

**Please Note: This document is revised twice yearly; suggestions for versions are appreciated. –Marshall**

## **So You Want to Observe the Basics of Dog Training and Earn College Credit?**

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Since 2001, I have been helping students earn college credit for *observing* dog training that is based on behavior analytic principles and that emphasizes positive reinforcement.

You should know that these placements are not required for you to earn your degree. They are also not required if you want to complete PSYCH 502, Applied Behavior Analysis, which offers: (a) an alternative field placement observing or working with children with an autism diagnosis and (2) an on-campus, laboratory section.

You may also earn college credit for the dog placements by registering in the other courses described below. But again, the university does not require these placements; you can choose from other alternatives to satisfy degree requirements.

### **Use of Live Animals in Teaching and Observational Field Studies**

Before discussing these placements you should know that the care and use of animals in teaching, research and field studies are regulated by the animal Welfare Act, the Public Health Service (PHS) Policy, and the Public Health Service publication "Guide for the Care and Use of Laboratory Animals." These regulations require that the use of live vertebrate animals for teaching or research first be approved by a

Committee called the IACUC (Institutional Animal Care and Use Committee).

Teaching and research proposals are submitted to the IACUC and reviewed. In deciding whether to approve a protocol, the IACUC assesses whether alternatives to animal use exist for the proposed teaching or research proposals, whether the proposal using animals will be carried out as humanely as possible, and whether unavoidable pain, distress and discomfort will be minimized through specific analgesics, anesthetics or sedatives. Field studies must follow all applicable guidelines. The regulations require that the IACUC include at least one veterinarian, a scientist, and a member representing community interests. The IACUC is responsible for reviewing the animal care program and all animal facilities and associated labs at least once every six months. Individuals reporting concerns about animal use are protected, by law, from repercussions, and the IACUC investigates all concerns over animal uses that are reported.

Basic animal husbandry requirements are also regulated to ensure that an animal's food, water and shelter are appropriate. The regulations further require that all personnel using animals be trained in appropriate handling techniques and experimental procedures and that persons coming in contact with animals are given information regarding methods to minimize the risks involved in using animals. The Animal Care Program has a web page that provides information on minimizing the risks involved in using animals including lab animal allergy information.

<http://www.uwm.edu/Dept/EHSRM/ACP/SAFETY/index.html>

The Animal Care Program at UWM is staffed and administered by a Veterinarian and a Lab Manager. These dedicated staff oversees the legal and humane treatment of animals and management of the animal facilities.

A protocol was filed and approved with the IACUC for the placements below.

### **Placement Contact Information**

Wisconsin Humane Society (WHS)  
4500 West Wisconsin Avenue,  
Milwaukee, WI (414-431-6114)

Driving instructions can be found here:

<http://www.wihumane.org/contactus/map.aspx/>

WHS has offered 1-hr classes M-F at 6:30 PM and 7:45 PM, and four classes on Saturdays. So there are 14 hours of class available each week. You can find the most current information here:

<http://savinglives.wihumane.org/site/PageServer?pagename=Calendar&JServSessionIdr010=hflxp0j886.app7a>

At WHS there is a limit of two students per class. So, it is important that you schedule your attendance. In particular WHS prefers that students commit to observing a six-week term rather than just “dropping in on a class.” The contact person for registering for these classes is:

Natalie Zielinski, CPDT  
Behavior Program Manager  
414-431-6114  
<mailto:nzielinski@wihumane.org>

Humane Animal Welfare Society (HAWs)  
701 Northview Road  
Waukesha, WI 53188

Driving instructions can be found here

<http://www.hawspets.org/Directions.asp>

You can access the calendar here:

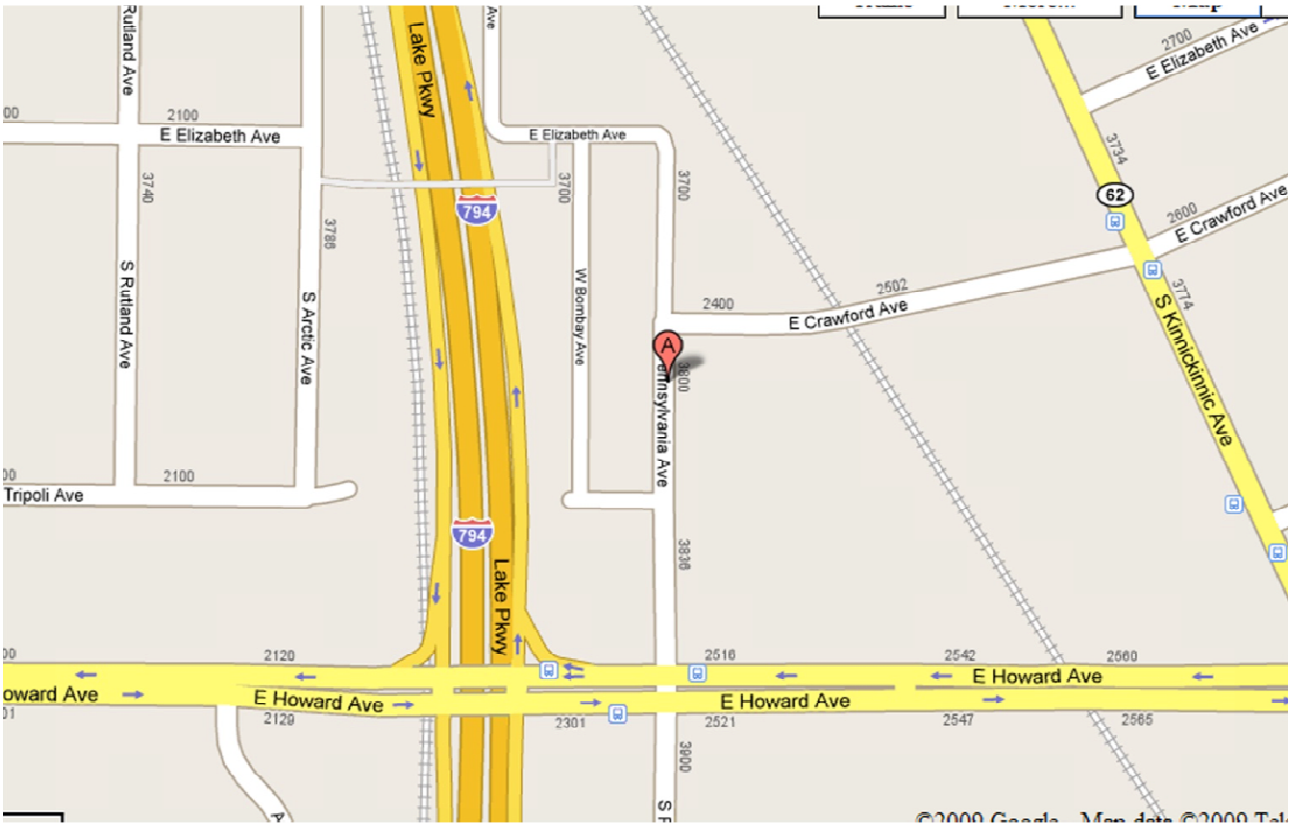
[http://www.hawspets.org/calendar/eCalendar\\_full.asp?d](http://www.hawspets.org/calendar/eCalendar_full.asp?d)

Instructions are as per WHS above.

The contact person for registering for these classes is:

Claudeen E. Mc Auliffe, Ph.D., M.Ed., CAP-2, CDDBC  
Manager, Behavior Department  
Humane Animal Welfare Society of Waukesha County  
Waukesha WI USA  
262-542-8851, Ext. 121  
<mailto:clauddeen@hawspets.org>

Cudahy Kennel Club (CKC)  
3820 South Pennsylvania Avenue  
Saint Francis, WI 53235  
(414) 769-0758



This map shows the club’s location with an “A”:

During the evenings, six- to eight-week terms classes are offered. These classes are labeled: basic manners, intermediate manners, advanced manners, puppy kindergarten, and agility training. The website lists the days/times for the current classes:

<http://www.cudahykennelclub.org/Calendar.htm>

The CKC’s board has approved students from this course observing training *contingent* on a trainer’s approval. Here is the list of current trainers for whom I have information:

Trainers at the Cudahy Kennel Club

Trainer	E-Mail Address
Wendy Anderson	<a href="mailto:safeharborpwd@yahoo.com">safeharborpwd@yahoo.com</a>
Meredith Biehl	<a href="mailto:meredith.biehl@gmail.com">meredith.biehl@gmail.com</a>

On 12/8/2012, I received this message from Meredith:

*This coming session I am teaching Mon 6-9 PM and Tues 6-9 PM (possibly also at 5 PM). I also teach 6:30-7:30 on Wed. The next session is Jan 7- till end of Feb. The subsequent session starts in March. Then I'll be teaching Tues PM and might share Mon PM with another trainer.*

*Wendy is still at CKC. She teaches Wed 8-9 PM and Thurs evening. We will have another new instructor and there's another lady, Kay, who teaches Mon 7-8 PM.*

*I have no problem being the contact for your students and passing their email to instructors who's classes fit their schedules.*

Meredith's message is not totally clear, but I would e-mail Meredith or Wendy. Tell them you are in this course and would like to observe training. It is best to observe multiple trainers in multiple classes. The CKC is one of the most interesting training venues.

Canine Care Dog Training LLC.  
Addison (Hartford), WI

Canine Care is off of Highway 41. For driving instructions contact Teayl Johnson (proprietor) at 262-644-8624 or e-mail her here: [caninecare@charter.net](mailto:caninecare@charter.net).

You can find more information about Canine Care here:

[www.caninecaredogtraining.com](http://www.caninecaredogtraining.com).

Canine Care has offered classes on Tuesdays and Thursdays from 6 PM to 7 PM.

## **Insurance Coverage, Risks, and Precautions**

UWM does not provide any liability, health, or accident insurance for you while you are traveling to or from the training sites, or when you are observing training. The university cannot guarantee that each training site maintains insurance coverage of any kind. You are responsible for providing your own health insurance coverage, and should not elect these placements if you are without health insurance.

If you elect to observe dog training then you will face a number of health risks. You may develop allergic reactions to canine and flea proteins. Allergic

reactions can include: sneezing, nasal congestion, a runny nose, watery or itchy eyes, coughing or wheezing, shortness of breath and various skin reactions including itchy skin and hives. Other skin reactions may be produced by mites and fungi (ringworm). Another problem, roundworm, can result from inadvertently ingesting roundworm eggs.

If you notice an allergic reaction you should consider discontinuing the placement. Alternatively you might want see if you can control the reactions by using a facemask and protective clothing. Launder your protective clothing often. Only use the clothing for the placement to avoid contaminating your other clothing and living environment. More details can be found here about controlling reactions to allergens:

[http://dels-old.nas.edu/ilar\\_n/ilarjournal/42\\_1/](http://dels-old.nas.edu/ilar_n/ilarjournal/42_1/)

Again, UWM does not provide any liability, health, or accident insurance for you while you are traveling to or from sites, or when you are observing training.

Besides the risks outlined above, you will be expected to arrange your own transportation to and from the training sites. Transporting yourself to and from new and unfamiliar neighborhoods may pose additional safety risks to you.

Though trainers have been selected for their records of accomplishment and their use of positive reinforcement neither UWM nor I control their practices. You should, therefore, carefully consider whether you want to observe dog training just as you might select some other activity with potential risk. If you become aware of any practice that appears improper or unsafe, please notify me immediately and I will reconsider referring students.

If, during the semester, you discontinue your placement for good reason, such as safety concerns, or if a trainer no longer wants you to observe through no fault of your own, I will try to help you find another way to complete the requirements for the course. For example, I anticipate having placements involving observing behavior-analytic autism interventions. Alternatively, every Tuesday and Thursday, from 3:00-4:50 PM, during the Fall and Spring semesters, I conduct a behavior-analytic laboratory section that you may be able to join. My ability to help you find another way to complete the requirements for the course will depend on space availability, the amount of time left in the semester, and other individual circumstances.

You will be required by UWM to sign an acknowledgement a release in which you accept all risks of participation for these placements (see pages 15 and 16 below). Additionally, you may be asked by a dog training agency to sign a release. You should review any release carefully and you may wish to consult your own advisor before signing one.

## Procedures for Animal Bites or Scratches

All venues have first aid kits, so wash the wound thoroughly with an antiseptic such as Betadine solution and bandage the wound.

Bites or scratches that are deep, that occur over joints or tendons, and that will not stop bleeding after 10-15 minutes of direct pressure should be evaluated immediately by your health care provider.

If any swelling, redness, or increasing pain occurs around the injured site, see your health care provider immediately.

Report the incident to the trainer and me, complete the form below (although it is designed for employees) and provide me with a copy.

<http://www.wisconsin.edu/oslp/wc/forms/OSLP-1EmpForm%202011.pdf>

I will make copies of the completed form and distribute them to the UWM Risk Management Office, the trainer and you, as well as keep a copy for my records.

## Register for the Appropriate Course

To earn credit, UWM students register, AT THE BEGINNING OF THE SEMESTER, for either courses: PSYCH 292, PSYCH 692, PSYCH 502, PSYCH 697, PSYCH 699..

**PSYCH 292 & PSYCH 692:** These field placement courses are offered every semester. The lower-numbered course is for lower division students; the higher-numbered course is for upper-division students (juniors and seniors).

**PSYCH 292 PSYCHOLOGY FIELD PLACEMENT-LOWER DIVISION. 3 CR. U. RETAKABLE. PREREQ: PSYCH 101(P); CONS INSTR & PLACEMENT SUPERVISOR**

**PSYCH 692 FIELD PLACEMENT IN PSYCHOLOGY. 3 CR. U. RETAKABLE. PREREQ: JR ST; CONS INSTR & PLACEMENT SUPERVISOR**

To earn 3 credits, students should attend the placement for about 9 hrs per week for a 15 week semester. If you register during the summer, register only for one summer session. An incomplete will initially be assigned but it will be converted to a grade when you complete your hours.

**PSYCH 502:** I try to offer this course, Applied Behavior Analysis, every semester. If you are a UWM psychology major who has completed PSYCH 325, Research Methods in Psychology, then you may want to complete Applied Behavior Analysis.

**PSYCH 502 APPLIED BEHAVIOR ANALYSIS. 4 CR. U/G.**  
LEARNING AND MOTIVATION OF HUMAN BEHAVIOR IN  
APPLIED SETTINGS. LAB WORK IN COMMUNITY AGENCIES  
USING OPERANT METHODS, BEHAVIOR MODIFICATION,  
PROGRAMMED INSTRUCTION, AV SYSTEMS. LC, LA. PREREQ:  
JR ST; PSYCH 325(P)

Register for the course's lecture section which meets Tuesday, Thursday, and Friday. Also register for laboratory section 903. This laboratory section is reserved for students completing dog observation placements. Scheduling your placement depends on your availability as well as that of the trainers whom you will be observing. You should devote about three hours per week to your placement.

Another possibility is for students to complete the 502-laboratory requirement by completing a placement during the summer session BEFORE their registration in PSYCH 502. I am considering this because there may be more observation opportunities during the summer than during the academic year.

Using this option you would meet briefly with me, then apply for a placement, complete the assignments detailed below, and then complete your placement for 45 hours. The following semester, you would register for the 502 lecture and Laboratory 903. You would attend the lecture but you would not attend the laboratory because you had already completed that portion of the course during the summer.

**PSYCH 697:** This course, Field or Research Placement in Psychology for Seniors. is one way to satisfy the capstone requirement. To satisfy the requirement, you must complete 3 credits during your senior year. To earn these credits you would observe 9 hours per week for 15 weeks. (An easier way to satisfy the capstone requirement is to enroll in a laboratory course during your senior year and complete one credit of Independent Study, PSYCH 699. To earn one credit you would work 3 hrs per week for a 15-week semester.)

## Assignments and Grading

The following is the requirement for one hour of credit for a 15-week semester:

Objectives:

1. observe dog training for 45 hrs
2. document above observations
3. understand basic applied behavior analytic procedures and terms.

Students may, if they wish, reduce the observation requirement from 45 hrs to 30 hrs. Students who choose this option should additionally conduct a behavioral



assessment. The assessment should focus on the troublesome behavior of a cat, dog, or human. The assessment assignment is outlined below.

## Documenting Observations

In a notebook, reserve two pages for a chart like this:

Date	Major Activity Today	Hours	Cumulative Hours
3/7	Orientation	1.5	1.5
3/9	Observed Puppy Training Class 1	2	3.5
3/11	Observed Puppy Training Class 2	2	5.5
3/15	Observed Puppy Training Class 3	1	6.6
3/17	Observed Agility Training	1	7.5

For each entry, above, you should describe what happened that session using one-half page to one page of your log. Provide entries for all the items in boldface below.

<Begin Entry>

**Date:** 3/9/20024

**Place:** Shorewood Animal Clinic

**Trainer:** John Fairweather

**Number of Dogs:** Six

**Session Began:** 6:30 PM

**Session Ended:** 7:30 PM

**Training Procedures Used:** Installing the Terminal Bridge & Shaping Sitting

**Description of Session or Procedures:**

The terminal bridge is an emphatically said "X" followed by a strong reinforcer such as a piece of hot dog. In this lesson, when the trainer said "X" he next tossed the dog some hot dog; but if the trainer was silent he did not toss the dog any hot dog. In principle the sound of the terminal bridge "X" should now become valuable to the dog or more technically a secondary or conditioned reinforcer.

In the next part of the lesson, the above procedure was used to shape sitting. The trainer waited *until the dog was lowering its rear* and said "X" and tossed some hot dog. The trainer repeated this several times and gradually the dog would

come to more and more rapidly sit after it had finished eating the hot dog. As the training progressed, the trainer later only administered the terminal bridge and hot dog *after the dog sat*.

**Additional Comments:** none today!

<End Entry>

Print or write clearly so that others can understand your log.

*For every session ask the trainer to sign your log.*

*After 12 hours of observation or training submit your log to me or your teaching assistant for review and feedback.*

When you have completed 45 hrs, submit your log.

For additional background information to help you with your assignment review:

Tillman, P. (2001). *Clicking With Your Dog: Step-By-Step in Pictures*.  
Waltham, MA: Sunshine Books.

I have several copies of this book and it is also available via the Milwaukee County Library system:

<http://countycat.mcfls.org/>

Another promising book, written by behavior analysts, is:

Burch, M. R., & Bailey, J. S. (1999). *How dogs learn*. New York: Howell Book House.

You can find a review here:

<http://www.kateconnick.com/library/burchlearn.html>

The library has one copy (SF431 .B928 1999) and I own several copies which I can share.

## **UNDERSTAND BASIC APPLIED BEHAVIOR ANALYTIC PROCEDURE AND TERMS (Only for Students in Psychology 502)**

So that I might assess your knowledge of behavior analysis in relation to your placement, complete the following annotation assignment for **FIVE** training programs associated with your placement. Note well, that if you do not

complete this requirement appropriately you cannot earn a grade above a B for your placement.

1. Write out five programs used in your placement.
2. Match as many relevant terms from the list below (see **Basic Behavior Analytic Technical Terms**) with each teaching program. For each match justify the match.
3. Use the format in the example below.

<Begin Example>

**Program Title:** “Installing the Terminal Bridge”

**Materials:** an emphatically said “X” and bits of hot dog

**Procedure:** When “X” is said a hot dog bit is immediately and always tossed but when “X” is not said no hot dog bit is tossed. Some time elapses between presentations of “X.”

**Behavior Analytic Analysis:** Initially “X” is a neutral stimulus in the sense that it does not control behavior. The hot dog bit is a reinforcer presumably because food deprivation is in effect. Food deprivation is a particular instance of an establishing operation. The procedure above is an instance of a procedure that renders the neutral stimulus a conditioned reinforcer. Why? Because the stimulus “X” comes just before and is correlated with the presentation of hot dog bits. The schedule between “X” and the hot dog bits is continuous.

## Functional Assessment Assignment

Basically, you are to: (a) identify a troublesome behavior and corresponding desirable behavior in a dog, cat, or human; (b) operationally define these two classes of behavior; (c) collect data that suggest the two behaviors’ controlling variables (but *do not use* assessment procedures that require manipulating variables); (e) develop functional hypotheses; and (f) given the functional hypotheses and the research literature propose constructional interventions.

[I use a similar assignment in another course and you may find the model paper for that course helpful:

[https://pantherfile.uwm.edu/dermer/public/courses/724/plagarism\\_model\\_paper\\_nov\\_02\\_08.doc](https://pantherfile.uwm.edu/dermer/public/courses/724/plagarism_model_paper_nov_02_08.doc)]

If you are observing a person’s behavior then *before* you begin you must gain the person’s informed consent. Your consent form should explain: what you will be doing for this course project, the purpose of your observations, that you will maintain the confidentiality of the person you will be observing, and that the person has the right to discontinue these observations at anytime. You and

the person being observed should sign this informed consent form and you should make a signed copy available to me before you begin observing.

Although you may want to later use the interventions you have proposed, this is *not* part of your assignment. Indeed, if you were observing the behavior of a person, I urge you to only consider implementing the intervention with the person's consent.

Functional assessment is discussed in Chapter 13 "Understanding Problem Behaviors through Functional Assessment." The non-manipulative observational methods include: narrative recording, behavioral interviews, ABC observation, and scatter plots. Regarding conducting interviews, ABC analyses, etc., I found useful forms here: <http://www.1edweb.com/fba%20forms.htm>. I found useful discussions and forms here: <http://cecp.air.org/fba/>.

You should write up your report in an APA-style manuscript that includes an abstract, introduction, method, results, discussion, and reference sections. Your introduction would begin with a brief description of behavioral assessment and why it is important, next a conceptual description of the problem behavior, and then a list of the assessment methods you used. Your method section would detail the methods you used including the operational definition of the undesirable behavior. Your results section would present what you found including ABC and scatter plots (as appropriate). Finally, your discussion section would summarize what you found and discuss what might be a suitable constructional intervention given these findings and the research literature. Finally, if you observed human behavior, this section could discuss the problems of conducting a functional assessment within the context of a relationship for the other person might be your roommate, your parents, or your significant other.

On what behavior might you focus?

One problem in our home occurs when someone enters our home which makes our dog loudly scream. The sounds are very loud and our dog persists screaming for about a minute. I suspect this behavior evolved from earlier, puppy behavior when he would urinate and scream when someone entered. Thankfully the urination stopped but the screaming has persisted. If you conducted a scatter plot you would see that the behavior does not depend on the day or time. If you conducted ABC analyses you would see that our dog reliably screams when my wife arrives home but hardly ever screams when I arrive home. If you looked at consequences you would see that when he screams my wife has looked at him and gently told him to calm down whereas when he screams when I enter I just ignore him. I suspect that our dog's behavior is controlled by consequences but I also suspect that if I knew something about canine ethology, I would better understand the origins of this behavior.

Besides focusing on other dog or pet behaviors, there are many undesirable human behaviors. The list includes: whining, lying, yelling, not cleaning up, etc.

## Grading

Your grade will be based on: (a) keeping a log, (b) documenting five training programs as detailed below, and (c) your functional assessment paper if you observe for only 30 hrs. Here are the formulas:

Observe for 45 hrs:  $.70 * \text{Grade for Log} + .30 * \text{Grade for Training Programs}$

Observe for 30 hrs:  $.45 * \text{Grade for Log} + .25 * \text{Grade for Training Program}$   
 $+ .30 * \text{Grade for Functional Assessment Paper}$

Over the years, the primary reasons students have not earned A's are: (a) failure to document five training programs adequately and (b) a history of unprofessional behavior. (Should a trainer report your behavior to be unprofessional, I will interview you, to hear your account, so that I can fairly assign a grade.)

## Basic Behavior Analytic Technical Terms

**OPERATION:** Any environmental procedure or condition, e.g., the withholding of food, or onset of a tone.

**BEHAVIOR:** Any action beyond or within the skin of an organism (e.g., walking and seeing, respectively) that is controlled by environmental events.

**STIMULUS:** Any event that produces a change in behavior. (Usually this change is rather immediate. Contrast this term with **DISPOSING OPERATION**.)

**NEUTRAL STIMULUS:** A stimulus that does not control a class of behavior.

**REINFORCER OR REINFORCING STIMULUS:** An event that follows a response (response contingent event) **THAT INCREASES** the rate at which similar responses are later emitted.

**MOTIVATING OPERATION:** An environmental event that momentarily alters a) the reinforcing effectiveness of other events, and b) the frequency of the type of behavior that has been consequated by those other events.

**PROCESS:** A change in (the control of) behavior as a result of imposing an operation. For example, reinforcement used as a process refers to an increase in the rate of behavior as a result of behavior being followed by reinforcers.

**NECESSARY CONDITIONS FOR A STIMULUS BEING A REINFORCER:**

Professor A. Charles Catania (Learning, Englewood Cliffs, NJ: Prentice Hall, 1979, pp. 74-75) has discussed the "vocabulary of reinforcement" in some detail. According to Professor Catania, this vocabulary is appropriate if and only if three conditions exist: (1) a response produces some consequence; (2) the response occurs more often than when it does not produce that consequence;

and (3) the increased responding occurs BECAUSE the response has that consequence.

Professor Catania has illustrated the use of the term reinforcer in the following ways:

**REINFORCER USED AS A NOUN:** refers to a stimulus as in, “Food pellets were used as reinforcers for the rat’s lever presses.”

**REINFORCER AS AN ADJECTIVE:** As an adjective, the term “reinforcing” refers to a property of a stimulus as in, “The reinforcing stimulus was produced more often than the other, non-reinforcing stimulus.”

**REINFORCEMENT AS AN OPERATION AND A PROCESS:** As a noun, the term “reinforcement” has two meanings. It may refer to an operation, the delivery of a consequence when a response occurs as in, “The fixed-ratio 5 schedule of reinforcement arranged food deliveries after every fifth peck.” Or reinforcement may refer to a process, the increase in responding that results from the reinforcement operation as in, “The experiment with monkeys demonstrated reinforcement produced by social consequences.”

**TO REINFORCE AS A VERB:** As a verb, the term “to reinforce” has two meanings. It may refer to an operation, to deliver a consequence when a response occurs, as in “When a period of free play was used to reinforce the child’s completion of class assignments, the child’s grades improved.” Or it may refer to a process, to increase responding through the reinforcement operation as in, “The experiment was designed to find out whether gold stars would reinforce cooperative play among first-graders.”

**ARE ORGANISMS REINFORCED?** Please note that it is responses not organisms that are reinforced. The term reinforcement is not used in the same way as the term “reward.”

**NATURE OF BEHAVIORISTIC EXPLANATION:** Radical behaviorists consider a change in behavior to be explained when the physical events that produced the change are described. The term reinforcement, for example, does not explain why a consequence increases the rate of a response. It is simply a name for the increase in responding that resulted from following responses with consequences. If someone asked a radical behaviorist to explain why an organism’s rate of responding increased as a result of reinforcement, the behaviorist would describe all of the operations needed to produce the change.

**POSITIVE REINFORCER:** A stimulus whose response contingent PRESENTATION (+) increases the rate at which similar responses are later emitted.

**NEGATIVE REINFORCER:** A stimulus whose response contingent REMOVAL (-) increases the rate at which similar responses are later emitted.

**OPERANT:** A class of behavior that is controlled by consequential operations. The class is defined by the features that produce reinforcement. For example, if money is provided whenever a particular student enters class and it does NOT

matter whether the student runs, walks, crawls, or is carried into class and the rate of the student's attendance is controlled by this operation then the operant is "entering class" not merely walking into class, running, etc.

**OPERANT CONDITIONING:** The modification of operant behavior by the use of reinforcement or punishment procedures.

**REINFORCEMENT SCHEDULE:** A rule that specifies the way in which reinforcements are assigned to particular responses within an operant class. (Note: The basic schedules studied include: fixed-ratio, variable-ratio, fixed-interval, and variable-interval schedules and, of course, extinction!)

**FIXED-RATIO (FR) SCHEDULE:** A schedule in which the last of a specified number of responses is reinforced with the number constant from one reinforcement to the next. Performance is characterized by pauses after reinforcement followed by a relatively high and constant rate of responding.

**VARIABLE-RATIO (VR) SCHEDULE:** A schedule in which the last of a specified number of responses is reinforced with the number changing from one reinforcement to the next. Performance relative to a **FIXED-RATIO SCHEDULE** is characterized by short post-reinforcement pauses or no pauses.

**FIXED-INTERVAL (FI) SCHEDULE:** A schedule in which a constant period of time must elapse before a response is reinforced. The time period is typically measured from the end of the last reinforcement. Performance is characterized by a pause after reinforcement followed by a gradual or an abrupt transition to a moderate level of responding.

**VARIABLE-INTERVAL (VI) SCHEDULE:** A schedule in which a variable period of time must elapse before a response is reinforced. The time period is typically measured from the end of the last reinforcement. Performance is characterized by a constant rate of responding relative to **FIXED-INTERVAL** schedules.

**OPERANT EXTINCTION:** The discontinuation of the reinforcement of an operant with the result that it decreases in frequency.

**CONDITIONED REINFORCER:** A stimulus that has acquired a reinforcing function by having been contiguous with and correlated with the presentation of another reinforcer.

**GENERALIZED REINFORCER:** A stimulus that has acquired a reinforcing function by having been contiguous with and correlated with the presentation of a variety of reinforcers.

**SHAPING:** The gradual modification of some property of an operant (usually its form) by the reinforcement of successive approximations until an acceptable form occurs.

**PUTTING THROUGH:** An alternative to **SHAPING** in which the initial occurrence of a response is produced by using physical force to produce behavior which is reinforced. For example the behavior of sitting, given the

vocalization “sit”, may initially be produced by gently pressing a dog’s haunches until sitting is produced which is followed by a pet.

**RESPONSE INDUCTION OR GENERALIZATION:** In strengthening one operant other operants are increased in strength.

**DISCRIMINATIVE STIMULUS (S-DEE):** A stimulus in whose presence a response is reinforced and in whose absence similar responses are not reinforced or reinforced less, with the result that these responses come to be emitted in the presence of the S-DEE but are less likely emitted when the S-DEE is absent (S-DELTA).

**THREE-TERM CONTINGENCY:**

Terms		
1	2	3
S-DEE	Response	Reinforcer
S-DELTA	Response	

Here is an example of a three-term contingency where a child is taught to name objects in English. When the child sees a book, and says “book,” then the child receives social reinforcement, “good.” If the child sees a car and says “book,” then the child does not receive social reinforcement. Here the book is the S-DEE, the response is “book,” the car is the S-DELTA, and the reinforcer is “good.” (Three-term contingencies are also called discrimination training procedures.)

**CONDITIONAL DISCRIMINATION (Four-Term Contingency):**

A discrimination involving two or more three-term contingencies where stimuli (called conditional stimuli: CSs) signal which contingency is in effect. Below is a diagram of a conditional discrimination involving two, three-term contingencies.

Terms			
1	2	3	4
CS-1	S-DEE	Response-1	Reinforcer-1
	S-DELTA	Response-1	
CS-2	S-DEE	Response-2	Reinforcer-2
	S-DELTA	Response-2	



Here the example is an extension of the one above. Let CS-1 be an English speaker, Response-1 be saying “book” and Reinforcer-1 be hearing “good.” Let CS-2 be a Spanish speaker, Response-2 be saying “libro” and Reinforcer-2 be hearing “bien.” For both contingencies S-DEE is a book and S-Delta is a car. The conditional stimuli are CS-1 and CS-2 which signal which of the two contingencies are in effect.

**CONDITIONAL STIMULUS:** The stimulus that signals which three-term or higher-order contingency is in effect.

**STIMULUS INDUCTION OR GENERALIZATION:** Given that behavior has been brought under the control of a particular stimulus, other stimuli may come to exert similar control. The spread of this effect is called induction or generalization.

**ABSTRACTION:** Bringing behavior under the control of a single property or special combination of properties of the environment while freeing it from the control of all other properties.

**CONCEPT:** A particular abstraction such that behavior is controlled by a class of stimuli such that each member of the class produces the behavior whereas stimuli that are not members of the class do not produce the behavior.

**CREATING IMITATION:** Use a continuous schedule of reinforcement to increase the rate at which an observer engages in responses matching those of a model. If the observer does not match the response then “push” the observer’s body into the appropriate form before providing reinforcement. Do this for model’s responses that vary widely in form. Eventually, the form of the model’s response will occasion observer’s matching behavior. (With appropriate variations in the schedule of reinforcement one can establish delayed imitation.)

**RESPONSE CHAIN:** A sequence of discriminated operants such that responses in the presence of one stimulus are followed by other stimuli that reinforce these responses and set the occasion for subsequent responses. The parts of the chain may be called components, links, or members. If the responses are formally similar (e.g., repeated depressions of the lever of a Skinner Box), the chain is homogeneous. If the responses are formally dissimilar (e.g., driving a car with a standard transmission—depress clutch pedal, shift gear, release clutch pedal, etc.), the chain is heterogeneous.

## Student Acknowledgement

I have carefully reviewed and considered the information provided in "So You Want to Observe the Basics of Dog Training and Earn College Credit?"

Print name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Agreement for Assumption of Risk, Indemnification, and Release

I, \_\_\_\_\_, desire to participate voluntarily in observing dog training at a non-UWM dog training agency in connection with course PSYCH 502, Applied Behavior Analysis, offered at the University of Wisconsin – Milwaukee. I acknowledge that UWM offers alternative experiences that satisfy course requirements, including an on-campus laboratory section that does not involve observing dogs.

**Assumption of Risks:** I understand the following important principles regarding my participation in dog training activities:

- (1) Each of the agencies at which I may complete my dog training experience are unaffiliated with UWM. Although UWM believes each selected agency employs reasonable safety measures, UWM has no way to monitor the agency's activities or my activities at the agency.
- (2) UWM does not provide liability, accident, or health insurance to cover my observing dog training and I also should assume that the dog training agency does not carry liability, accident, or health insurance that covers my activities. If an accident occurs, I am responsible for my own injuries or the injuries I may cause another. I have been advised to have my own health and accident insurance in effect during my participation in this activity.
- (3) Activities relating to dog training, by their very nature, carry with them certain inherent risks that cannot be eliminated regardless of the care taken to avoid injuries. The specific risks vary depending on the nature of the clinical experience and level of observation of dog training, but in each case could include a variety of allergic reactions, disease, and minor and major injuries resulting from aggressive canine behavior, up to and including death.
- (4) I know, understand, and appreciate the risks that are inherent in observing dog training. I acknowledge that my participation is VOLUNTARY and that I KNOWINGLY ASSUME ALL OF THE RISKS.

**Hold Harmless, Indemnity and Release:** In consideration of permission to participate in observing dog training today and on all future dates, I, for myself, my heirs, personal representatives or assigns, agree to defend, hold harmless, indemnify and release the Board of Regents of the University of Wisconsin System, the University of Wisconsin-Milwaukee, and their officers, employees, agents, and volunteers, from and against any and all claims, demands, actions, or causes of action of any sort on account of damage to personal property, or personal injury, or death which may result from my participation in the dog training experience. I intend this to be a complete and unconditional release of all liability to the greatest extent allowed by law.

**Acknowledgement of Understanding:** I have read this agreement, fully understand its terms, and understand that I am giving up substantial rights, including my right to sue. I acknowledge that I am signing the agreement freely and voluntarily.

I am eighteen (18) years of age or older, have read the above terms, and agree to them.

Print name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please return these two forms to Marshall Lev Dermer. I will return a copy for your records.