



UNIVERSITY OF  
CALGARY

## Department of Psychology

### Behavior Modification

### Psychology 435 (L01) – Fall, 2007

#### Course Outline

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**Instructor:** Eric J. Mash, Ph.D.      **Office:** A 251D      **Office Hours:** On request

**E-mail:** [mash@ucalgary.ca](mailto:mash@ucalgary.ca)

**Office Phone:** 220-5570      **Class Resource:** <http://blackboard.ucalgary.ca>

**Class Days:** Tuesday and Thursday      **Time:** 11:00 – 12:15      **Location:** SH278

#### **Lab Instructors:**

TBA – Lab 02

**E-mail:**

**Office Hours:** TBA

Avril Keller – Lab 01

**E-mail:**

**Office Hours:** TBA

[avril.keller@ucalgary.ca](mailto:avril.keller@ucalgary.ca)

<b>Lab Days:</b>	<b>Lab 01</b>	Wednesday	<b>Time:</b> 16:00-18:00	<b>Location:</b> A 253
	<b>Lab 02</b>	Friday	<b>Time:</b> 14:00-16:00	<b>Location:</b> A 253

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#### **Required Text:**

Spiegler, M. D., & Guevremont, D. C. (2003). *Contemporary behavior therapy, Fourth Edition*. Belmont, CA: Wadsworth.

#### **Course Description and Purpose:**

The purpose of Psychology 435 is to provide you with a basic understanding of the theory, principles, and practices of contemporary cognitive behavior therapy/behavior modification as applied to a representative range of child and adult disorders. You will also have an opportunity to develop some beginning behavior modification skills in the lab, particularly in relation to the analysis of human behavior, the implementation a self-change program, and the formulation of intervention strategies for specific disorders.

### **University of Calgary Curriculum Objectives:**

PSYC 435 is an issues-oriented course with a research and applied emphasis. The course is designed to strengthen the following core competencies: critical and creative thinking, analysis of problems, effective written and oral communication, gathering and organizing information and data, logical calculation, mathematical ability, abstract reasoning and its applications, insight and intuition in generating knowledge, and interpretive and assessment skills.

These objectives will be fostered by incorporating experiential learning (e.g. class and lab presentations and discussions), integration of research (literature reviews), interdisciplinary emphasis (e.g., biopsychosocial framework), and broad faculty/student and student/student interaction (e.g., class and lab discussions).

### **Class Schedule, General Topics, and Assigned Text Chapters**

The class schedule, general topics, and assigned readings for the course are listed on the following page. Please note that the weekly assigned text chapters for the course will inform class presentations and discussions but may not always correspond directly to them since our classes will focus on the application of the cognitive behavior therapy procedures that are described in the text to specific clinical populations and problems. The emphasis in class will be on looking at cognitive behavior therapy practices in relation to specific clinical problems (e.g., conduct problems, autism, anxiety, depression) since it is these problems for which clients are typically referred for help. Part of effective practice in cognitive behavior therapy involves mastery of the assessment and decision-making processes needed to determine which of the many currently available cognitive behavioral interventions are most appropriate and most effective in treating specific problems.

<b>Class Schedule, General Topics, and Assigned Text Chapters*</b>			
<b>Date</b>		<b>General Topic</b>	<b>Chapters</b>
September	11	Introduction to Course/Behavior Therapy	1
	13	Antecedents of Behavior Therapy	2
	18	Behavioral Model	3
	20	Process of Behavior Therapy	4
	25	Behavioral Assessment	5
	27	Behavioral Intervention with Children & Families	6
October	2	Behavioral Parent Training**	pp. 194-198
	4	Conduct Problems/ADHD	8
	9	Behavioral Intervention with Children & Adolescents	9
	11	Anxiety and Depression in Children**	
	16	Autism/Mental Retardation	7
	18	Autism/Mental Retardation (con't)	
	23	Behavioral Pediatrics**	pp. 414-426
	25	<i>Test 1</i>	
October	30	Behavioral Intervention with Adults	10
November	1	Anxiety Disorders	12
	6	Anxiety Disorders	
	8	Depression	13
	13	Reading Days – No Class	-
	15	Depression (cont.)	
	20	Marital Intervention**	15
	22	Social Competence	11, 16
	27	<i>Test 2</i>	
	29	Physical Problems	14
December	4	Self-Management	-
	6	Future Directions	<i>Paper</i>

\* Note: Adjustments may be made in our class schedule and readings as required.

\*\* Note: Denotes guest speaker from the community. TBA.

\*Please Note: The reading schedule on the previous page is designed to conform roughly to the ordering of topics for child and adult disorders respectively. Class topics, may deviate from this outline. Class presentations, guest speaker from the community presentations, films and videos, and class discussions will frequently be directed at elaborating on a treatment approach and its underlying rationale and empirical base *in relation to* specific clinical populations and problems. In this context, our discussions will not be restricted to the chapter organization of the text, but rather, as noted above, may touch upon several different problems, populations, procedures, and issues. You are responsible for some assigned readings that may not be covered in detail in class.

Examples of some of the specific topics to be covered in the course include:

1. What is behaviour therapy, behaviour modification, applied behavior analysis, cognitive therapy and cognitive-behaviour therapy?
  - A. Defining characteristics
  - B. Contrasted with other approaches to psychotherapy
  
2. Behaviour therapy assessment: Problem Diagnosis, Treatment Design, Treatment Evaluation
  - A. Concepts
    - i. behavioural versus traditional forms of assessment
    - ii. assumptions underlying behavioral assessment
  - B. Techniques
    - i. behavioral interviews
    - ii. behavioral/functional analysis and case formulation
    - iii. verbal report measures/surveys
    - iv. assessing for potential reinforcers
    - v. direct observational assessment
    - vi. analogue assessment
  
3. Operant Conceptual Framework
  - A. Techniques
    - i. positive reinforcement
    - ii. negative reinforcement
    - iii. punishment
    - iv. time-out
    - v. extinction
    - vi. response-cost
  - B. Shaping, Chaining, Fading and Prompting, Satiation, Restraint
  
4. Token Economy/Reward Programs
  - A. Institutional
  - B. Classroom
  - C. Home
  - D. Group Home
  - E. Behavioural Contracts

5. Parent Training Programs
6. Classroom Interventions
7. Behavioural Interventions for Children with Autistic Disorder
8. Methods based on the use of mild negative forms of control
9. Modeling Methods
10. Simulation and Role Playing Methods
11. Fear Reduction Methods
  - A. Systematic Desensitization
  - B. Exposure/Flooding/Implosion
  - C. Cognitive Restructuring
  - D. Modeling
12. Cognitive-Behavioral Methods
13. Concepts of Self-Control, self-management, and self-instructional methods.
14. Ethical Issues in Behaviour Therapy
15. Behaviour Therapy as a Profession

**Grading and Assignments:**

1. Tests (Test questions will consist of short answer, short definition and short essay questions.)

<u>Dates</u>		<u>Coverage</u>	<u>%</u>
October 25	Test 1	Chapters 1-9, pp. 414-426 Lectures, Films, Speakers	30%
November 27	Test 2	Chapters 10-16 Lectures, Films, Speakers	20%

2. Term Paper

December 6	Term Paper		15%
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3. Lab Assignments

	Described in lab outline and handouts		35%
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***Term Paper:***

You will write a paper focusing on a **specific issue or controversy** related to the theory, methods, or practices of cognitive behavior therapy that has captured your interest. The topic you select for your paper must be ***different*** than the one you address in your lab presentation. In the paper, you should select a topic that is of special interest to you, review relevant research

literature related to the topic, and provide a critical analysis and conclusions. The length of the paper should be 13-15 pages of text, plus additional pages for references, tables, or figures. There is no shortage of issues surrounding cognitive behavior therapy including the role of client-therapist relationship factors in treatment, need to involve family members in treatment, the use of punishment in behavior therapy, extrinsic rewards, token economy programs, generalization of treatment effects, efficacy versus effectiveness of treatment, single subject case designs for evaluating treatment outcomes, effectiveness of specific procedures in relation to certain populations, combined treatments, use of flooding procedures with children, gender-sensitive treatments, cultural sensitivity of cognitive behavioral therapies for specific problems, and many others. It is critical that your paper focuses on an issue related ***specifically to cognitive behavior therapy as presented in this course***. If you have any questions regarding the appropriateness of your topic, check with the instructor before submitting. Additional paper topics will be discussed in class.

A hard copy of your paper is due on or before 4:30 p.m. on the last day of class (December 6). *Papers submitted after this deadline will not be accepted for grading so please be sure to begin work on your paper early in the term and to submit it before the specified deadline.* Style and references for your paper (and reference list) should conform to the publication manual of the American Psychological Association: American Psychological Association (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

The location that is acceptable for written term assignments to be handed in is in class. Final term papers may be handed in after class or placed in the drop box outside of the Department of Psychology Office (A275) prior to the designated deadline. **E-mailed term papers will not be accepted for grading.**

### **Grading:**

Percentages below indicate the *approximate* standard required for each letter grade; some or all cutoffs may be lowered but will not be raised. In this course there will be no rounding up of final grades, especially in light of the opportunities students have to increase their final grade via bonus credit.

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

### **Reappraisal of Grades**

A student who feels that a piece of graded term work (term paper, essay, test, etc.) has been unfairly graded, may have the work re-graded as follows. The student shall discuss the work with the instructor within fifteen days of being notified about the mark or of the item's return to the class. If not satisfied, the student shall immediately take the matter to the Head of the department offering the course, who will arrange for a reassessment of the work within the next fifteen days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same.

If the student is not satisfied with the decision and wishes to appeal, the student shall address a letter of appeal to the Dean of the faculty offering the course within fifteen days of the unfavourable decision. In the letter, the student must clearly and fully state the decision being appealed, the grounds for appeal, and the remedies being sought, along with any special circumstances that warrant an appeal of the reappraisal. The student should include as much written documentation as possible.

### **Plagiarism and Other Academic Misconduct**

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct.

### **Academic Accommodation**

*It is the student's responsibility to request academic accommodations.* If you are a student with a documented disability who may require academic accommodation and **have not** registered with the Disability Resource Centre, please contact their office at 220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

### **Absence From A Test**

Make-up exams are NOT an option without an official University medical excuse (see the University Calendar). You must contact the instructor before the scheduled examination or you will have forfeited any right to make up the exam. At the instructor's discretion, a make-up exam may differ significantly (in form and/or content) from a regularly scheduled exam. Except in extenuating circumstances (documented by an official University medical excuse), a makeup exam is written within two (2) weeks of the missed exam.

A completed Physician/Counselor Statement will be required to confirm absence from a test for health reasons. The student will be required to pay any cost associated with the Physician Counselor Statement.

### **Course Credits for Research Participation**

Students in most psychology courses are eligible to participate in Departmentally approved research and earn credits toward their final grades. A maximum of one credit (1%) per course, including this course, may be applied to an individual's final grade. Students can create an account and access the Research Participation System website at <http://ucalgary.sona-systems.com>. The last day to participate in research is December 6, 2007.

### **Course Blackboard:**

An information resource, Blackboard, has been set up to access information related to this course. Blackboard can be accessed two ways:

1. myUofC [<https://my.ucalgary.ca>] with your eID.
2. blackboard.ucalgary.ca [<http://blackboard.ucalgary.ca>] with your UCIT Account.

1. my.ucalgary.ca

Once you sign on to myUofC you can access Blackboard along with the Infonet and a variety of other Campus Services

1. In your web browser, go to my.ucalgary.ca
2. If you haven't created your eID, follow the creation link under the sign on boxes.
3. Once signed on to my U of C, click the Blackboard link on the left side.

2. blackboard.ucalgary.ca

If you have an UCIT Computing Account you can use it to log on to Blackboard from the web address blackboard.ucalgary.ca. To sign up for an IT computing account, go to [www.ucalgary.ca/it/register](http://www.ucalgary.ca/it/register).

1. In your web browser, go to blackboard.ucalgary.ca
2. Log in with your IT user name and password.

If you have any questions about accessing Blackboard, please contact:

IT Support Centre

Phone: 403-220-5555

Hours: Monday – Friday 0830-1630 MDT

Email: [bbhelp@ucalgary.ca](mailto:bbhelp@ucalgary.ca)

### **Behaviour Modification Journals:**

Critical to your development in this area is the degree to which you become familiar with the techniques and empirical findings of cognitive behaviour therapy at a level of specificity that can only be found by reading articles in the scientific and professional journals. Some of the major journals in the field are listed below.

	<u>Year Began</u>
1. <i>Behavior Therapy</i>	1970
2. <i>Behavior Research and Therapy</i>	1963
3. <i>Journal of Applied Behavior Analysis</i>	1968
4. <i>Journal of Behavior Therapy and Experimental Psychiatry</i>	1970
5. <i>Behavior Modification</i>	1977
6. <i>Cognitive Therapy and Research</i>	1977
7. <i>Child and Family Behavior Therapy</i>	1982
8. <i>Cognitive and Behavioral Practice</i>	1999

The differences in the topics of articles included in each journal reflect the differing developments within the field of behavior modification. A look at the Tables of Contents of these



journals should give you some idea of these differences. Note such distinctions as subject populations, nature of techniques employed, experimental versus clinical emphasis, and theoretical versus applied content. Note also that there are many research articles dealing with behavior therapy that are contained in other journals that are not specifically identified as behavioral (e.g., *Journal of Consulting and Clinical Psychology*)

### **Recommended Books:**

You may find some of these books to be particularly useful in the development of your topical presentations and discussion questions for the lab.

Antony, M. M., & Barlow, D. H. (Eds.). (2002). *Handbook of assessment and treatment planning for psychological disorders* (2<sup>nd</sup> ed.). New York: Guilford.

Barlow, D. H. (Ed.). (2001). *Clinical handbook of psychological disorders: A step-by-step treatment manual* (3<sup>rd</sup> ed.). New York: Guilford.

Bornstein, P. H., & Kazdin, A. E. (Eds.). (1985). *Handbook of clinical behavior therapy with children*. Homewood, Illinois: Dorsey Press.

Hersen, M., & Last, C. G. (Eds.). (1988). *Child behavior therapy casebook*. New York: Plenum.

Hersen, M., & vanHasselt, V. B. (Eds.). (1987). *Behavior therapy with children and adolescents*. New York: Wiley-Interscience.

Hibbs, E. D., & Jensen, P. S. (Eds.). (2005). *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (2<sup>nd</sup> ed.). New York: Guilford.

Kazdin, A. E., & Weisz, J. R. (Eds.). (2003). *Evidence-based psychotherapies for children and adolescents*. New York: Guilford.

Kendall, P. C. (Ed.). (2000). *Child and adolescent therapy: Cognitive-behavioral procedures* (2<sup>nd</sup> ed.). New York: Guilford.

Mash, E. J., & Barkley, R. A. (Eds.). (2006). *Treatment of childhood disorders*. New York: Guilford.

Mash, E. J., & Barkley, R. A. (Eds.). (2007). *Assessment of childhood disorders* (4<sup>th</sup> ed.). New York: Guilford.

Ollendick, T. H. (Ed.). (1993). *Handbook of child and adolescent assessment*. Boston: Allyn and Bacon.

Schroeder, C. S., & Gordon, B. N. (2002). *Assessment and treatment of childhood problems: A clinician's guide* (2<sup>nd</sup> ed.). New York: Guilford.

Watson, D.L., & Tharp, R. G. (2002). *Self-directed behavior: Self-modification for personal adjustment* (8th ed.). Pacific Grove, CA: Brooks/Cole.

## Core Characteristics of Behavior Therapy

Most abnormal behavior is acquired and maintained according to the same principles as normal behavior.

Most abnormal behavior can be modified through the use of social learning principles.

Assessment is continuous and focuses on the current determinants for behavior.

A person is best described in terms of what he or she thinks, feels, and does in specific situations.

Treatment is derived from the theory and experimental findings of scientific psychology, particularly social learning principles.

Treatment methods are precisely specified, replicable, and objectively evaluated.

Innovative research strategies (single subject designs) have been developed to evaluate the effects of specific therapeutic techniques on particular problems.

Treatment outcome is evaluated in terms of the initial induction of behavior change, its generalization to the real life setting, to other aspects of the client's life situation, and its maintenance over time.

Treatment outcome is evaluated in relation to the social validity of the outcome as well as consumer satisfaction.

Treatment strategies are individually tailored to different problems in different individuals.

Extensive use is made of psychological assistants such as parents and teachers to modify problem behavior in the real life setting in which it occurs.

Behavior therapy is broadly applicable to a full range of clinical disorders and educational problems.

Behavior therapy is a humanistic approach in which treatment goals and methods are mutually contracted, rather than arbitrarily imposed.

## Behavioral versus Traditional Assessment

	BEHAVIORAL	TRADITIONAL
<u>Assumptions</u>		
1. Conception of Personality	Personality constructs mainly employed to summarize specific behavior patterns, if at all	Personality as a reflection of enduring underlying states or traits
2. Causes of behavior	Maintaining conditions sought in current environment	Intra-psychic or within the individual
<u>Implications</u>		
1. Role of behavior	Important as a sample of person's repertoire in specific situation	Behavior assumes importance only insofar as it indexes underlying causes
2. Role of history	Relatively unimportant, except, for example, to provide a retrospective baseline	Crucial in that present conditions are seen as a product of the past
3. Consistency of behavior	Behavior thought to be specific to the situation	Behavior expected to be consistent across time and settings
<u>Uses of data</u>		
	To describe target behaviors and maintaining conditions	To describe personality functioning and etiology
	To select the appropriate treatment	To diagnose or classify
	To evaluate and revise treatment	To make prognosis; to predict
<u>Other characteristics</u>		
1. Level of inferences	Low	Medium-high
2. Comparisons	More emphasis on intraindividual or idiographic	More emphasis on interindividual or nomothetic
3. Methods of assessment	More emphasis on direct methods (e.g., observations of behavior in natural environment)	More emphasis on indirect methods (e.g., interviews and self-report)
4. Timing of assessment	More ongoing; prior, during and after treatment	Pre- and perhaps posttreatment, or strictly to diagnose
5. Scope of assessment	Specific measure of more variables (e.g., of target behaviors in various situations, of side effects, contexts, strengths as well as deficiencies)	More global measures (e.g., of cure, of improvement) but only of the individual

## Film Guide - "Harry"

### *The Use of Physical Restraint as a Reinforcer, Timeout from Restraint, and Fading Restraint in Treating a Self-Injurious Man"*

#### Behind the Scenes

HARRY is a carefully documented case study illustrating the successful treatment of a 24-year-old self-abusive man by the effective use of behavior therapy. The one-to-one interaction of the patients and therapist was recorded on videotape through a one-way mirror at the Northern Virginia Training Center at Fairfax Virginia. No scenes were acted or staged. The therapist, Dr. Richard M. Foxx, narrates his treatment step by step, and overprinted time intervals set the chronology of the two-day program. The sync sound documentary record of baseline and treatment sessions plus on-camera summations and interpretations by Dr. Foxx comprise the major portion of the film. Because some of the initial self-abuse scenes are startling, previewing the film is recommended before showing it to a general audience.

#### **The Patient**

A good part of the first 24 years of Harry's life was spent in institutions because he was seriously self-abusive. As early as age 3 1/2 he wore arm restraints and a football helmet to prevent self-inflicted harm. Between the ages of 5 1/2 and 15, he was in and out of numerous schools and centers for the retarded. At 15 1/2 he was placed in an institution in southern Virginia, where he began to receive massive drug dosages for his extreme outbursts. Damaging self-abuse continued: (1) head and nose banging, (2) thigh hitting, (3) ankle kicking, and (4) arm biting. In addition to permanent disfigurement of his nose, he had inflicted a number of hematomas on his body from first blows; beginning calcification of his ankles from striking them together; and numerous scars and scabs on his arms as a result of biting himself.

Harry's major problem, besides his self abuse, was his non-compliance. Throughout his years of institutionalization he had learned to do simple mathematics and reading at about the first or second grade level. But efforts to advance him educationally or socially failed because when pressed to participate in such activities he would begin to self-abuse. His I.Q. tests placed him in the mildly retarded range, but there was a strong possibility that his I.Q. was higher, because he refused to apply himself fully during I.Q. testing.

Harry had also developed the habit of intimidating people by staring them down. Because of his size—6 feet 6 inches—this was another effective way of maintaining noncompliance when demands were placed upon him.

When he was 20, Harry was transferred from an institution in southern Virginia to the Northern Virginia Training Center in Fairfax, Virginia. Four years later, the training center asked Dr. Foxx to work with Harry.

#### **The Therapist**

Dr. Richard Foxx received his Ph.D. from Southern Illinois University. Prior to that he worked as an attendant for two years in an institution for the mentally retarded and for two years in an institution for the mentally ill. Currently he teaches in the Psychology Department at the University of Maryland, and in the Pediatrics Department of the University's Medical School. He has a private practice in Bethesda, Maryland and does consulting in institutions, schools, vocational workshops, and group homes in the U.S., Canada, and Great Britain.

Dr. Foxx has published widely on the use of behavioral programs to treat retarded and autistic children and adults, and normal children and adults with behavioral disorders. He is the co-developer of “overcorrection” and the co-author of two books. Toilet Training in Less Than a Day and Toilet Training of the Retarded. Dr. Foxx won the Research Award from the American Association on Mental Deficiency.

### **The Treatment Strategy**

Prior to determining a treatment program, Dr. Foxx suspected that Harry’s arm restraints—heavy pieces of metal strapped on to prevent self-injury—were very reinforcing or rewarding to him. He decided to use those restraints to reinforce the *absence* of self-abuse. A similar technique had been used by Judy Favell at the Western Carolina Center in Morganton, North Carolina.

The plan was to have Harry earn the restraints by not hitting himself, to increase the duration of time spent out of restraints, and eventually to make the restraints smaller and smaller until they were faded out. The plan followed the Least Restrictive Model of Treatment and included three levels of negative consequences” Level 1 would use a timeout procedure from restraints if Harry self-abused. Level 2 would use physical restraint of Harry’s entire body as a negative consequence. Level 3 would consist of brief contingent electric shock.

After obtaining parental support, administrative support, and legal clearance from the State’s Department of Mental Retardation, the treatment was begun. An ABAB experimental design (A = baseline, B = treatment) was used. The baseline consisted of 5-minute sessions in the treatment room, with no contingencies in effect for self-abuse. Following the baseline sessions, the Level 1 treatment was implemented: the reinforcement of non-self injury with the restraints, and timeout from the restraints for self-injury; then return to baseline; then final return to Level 1 treatment.

During the sessions, event and interval recording methods were used to note all instances and the frequency of Harry’s self-abuse. Interobserver reliability was conducted by videotaping each session and then having 3 observers simultaneously but independently record Harry’s self-abuse.

### **Objectives**

- understand that behavior therapy can be applied in a humanistic fashion
- see the successful application of the Least Restrictive Model of treatment to self-abusive behavior
- see how an experienced behavior therapist designs and implements behavior therapy programs
- understand that designing any treatment program begins with taking what the patient gives you
- counter the argument that behavior modification is a cold, uncaring, or mechanistic type of therapy
- recognize the importance of a therapist’s interest, sincerity, and good will
- see that consistency and commitment are required in order to effectively change behavior