# GRANDE PRAIRIE REGIONAL COLLEGE DEPARTMENT OF HUMAN SERVICES

#### HS1202 PRINCIPLES OF APPLIED BEHAVIOR ANALYSIS AND LEARNING

Winter 2007 - January 8 to April 11, 2007

Location: J204

Times: Monday and Wednesday: 10:00 - 11:20

Instructor: Marsha Zalik
Office: Room H132
Phone: 539-2709

**Email:** Please use the Blackboard email function

**Office Hours:** Tuesday: 2:00 – 3:30

Wednesday: 1:00 - 2:30

#### **COURSE DESCRIPTION:**

Formerly RP1202 this course provides students with the tools needed to design, apply and evaluate both simple behaviour change and behaviourally based instructional programs. These strategies are applied to helping people develop skills needed to improve the quality of their lives and, more specifically, to improve their participation as members of their communities. Students will be taught to develop, use, and evaluate behavior change programs. Application of assessment skills covered HS1102: Behavioural and Functional and Assessment will be required to identify appropriate goals and to assess the effectiveness of interventions.

The course will begin with a review of task analysis and introduce ecological inventories as a functional assessment tool. Principles of Applied Behaviour Analysis will be addressed next and we will conclude with an overview of general learning principles.

# **PREREQUISITES:**

RP1100: Human Services Values and Issues

RP1102: Observation and Assessment

# **CLASS FORMAT**:

This is a Web-enhanced course with extensive utilization of Blackboard.

A Web-enhanced course uses the web to supplement classroom instruction. You will need to use Blackboard for

- Course announcements
- The semester plan outlining what is to be covered in each class
- Homework and assigned reading
- Assignment guidelines
- Assignment submission and pick up
- Examples of completed assignments
- Handouts (Paper copies will not be provided.)
- Copies of PowerPoint slides from class lectures.
- Discussions.
- Links to sites on the World Wide Web

**Classes** will use a variety of formats. There will be small group work, class discussions, minilectures, and a variety of other activities designed to promote active learning of the course content.

Student participation in learning activities is vital to this course. According to Edgar Dale's (University of Texas) research, <u>WE TEND TO REMEMBER 10% OF WHAT WE READ, 20% OF WHAT WE</u>

HEAR, 30% OF WHAT WE SEE, 50% OF WHAT WE HEAR AND SEE, 70% OF WHAT WE SAY AND **90% OF**WHAT WE BOTH SAY AND DO.

Strategies promoting active learning are, therefore, critical to this course. Learners must come to classes **PREPARED**, with assigned readings and exercises thoughtfully completed, and **ON TIME** in order to be able to fully participate and benefit from classroom learning activities.

# **CLASSROOM CLIMATE**

The development and maintenance of a **CLASSROOM CLIMATE** conducive to learning is a shared responsibility. Each and every learner along with the instructor contributes. If we work together we can make our classes enjoyable and productive. Stay on topic. Avoid personal and private conversations. Ask for clarification whenever you need it. Often you'll find many of your classmates need the same clarification. Your questions will enhance your learning and the learning of others. Hard as it may be, teach yourself to leave problems and issues not related to the course at the classroom door.

# ACADEMIC RESPONSIBILITIES AND PROFESSIONALISM

Students are advised to familiarize themselves with Grande Prairie Regional College's Academic Regulations regarding Student Conduct as described on pages 43 to 47 of the College Calendar. Pay particular attention to the regulations on Cheating and Plagiarism.

The following responsibilities are highlighted as they apply directly to classroom climate.

It is your responsibility to arrive on time. Late arrivals are disruptive to classes. If you do arrive late, minimize your disruption of the class by sitting in the first available seat next to the door, taking out your materials quietly and getting to work. Do not disrupt the class by making

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your way to your usual seat or by asking classmates what you have missed. It disrupts the class's learning as attention is shifted from class content to addressing your needs. Questions asked of the instructor that would have been unnecessary had you arrived on time will not be answered during classes. Learners will be responsible for using course materials to find the information they need.

It is your responsibility to attend all classes. The importance of ATTENDANCE cannot be overemphasized. Learners cannot benefit from active learning strategies if they are not present and the class is denied the participation and input of one of their valued peers. If you must be absent from a class, it is your responsibility to obtain missed material from Blackboard and from classmates. If you need further explanation after having reviewed this material, the instructor will be available to you.

Students' grades will be reduced by one quarter of a grade for every five hours or part of five hours missed. (e.g. 'B' would be reduced to 'B-') to a maximum of one half grade (e.g. 'B+' would be reduced to 'C')

It is your responsibility to participate and request clarification. Active participation will facilitate student learning. Student responsibility for requesting clarification reflects the instructor's recognition that students are responsible for their own learning. Only you know when you need help.

#### **COURSE OBJECTIVES:**

Learners will demonstrate knowledge and application of

#### Module 1

- 1. Individualized functional assessment tools
  - a. Ecological inventories
- 2. Single-Subject Designs
  - a. AB
  - b. Changing criterion
  - c. Changing conditions
- 3. Techniques for Increasing Behavior
  - a. Rewarding Behaviour: Positive Reinforcement
  - b. Effectiveness of Reinforcers
  - c. Types of Reinforcers
  - d. Schedules of Reinforcement

#### Module 2

- 4. Techniques for Decreasing Behavior
  - a. Differential Reinforcement Strategies
  - b. Extinction
  - c. Response Cost

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  - d. Time Out
  - e. Presentation of Aversive Stimuli (punishment)
- 5. Token Economies and Contracting
- 6. Techniques for Teaching New Behaviors
  - a. Stimulus Control
  - b. Discrimination Training
  - c. Prompting and Fading
  - d. Task analysis and Chaining
    - Forward
    - Backward
    - Total Task Presentation
    - Shaping

#### Module 3

- 7. Self-Management Strategies
- 8. Techniques for Promoting Generalization of Behavior Change
  - a. Stimulus Generalization
  - b. Maintenance
  - c. Training Generalization
- 9. General Learning Principles
  - a. Authentic Learning
  - b. Learning without Labels
  - c. Stages of Learning
  - d. Mistakes as Learning Opportunities
  - e. Expectancy
  - f. Motivation
  - g. From Simple to Complex
  - h. Support

# **REQUIRED TEXT:**

Alberto, Paul A. and Troutman, Anne C. (2006) <u>Applied Behaviour Analysis for Teachers</u>, 7<sup>th</sup> ed., Columbus, Ohio: Charles Merrill Publishing Company.

NOTE: students who already have a copy of the 6<sup>th</sup> edition of the textbook need not purchase the 7<sup>th</sup> edition.)

Texts will be supplemented by other assigned readings which will be available either on Blackboard, on the World Wide Web, or on reserve in the library.

### STUDENT SUPPORT

- 1. The Learning Centre is available to help students with academic skills. In addition the Learning Centre offers a variety of workshops that focus on academic success skills. Brochures describing these sessions are available at the Learning Centre in the library. Program graduates who have attended these sessions have reported that the strategies they learned were extremely helpful and contributed to their academic success. Students are encouraged to attend these sessions. (You will be happy that you did!)
- N.Q.A. (No Questions Asked) coupons worth 5 days of extensions on assignments will be distributed early in the semester. Students are advised to use these coupons wisely. Other extensions will <u>NOT BE CONSIDERED</u>. Without N.Q.A. coupons, late assignments will not be accepted.

When submitting a late assignment include both due date and date submitted on the cover page. Attach your NQA coupon(s).

**NOTE:** Weekends, holidays and school days are ALL Included in the calculation of days late.

**3. Blackboard:** Assignments, handouts, homework, and other course materials will be available to you on Blackboard. Use of Blackboard will also increase your access to the instructor and your classmates.

#### **GENERAL ASSIGNMENT REQUIREMENTS**

Assignments must be typed on a word processor with a <u>spell check function</u>. They must be double spaced and, if hard copies are to be submitted, they must be printed on only one side of the page and have at least one inch margins. These requirements enable the instructor to return assignments in a timely manner and to provide students with meaningful written feedback. Many assignments will only be accepted electronically through Blackboard. This eliminates the possibility of instructor loss of assignments. The Alpha system will be used in grading assignments. (see GRADING).

All assignments, whether submitted electronically or in hard copy, must have a cover page with the following information.

- a. Course name and number
- b. Assignment name
- c. Your name and student number
- d. Due data (and date submitted if the assignment is late)
- e. Instructor's name

You are required to keep either a hard copy or an electronic copy of everything you submit. If an assignment goes missing the student is responsible for submitting a second copy. The instructor will not excuse assignments due to loss or misplacement.

#### STUDENT EVALUATION:

### 1. Blackboard Discussions, Reading Quizzes, Homework (35%)

In preparation for class, learners will often be asked to complete exercises and answer questions based on assigned readings and on class content. Brief reflections about the application of course material to personal life experience may also be required. Discussion questions may be posted requiring learners to post their own thoughts and to read and post responses to classmates' and/or instructor's entries.

It is expected that homework be completed **PRIOR** to the next class.

# 2. ASSIGNMENTS (35%)

# A. Self-Management Project (20%)

The Self-Management Project must target a behaviour for increase.

The project which will include:

i. identification and operational definition of a target

behaviour

- ii. rationale for targeting the behaviour
- iii. choice of design with rationale
- iv. description of baseline method
- v. report of baseline results
- vi. behavioural objective
- vii. description of intervention method
- viii. report of intervention results
- ix. discussion of the results with implications for future programming

#### NOTE:

Students who targeted a behaviour for <u>increase</u> in HS1102 may choose to follow up on the Self-Management Project begun last semester. Steps (i) - (vi) above can be drawn from last semester's assignment. It will, however, be necessary to collect new baseline data. Last semester's data is no longer current.

# B. Behaviour Change Methodology Mini-Assignments (15%)

Each mini-assignments will target one behaviour for change.

Students must complete three (3) mini-assignments, one for each of the following behaviour change goals or techniques:

a.	behaviour increase	(5%)
b.	token economy	(5%)
C.	teaching new behaviours	(5%)

#### NOTE:

These are **THEORY** assignments. You will not implement these procedures. You will not collect data. You will only <u>plan the behaviour change procedures</u>.

# 3. TESTS (30%)

There will be two tests

- module one (15%)
- module two (15%)

(Evaluation of 3<sup>rd</sup> module work will be based on the Self-Management Project, homework completion, and participation in any Blackboard discussions that may be posted.)

Any student not able to write a **test** on the date scheduled must speak with the instructor **BEFORE** the test providing reasons for not writing at that time. The instructor reserves the right to determine if the absence will be excused. A doctor's note may be required. Should it be agreed to excuse the absence, an alternate date and time will be set. A grade of **'F'** will be assigned for the test if the absence is unexcused or if the student fails to write on the alternate date.

#### NOTE:

Only <u>ONE</u> alternate writing time will be scheduled regardless of the number of students involved. Every effort will be made to schedule the alternate writing at a mutually convenient time.

Winter, 2007 **GRADES** 

Grande Prairie Regional College uses the **ALPHA** grading system. This system is outlined in the table below and in the college calendar.

Grade	4 point	Descriptor	
	equivalence		
A +	4.0	Excellent	
Α			
A -	3.7	Very Good	
		First Class Standing	
B+	3.3	3	
В	3.0		
D	3.0	0!	
	0.7	Good	
B -	2.7		
C +	2.3		
<u> </u>	2.0	Satisfactory	
С	2.0	-	
C -	1.7		
0 -	1.7		
D+	1.3		
	10	Poor	
D	1.0	1 001	
	1.0		
F	0	Failure	
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### **FINAL GRADE**

Final grades will be determined according to the following weightings using the 4 point equivalencies to the Alpha grading system.

Preparation for class:

Readings / Reading Quizzes / Homework / On-line discussions 35 %

Assignments 35 %

Tests 30 %

# **CALCULATION OF GRADES**

# **Assignments:**

1. Convert each mark to point equivalent.

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2. Calculate total possibe point equivalents.

# Total points on assignments

Total possible points

3. Multiply by weight (weight on assignments is 35%

# total points on assignments x weight Total possible points

Example:

There were 3 assignments. Assignments are worth 35% of the final grade

Total possible points is (3 assignments) x (4 possible points) = 12

Adrienne's grade on the assignments are:

B A B+

Adrienne's grades are converted to their point value (using the scale in the College Calendar):

$$B = 3.0$$
  $A=4$   $B+=3.3$ 

Adriennes total # of points: 3.0 + 4 + 3.3 = 10.3

Now apply the formula:

Adrienne's points on assignments = 
$$10.3$$
 =  $86\%$  x (weight) 35 = **30 points for assignments**.

possible points on assignments 12 .

Apply the same formula to Adriennes test mark.

Tests are worth 30% of the final grade.

Adriennes grade on tests are: 
$$A = 4.0$$
  $A = 4.0$   $A = 4.0$ 

Adrienne's total points on assignments = 
$$\frac{12}{12} = 100\%$$
 x (weight)  $30 = 30$  points for tests.  
Total possible points  $12 = 100\%$  x (weight)  $10 = 30$  points for tests.

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Apply the same formula to Adriennes homework mark.

Homework is worth 35% of the final grade.

Adrienne completed all homework to criterion.

Adrienne's points on homework = 
$$\underline{4}$$
 = 100% x (weight) 35 = **35 points for homework**.

total possible points on homework = 4

# Adriennes total mark is the sum of all the marks above

(Assignments) 
$$30 + (Tests) 30 + (homework) 35 = 95$$
 =  $95\%$  (Assignments)  $35 + (Tests) 30 + (homework) 35 = 100$ 

Adrienne's final grade in the course is 95% = A+

# RP1202 APPLIED BEHAVIOUR ANALYSIS AND LEARNING TENTATIVE CLASS SCHEDULE - WINTER 2001

 $<sup>6^{</sup>th}$  edition page number are indicated in italic type.

DATE	TOPIC	READING	TEST/ ASSIGN
Jan.8	Course outline and overview Individualized Functional Assessment:  Ecological Inventories	Course outline	
Jan.10	SNOW DAY		
Jan. 15	Individualized Functional Assessment  ➤ Ecological Inventories  Single Subject Designs  ➤ Variables and Functional	Blackboard readings	
	Relationships > AB design	119-120; <i>168-</i>	

<sup>7&</sup>lt;sup>th</sup> edition page numbers are indicated in plain type.

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	<ul><li>Changing Conditions Design</li></ul>	169 124-128; 175- 179 128-137; 209- 216	
Jan. 17	Functional Assessment and Analysis  Behaviour and function  Behaviour support plan	230 170-176; 230- 238 177-184; 238-	
		247	
Jan. 22	Behaviour support plan, cont.	185-191 <i>247- 256</i>	
	<ul> <li>Functional analysis</li> <li>Single subject         designs required</li> <li>Reversal</li> </ul>	190-191 <i>254-</i> <i>256</i>	
	design  • Alternating	128-132 <i>179-</i>	
	Treatments Design	148-155 <i>203-</i>	
	<ul> <li>Functional Analysis procedures</li> </ul>	191-198 <i>256-</i> <i>258</i>	
	<ul><li>Develop Behaviour</li><li>Support Plan</li></ul>	198-207 <i>264- 275</i>	
Jan. 24	Increasing Behaviour  Reinforcement & Positive reinforcement (SR+)	212-225 <i>282-</i> 298	
Jan. 29	Increasing Behaviour, cont.  > Schedules of reinforcement	243-247 <i>320-</i> <i>324</i>	
Jan. 31	Increasing Behaviour, cont.  Thinning schedules  Negative Reinforment(SR-	247-249 325- 328	
	) Natural Reinforcement	250-254 <i>328-</i> <i>333</i>	
Feb.5	Catch up	254 233	Mini Assignment 1 Increasing Behaviour

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Feb. 7	General Learning Principles	Galambos: 118 -122 122 -127	
Feb. 12			Unit 1 Test
Feb. 14	Decreasing Behaviour  Procedural alternatives  Level 1  DRL	260-262 <i>342-</i> <i>344</i>	
	• DRO	262-264 <i>344- 347</i>	
		264-267 <i>347- 350</i>	
Feb. 19	FAMILY DAY		
Feb. 21	WINTER BREAK		
Feb. 26	Decreasing Behaviour  Level 1,cont  DRA and DRI	267-270 351-	
	<ul> <li>Noncontingent reinforcement</li> </ul>	354 270-272 356 354-	
Feb. 28	Decreasing Behaviour  Level 2: Extinction  Punishment	272-278 <i>357-</i> <i>364</i>	
	<ul><li>Level 3 (P-).</li><li>Response Cost</li><li>Time Out</li></ul>	278-279 <i>364-</i> <i>365</i>	
	Procedures	279-281 <i>365</i> -368	-
		281-287 <i>368-</i> <i>375</i>	
Mar.5	➤ Level 4 (P+)  • P+: Aversive stimuli	287-294 <i>375-</i> <i>383</i>	
	<ul> <li>Overcorrection</li> </ul>	294-298 <i>383-</i> <i>388</i>	
Mar. 7	Token Economies Contracting	225-233 <i>298-</i> <i>308</i>	
	_	235-238 <i>310-</i> <i>314</i>	
Mar. 12			Mini-

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Mar. 14	Teaching self-control  ➤ Self-recording	362-365 478	474-	
	<ul><li>Self-evaluation</li><li>Self-reinforcement</li></ul>	365-368 481	478-	
	<ul><li>Self-punishment</li><li>Self-instruction</li></ul>	369 482	481-	
	<ul><li>Learners with disabilities</li></ul>	369-372 486	482-	
		373-374 488	486-	
		374-377 492	488-	
		377-379 494	492-	
Mar. 19	Catch up			Mini- assignment 3
Mar. 21				Test Unit 2
Mar. 26	Antecedent Influences  Differential reinforcement / Stimulus control / Discrimination / Discrimination Training	304-308 406	402-	
Mar. 28	Teaching New Behaviours:  Prompts Rules Instructions Hints Self operated Visual	308-313 411	406-	Mini- assignment 3
Apr. 2	<ul> <li>Prompts, cont.</li> <li>Modeling</li> <li>Physical guidance / Tactile prompts</li> </ul>	313-334 <i>413</i> 314-315	411- 413-	
	<ul><li>Fading Prompts</li><li>Decreasing</li></ul>	414	-	
	assistance / Graduated	315-318 <i>417</i>	414-	
	guidance  Time delay	318 418	417-	

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	<ul><li>Increasing assistance</li></ul>	319 <i>419</i>	418-	
	■ Effectiveness	319-322 422	419-	
Apr. 4	Teaching Complex Behaviours:  Task Analysis	322-325	423-	Self- management
	> Chaining	426	723	project
		325-330	426-	
		430		
Apr. 9	Shaping	330-334	431-	
	Generalization	435	110	
	> Types	338-340 443	440-	
		340-342	443-	
		445		
Apr. 11	> Procedures	342-358	445-	
		466		

Let's have a fabulous semester full of learning, laughter and success!