of Verbal Behavior*, 6, 23-32.

✧ Fraley, L.E. (1996). Verbal behavior in the measuring process. *The Analysis of Verbal Behavior*, 13, 123-126.

✧ Ledoux, S.F. (2002). Increasing tact control and student comprehension through such new postcedent terms as added and subtracted reinforcers and punishers. In S.F. Ledoux. *Origins and Components of Behaviorology—Second Edition*. Canton, NY: ABCs.

✧ MacCorquodale, K. (1969). B.F. Skinner's *Verbal Behavior*: A retrospective appreciation. *Journal of the Experimental Analysis of Behavior*, 12 (5), 831-841.

✧ Michael, J.L. (1982). Distinguishing between discriminative and motivational functions of stimuli. *Journal of the Experimental Analysis of Behavior*, 37, 149-155.

✧ Premack, D. (1970). A functional analysis of language. *Journal of the Experimental Analysis of Behavior*, 14, 107-125.

✧ Schlinger, H. & Blakely, E. (1987). Function-altering effects of contingency-specifying stimuli. *The Behavior Analyst*, 10, 41-45.

✧ Sidman, M. (1986). Functional analysis of emergent verbal classes. In T. Thompson & M. Zeiler (Eds.). *Analysis and Integration of Behavioral Units* (pp. 213-245). Hillsdale, NJ: Erlbaum.

✧ Sidman, M. (1994). *Equivalence Relations and Behavior: A Research Story*. Boston, MA: Authors Cooperative.

✧ Skinner, B.F. (1953). *Science and Human Behavior*. New York: Macmillan. (Paperback edition published by Free Press, 1965.)

✧ Skinner, B.F. (1957). *Verbal Behavior*. New York: Appleton-Century-Crofts. Reprinted, 1992, Cambridge, MA: The B.F. Skinner Foundation.

✧ Stromer, R. (1991). Stimulus equivalence: Implications for teaching. In W. Ishaq (Ed.). *Human Behavior in Today's World* (pp. 109-122). New York: Praeger.

✧ Vargas, E.A. (1988). Verbally-governed and event-governed behavior. *The Analysis of Verbal Behavior*, 6, 11-22.

✧ Vargas, J.S. (1990). Cognitive analysis of language, and verbal behavior: Two separate fields. In L.J. Hayes & P.N. Chase (Eds.). *Dialogues on Verbal Behavior* (pp. 197-201). Reno, NV: Context Press.

*Note #4:* You can order the required or recommended books through the publishers, including *Pro-Ed* at—toll free—1-800-897-3202, and *ABCs* at 315-386-2684. You may also order these books through the online bookstore at [www.behavior.org](http://www.behavior.org) which is the web site of the Cambridge Center for Behavioral Studies.

The simplest way to access required or recommended articles is to seek them through your local community or college library. Alternatively, the parent journals may have web sites where the articles are available online. Visit [www.behaviorology.org](http://www.behaviorology.org) for some relevant links.

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. The assignments on the first four chapters of the Peterson book are all worth 40 points each, while the assignment on the shorter, fifth chapter is worth 20 points, for a total of 180 points. The read-and-summarize assignment on the MacCorquodale book-review article, and the completion assignment on the Ledoux *et al* material, and completion of the “area-focused” assignment, are all worth 40 points each, for a total of 120 points. This provides a grand total of 300 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.

### ***Assignment Method***

Unless specified otherwise, you need to write out your answer 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 covered in this course—writing answers in longhand involves both point-to-point correspondence and formal similarity between the stimuli and the response products of the answer.

### ***The Peterson Book***

Peterson's textbook, *An Introduction to Verbal Behavior*, introduces all the basic concepts that B.F. Skinner covered in his substantive book, *Verbal Behavior*. (That book is covered in BEHG 475: Verbal Behavior II.) Thus, while Peterson's book describes the elementary verbal operants and explores fundamental controlling relationships, it does *not* contain detailed explanations of exceptions, ambiguities, controversies, and many of the implications of the analysis. However, it effectively provides the necessary preparation for efficiently studying Skinner's *Verbal Behavior*. Write your answers right in the Peterson book. The Peterson book assignments are provided in the *Assignment Sequence* section. Submit your work according to the methods specified in the *Submitting Your Work* section.

### ***The MacCorquodale Review***

This assignment involves reading MacCorquodale's review of Chomsky's review of Skinner's *Verbal Behavior* and then writing a two to three page *typed* summary of the main points of this paper. Do this assignment as scheduled in the *Assignment Sequence* section. Submit your work according to the methods specified in the *Submitting Your Work* section.

### ***The Ledoux et al Material***

This assignment involves studying all the sections of the material by Ledoux *et al*. As you do so, complete the integrated exercises. *Then* make any needed corrections using the answer sheets provided. For each correction, state what makes your initial answer inaccurate and why the correct answer *is* correct. Do this assignment as

scheduled in the *Assignment Sequence* section. Submit your work according to the methods specified in the *Submitting Your Work* section.

### ***The Area-Focused Assignment***

This last assignment focuses each student on one of the two application areas that this first course on verbal behavior emphasizes. These two applications involve enhancing the acquisition of verbal behavior either by foreign language learners or by learners with language deficits perhaps from developmental disabilities. Locate the area appropriate for you, and follow the instructions. Do this assignment as scheduled in the *Assignment Sequence* section. Submit your work according to the methods specified in the *Submitting Your Work* section.

**Foreign Language Area.** If you teach foreign languages or ESL, then the assignment requires you to write a three to five page *typed* description of how you will incorporate applications of verbal behavior analysis into your teaching. *Your* applications may begin with, but should also go beyond, those included in the Ledoux *et al* material.

**Language Deficit Area.** For all others (i.e., for all who are not, or will not be, actively engaged in teaching foreign languages or ESL) the assignment involves reading chapter 14 of the Maurice *et al* book, and answering the set of study questions for this chapter. This chapter is titled "Strategies for Promoting Language Acquisition in Children with Autism." Answering the study questions will help you absorb the material from the chapter. You complete the study questions, *after reading the chapter through*, by *writing out* the answer to each question when you come to it as you *reread* the chapter. You *write out* the answers right on the *Study Question* pages. Write out your answers in full sentences that incorporate the questions. Learning occurs when responses (like writing question answers) are made, and reinforced, especially responses that automatically provide their own reinforcing consequences (like being right) as does writing out study question answers correctly.

### ***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 answers for the Peterson book, the Ledoux *et al* material, and the area-focused assignment / language-deficit chapter—all of which must be hand-written—you can scan and fax to your professor the pages that have your work. However, your professor would prefer that you photocopy those pages and send them to your professor by regular postal mail.

To submit your review of the MacCorquodale article, or your area-focused assignment / foreign language ap-

plication description, you may email your work to your professor (but do not use email attachments). Or, you may scan and fax your work to your professor. However, your professor would prefer that you print out your work (although it too may be handwritten), photocopy it, and send it to your professor by regular postal mail.

In all cases, 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 study question answers, 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:

- Weeks 1 & 2: The Peterson book, Preface (with review of the “prerequisite terminology”) & Ch. 1.
- Weeks 3 & 4: The Peterson book, Ch. 2.
- Weeks 5 & 6: The Peterson book, Ch. 3.
- Weeks 7 & 8: The Peterson book, Ch. 4.
- Week 9: The Peterson book, Ch. 5.
- Weeks 10 & 11: The summary of the MacCorquodale article.
- Weeks 12 & 13: The completion of the Ledoux *et al* material.
- Weeks 14 & 15: The description of your applications, *or* your study-question answers, from the Area-Focused assignment.

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 #5: Be sure that everything you submit is readable and contains your name!*

*Note #6: 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.☺

