Learning Outcomes
In completing the self-management project, you will:

1. Apply the principles and procedures of behaviour modification, which will help you learn and remember foundational knowledge in the course.
2. Develop your scientific research, data visualization, and written communication skills, which are important abilities to have in university and are highly valued by employers and graduate schools.
3. Engage in a unique experiential learning activity that is beyond the scope of the lectures.
4. Improve your life by changing a behaviour that is important to you.

Requirements
Each part of the project must be submitted online using eClass. Answers to each part of the assignment must not exceed 400 words (approximately the equivalent of one double-spaced page), or you will be penalized 1 mark. Use complete sentences; do not use point form. It is your responsibility to ensure that your assignment has been properly submitted. You should receive a confirmation email from eClass as soon as your submission is successful. Assignments submitted without appropriate data (when required) will be considered incomplete, and will be penalized for lateness if not submitted with data on time. Keep a copy of your answers to each part of the assignment on your computer: in the final part, you will be asked to submit your answers to all five parts.

Marks
Each assignment consists of a number of questions. Some assignments also require a line graph, which is worth additional marks. Marks are assigned based on the completeness, relevance, and specificity of your answers. If your answer is incomplete, irrelevant, vague, or is lacking detail, marks will be deducted. Half-marks are assigned at the discretion of the teaching assistant. A scoring rubric is attached to the end of this document.

Do not copy your answers to the questions from any other source (e.g., journal article, textbook, lecture notes, website, etc.). This is plagiarism; you will receive a mark of zero, and you will be prosecuted under the terms of the Code of Student Behaviour.

Due Dates & Late Policy
Each assignment must be submitted by the end of class time (not at midnight) on the day in which it is due, or it will be considered late. Late assignments will lose 1 mark per 24-hour period, starting immediately after class is over. That is, if you submit your assignment 1 minute after class is over, you will lose 1 mark. If you submit your assignment 23 hours and 59 minutes after class is over, you will still lose only 1 mark. But if you submit your assignment 24 hours and 1 minute after class is over, you will lose 2 marks.

⚠️ If you edit or make any changes to your eClass submission in any way after the due date, you will receive a late penalty.

Do not email assignments to the instructor or the TA. Late (or early) assignments may be submitted via eClass. However, after 6 days past the due date, you will no longer be able to submit your assignment online. If you have exceptional extenuating circumstances (e.g., you cannot submit your assignment because your arms have fallen off, or you were abducted by aliens), please contact the instructor.
Exit Protocol
Should you begin, but be unable to complete the self-management project (e.g., your target behaviour is exercise and you injure your knee), or if you have ethical concerns about your project, stop your treatment plan immediately and contact the instructor.

Research
Parts II and IV of this project require doing secondary research; that is, finding, evaluating, and briefly summarizing primary research articles that support your position. Do not take this lightly—doing research is an important scientific skill (also, marks are assigned based on the quality of evidence that you provide). A powerful tool that can help you find appropriate research is the PSYCInfo® database (here is a library guide); however, many behaviour modification-specific articles are indexed by PubMed® and PubMed Central®. To help guide you through the research process, the University of Alberta Library’s Psychology subject guide is recommended. The research process will also be explained in more detail in lectures.

APA Style
You may be familiar with Modern Language Association (MLA) style, often used for high school or English papers. Style guides are about the design of documents, and the mechanics of writing, such as punctuation, quotation, and documentation of sources. However, many psychology papers and scientific journals require American Psychological Association (APA) style. APA style specifies things like fonts, spacing, margins, etc., but more importantly explains how to support claims with evidence, and how to clearly differentiate between your ideas and those of others—this helps to prevent plagiarism.

If you have drawn on an outside source of information (e.g., an article in a scientific journal) to support a claim you make, you must cite it and provide a complete APA style reference. This is an example of an APA style in-text citation: (Achterberg et al., 1981). This is an example of an APA style reference: Achterberg, J., McGraw, P., & Lawlis, G. F. (1981). Rheumatoid arthritis: A study of relaxation and temperature biofeedback training as an adjunctive therapy. *Biofeedback and Self-Regulation, 6*(2), 207-223. [https://doi.org/10.1007/bf00998870](https://doi.org/10.1007/bf00998870)

Some elements of APA style will be covered in lectures. Here are some more APA style resources:
- American Psychological Association’s [APA style website](https://apastyle.apa.org/) (including Handouts and Guides and their blog)
- Purdue Online Writing Lab’s overview and information on [APA formatting and style](https://owl.purdue.edu/owl/research_and_citation/university_of_apa/university_of_apa.html)
- University of Alberta Library’s [APA Citation Style subject guide](https://library.ualberta.ca/subject_guides/apa-citation-style)

Note: Not all parts of the assignment require citations to relevant research. Also, to submit some parts of the assignment, you will use a text box in eClass, which does not permit certain kinds of APA formatting (e.g., fonts, double-spacing, margins, hanging indents, title page, etc.) so these will not be required.

Alternate Assignment
If you have a compelling reason not to do this self-management project, an alternate assignment may be provided. You must make arrangements with the instructor before Part I of the assignment is due.

Technical Support
“Technical problems” will not be accepted as an excuse for a late or incomplete assignment. IST eClass Support has [eClass for Students](https://library.ualberta.ca/eClass) tutorials, ranging from System Setup, to Submitting Assignments. For help with eClass, see IST’s [eClass support knowledgebase](https://library.ualberta.ca/eClass) or contact IST eClass support. For other IT problems, contact IST.

It is strongly recommended that you make backups of your answers to each assignment part (and your data). “My computer crashed” is not an acceptable excuse for a missing, incomplete, or late assignment.
Target Behaviour

In this assignment, you must decide on the behaviour you wish to change. (For the purposes of this self-management project, it is assumed that you will be managing your own behaviour, and that you will be using direct assessment and continuous recording.) There are two kinds of behaviour change: Decreasing an undesirable behaviour, and increasing a desirable behaviour.

Below are some examples of undesirable behaviours that you may wish to extinguish or weaken. You are not required to choose one of these; you are encouraged to come up with a unique, personally relevant target behaviour! Choose a behaviour that you typically perform on a daily (not weekly) basis.

• eating snacks/junk food
• smoking
• being a shopaholic (however, Compulsive Buying Disorder is a psychological disorder--see below)
• watching television, web surfing, or checking social media
• biting your nails or pulling your hair
• avoiding social situations

Here are some examples of desirable behaviours that you may wish to establish or strengthen:

• eating healthy food
• being punctual
• saving money
• studying
• exercising
• talking to new people

For example, you may wish to spend less time on your Xbox (decreasing an undesirable behaviour) and spend more time studying (increasing a desirable behaviour). For the purposes of this assignment, you must designate one of these as your target behaviour--not both. Choose the behaviour that is most important to you to change.

⚠️ Blacklist: For ethical reasons, you may not choose a target behaviour dealing with any of the following:

• another person’s behaviours (this is a self-management project)
• animals (e.g., an assistance dog, therapy animal, pet orangutan, etc.)
• anything that contravenes the Code of Student Behaviour
• any illegal activity, or any behaviour involving illegal substances (e.g., illicit drugs, plutonium, etc.)
• illicit drugs, alcohol, herbal remedies, or prescription medications
• behaviours of a sexual nature
• abuse or neglect
• infringing on another’s human rights
• time travel
• weight loss (this is not a behaviour; neither is “getting rich” or “being an Instagram influencer”)
• any dental, medical, or psychological treatments
• phobias or psychological disorders (e.g., anxiety, depression, eating disorders, etc.)
• medical conditions (e.g., heart disease, diabetes, happy puppet syndrome, etc.)

(If you believe that you have a serious medical or psychological problem, please seek appropriate help in addressing it. Resources on campus include University Health Centre, Counselling & Clinical Services, and Peer Support Centre.)

Be careful to choose voluntary behaviours (e.g., going to bed), not autonomic responses (e.g., sleep).
**Behavioural Treatment Program**

Your behavioural treatment program must be based on the principles and procedures that you learn in this course. Essentially, self-management can be done using two kinds of manipulations. You can change the antecedents that evoke a behaviour, or change the consequences that follow a behaviour. These procedures can be applied either to increase a desired behaviour, or to decrease an undesired behaviour. (Some, more complex procedures, do both.)

The following examples of behaviour change procedures are explained in the textbook (Miltenberger, 2016). These procedures may not necessarily be covered in the lectures or the assigned readings by the time your treatment plan is due to be submitted, but you are strongly encouraged to read ahead:

**Antecedent manipulations:**
- Present discriminative stimulus ($S^D$) or cues for the desirable behaviour
- Eliminate $S^D$ or cues for the undesirable behaviour
- Arrange establishing operations (EOs) for the desirable behaviour
- Present abolishing operations (AOs) for the undesirable behaviour
- Decrease response effort for the desirable behaviour
- Increase response effort for the undesirable behavior

**Consequence manipulations:**
- Provide reinforcers for the desirable behaviour
- Eliminate reinforcers for the undesirable behaviour
- Eliminate punishers for the desirable behaviour
- Provide punishers for the undesirable behaviour

Although you may use more than one of these manipulations at the same time to increase effectiveness, this can result in a more complex behavioural treatment program.

You are not required to perform a functional analysis of your behaviour in this project.

You may not apply formal psychotherapy (e.g., flooding, CBT, etc.).

**The Fine Print**

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence.

Academic dishonesty is a serious offence and can result in suspension or expulsion from the University. These resources from Student Conduct and Accountability, and the University of Alberta Library can help:
- **Academic Integrity: Introduction to Academic Culture** - videos on citing, quoting, summarizing, and paraphrasing
- **Plagiarism** - plagiarism definition, and tips for avoiding plagiarism
- **Foundational Research Tutorial: Plagiarism** - video on plagiarism with examples
- **Citing, Quoting, Paraphrasing & Summarizing** - how-to document from the UAlberta Centre for Writers
- **Don’t Do It (Cheating & Plagiarism)** - Faculty of Science document on academic misconduct and resulting penalties
Assignments

Part I: Target Behaviour (6 marks) -- due Monday, September 13
Decide on the target behaviour that you would like to change.

1. What is your target behaviour? Be sure that it is clearly and fully defined, and that there are no loopholes. Is this an undesirable behaviour that you wish to decrease, or a desirable one that you wish to increase? Do not justify your choice of behaviour yet; you will do this in Part II: Ethics. Do not give your behavioural goal yet; you will provide this in Part IV: Treatment Plan. (3 marks)

2. What dimension of your target behaviour are you going to record (e.g., frequency, latency, duration, etc.)? Note that some behaviours require more than one dimension to be fully captured. Briefly explain why you chose your dimension. Provide an operational definition--How will you measure and/or record the dimension of your target behaviour? Keep in mind that you will have to record and graph each dimension in Part III: Baseline Phase and Part V: Treatment Phase. (3 marks)

Submit this assignment using the text box in eClass. Clearly indicate (and separate) your answers to questions 1 and 2. (Keep a copy of your answers; you will need them in subsequent assignments.) The text box will accept a maximum of 400 words.

Part II: Ethics (7 marks) -- due Monday, September 27
Justify your choice of target behaviour by supporting it with evidence.

1. Provide evidence that changing your target behaviour is beneficial. Cite and briefly summarize one research article supporting your choice of target behaviour. Provide one properly formatted APA style reference to a primary source (a peer-reviewed research article) or high-quality secondary source (a systematic literature review or meta-analysis), not a random website, magazine article, or something else that Google barfed up. If you cannot find evidence that your target behaviour is beneficial (e.g., “exercise is good”), then you may provide evidence that not doing your target behaviour is harmful (e.g., “not exercising is bad”). (6 marks)

2. What are the downsides to modifying your target behaviour? What is the potential harm to you or to other people (for example, in applying punishment to reduce an undesirable behaviour)? If you are planning to exercise more or change your diet, have you consulted with and received approval from your physician? Consider potential unintended consequences or perverse incentives. No citation/reference is required for this question. (1 mark)

Submit this assignment using the text box in eClass. Include your answers to Part I of your self-management project when submitting Part II, making any changes to Part I as required. It is not possible to apply certain aspects of APA style in the text box (e.g., fonts, spacing, margins, hanging indents, title page, etc.), and are thus not required. If you are copying and pasting your answers from your word processing app into the eClass text box, be aware that eClass may remove your formatting. You are responsible for ensuring that all APA style formatting is correct (e.g., journal title and volume number are italicized, etc.). The text box will accept a maximum of 800 words (i.e., up to 400 words for your answers to Part I plus up to 400 words for your answers to Part II).
Part III: Baseline Phase (8 marks) -- due Monday, October 18
Collect and record baseline data in an ABC observation data sheet for 14 consecutive days. Do not fill out your data sheets at the end of the observation period; each response should be recorded as soon as possible after it occurs. You may modify the data sheet as required; you may also use an ABC observation checklist (see textbook chapter 13); also see the online links (there are links to help with graphing, as well). Along with your answers to the questions below, include a one-page sample of your data sheet. You must include this, or your submission will be considered incomplete and will not be marked until you submit it; late penalties will apply.

Create a line graph of your behaviour. Each target behaviour dimension you are recording requires a separate graph. (No phase line or phase label are required in your baseline graph.) (2 marks)

1. What is the one most important antecedent of your target behaviour, in general? For example, what stimulus, situation, location, or time of day evokes your target behaviour? (If your target behaviour never occurs during baseline, consider an antecedent of one behaviour that occurred instead of it. For example, feeling tired, then checking social media instead of studying.) You must fully categorize the antecedent into its types, as described in lectures. (3 marks)
2. What is the one most important consequence of your target behaviour, in general? That is, what is the function of your target behaviour? For example, what consequence is maintaining your undesirable behaviour? (If your target behaviour never occurs during baseline, consider a consequence of one behaviour that occurred instead of it. For example, checking social media makes you feel relaxed.) You must fully categorize the consequence into its types/subtypes and forms as described in lectures. (3 marks)

Submit this assignment by uploading a single file in eClass. eClass will only accept these document file types: Microsoft Word (.doc and .docx), Portable Document Format/Adobe Acrobat (.pdf), OpenDocument Text/LibreOffice (.odt), or Google Docs (.gdoc). NOTE: Apple Pages (.pages) files are not accepted. Remember to include your answers to Part I again as well. Your answers to Part III must not exceed 400 words.

Part IV: Treatment Plan (8 marks) -- due Friday, November 5
Decide on a single behaviour change procedure to apply to your target behaviour.
1. What one specific treatment or behaviour change procedure (e.g., which antecedent control procedure, subtype of reinforcement, etc.) do you plan to apply to your target behaviour? Describe how you will apply this in general to your target behaviour, and explain why you chose this procedure. (3 marks)
2. Provide support for your decision by briefly summarizing, citing, and referencing (in APA style) a primary source (research paper) that supports your choice of treatment. It would be ideal to find a published study applying the specific behaviour change procedure you selected to your specific target behaviour, but this may be difficult to find. The next best thing would be to find a published study that has successfully applied the behaviour change procedure that you will be using (e.g., increasing response effort for an undesirable behaviour) to some other target behaviour. (4 marks)
3. What is your behavioural goal for your target behaviour? That is, describe what level you would realistically like your behaviour to reach by the end of the treatment phase. (1 mark)

Submit this assignment using the text box in eClass. Include your answers to Part I again. The text box will accept a maximum of 800 words (400 words for Part I, and 400 words for Part IV).
Part V: Treatment Phase (9 marks) -- due Monday, November 29
Implement the behaviour change procedure that you chose in Part IV. Collect and record treatment data for 14 consecutive days. Along with your answers to the questions below, include a one-page sample of your treatment phase data. You must include this, or your submission will be considered incomplete and will not be marked until you submit it; late penalties will apply.

Create a line graph of your behaviour, including baseline and treatment phases. Each target behaviour dimension you are recording requires a separate graph. (3 marks)

1. Was your self-management successful? That is, did you meet the behavioural goal you described in Part IV? Was there a clear change in your target behaviour from the baseline to the treatment phase? Explain what changed. (If there was no change, discuss a possible reason why.) (3 marks)

2. How would you change your treatment if you were to continue this self-management project, and why? For example, would you implement an A-B-A design, or A-B-C, and why? Or, how would you promote generalization or maintenance? Or fading? Just give one proposed change. Briefly explain your rationale for the procedure you chose. (3 marks)

Submit this assignment by uploading a single file in eClass. Also, include all your answers to Parts I-IV. Do not resubmit your baseline data sheet. Do not resubmit your graph from part III. Your answers to Part V must not exceed 400 words.
Scoring Rubric

This rubric is intended to provide a general sense of how student answers are differentiated, scored, and resulting marks awarded. Due to the huge variability of project topics and approaches, it is impossible to provide specific guidelines for how each question is marked. Therefore, this rubric is provided not as the final word on marks, but for information purposes. If there is any discrepancy between this rubric and the marking guide, the marking guide will supersede this rubric.

Part I: Target Behaviour (3+3 marks)
If your behaviour is on the not-permitted list, your mark for this part will be zero.
1. Complete, precise behavioural definition at an appropriate level of detail: 1 mark.
   Behavioural definition has no loopholes: 1 mark.
   Nature of behaviour and direction of behaviour change specified: 1 mark.
   Behavioural goal is included: -1 mark.
2. Appropriate dimension(s) of target behaviour, correctly applied: 1 mark.
   Appropriate terminology, correctly applied: 1 mark.
   Appropriate operational definition, correctly applied: 1 mark.

Part II: Ethics (4+2+1 marks)
1. Providing and summarizing one article of high-quality empirical evidence (primary source, review, or meta-analysis) that appropriately justifies the target behaviour.
   Source is inadequately or not appropriately summarized: -1 mark.
   Providing weak or poor quality evidence (e.g., secondary source, or conclusion is made about cause and effect from a correlational study): -1 mark.
   Source does not support target behaviour: -1 mark.
   Providing irrelevant or inappropriate evidence: 0 marks.
   Source is cited in correctly formatted APA style: 1 mark
   Source is provided in correctly formatted APA style reference: 2 marks. (Deductions will be applied for violations of APA style.)
2. Fully considering downsides, unintended consequences, and/or perverse incentives: 1 mark.
   Incomplete assessment of downsides or risks: 0 marks.
   Lack of consultation with physician, and/or lack of healthcare assessment (if applicable): 0 marks.

Part III: Baseline Phase (2+3+3 marks)
No data provided: 0 marks for all of Part III.
All appropriate components of line graph are included: 2 marks.
Components of graph missing: -½ mark each.
1. Clear description of antecedent conditions, using all appropriate terminology: 3 marks.
   General description of antecedents lacking: -1 mark.
   Types of antecedent conditions not specified: -1 mark each.
   Vague, incomplete, or inappropriate descriptions of antecedents: 0 marks.
2. Clear description of consequences; type and form specified using appropriate terminology: 3 marks.
   General description of consequences lacking: -1 mark.
   Type/subtype of consequences not specified: -1 mark.
   Form of consequences not specified: -1 mark.
   Vague, incomplete, or inappropriate descriptions of consequences: 0 marks.
Part IV: Treatment Plan (3+2+2+1 marks)
1. Describing specific treatment plan applied correctly using appropriate terminology, with supporting explanation: 3 marks.
   Inappropriate behaviour change procedure, or incorrectly applied: -1 mark.
   No terminology provided, or incorrectly used: -1 mark.
   No explanation or rationalization of treatment plan: -1 mark.
   Vague, incomplete, inappropriate, or incorrect description of treatment plan: 0 marks.
2. Appropriate application of behaviour change procedures to target behaviour, supported by description of relevant source cited in APA style: 2 marks.
   Source is inadequately or not appropriately described, or is not a primary research article: -1 mark.
   Source is not cited in APA style: -1 mark.
   Providing irrelevant or inappropriate evidence: 0 marks.
   Source is provided in correctly formatted APA style reference: 2 marks. (Deductions will be applied for violations of APA style.)
3. Description of achievable behavioural goal stated in terms of the target behaviour and measure: 1 mark
   Goal is lacking quantitative measure: -½ mark.
   Goal is inappropriate, not measurable, or does not match dimension(s) of target behaviour: -1 mark.

Part V: Treatment Phase (3+3+3 marks)
No data provided: 0 marks for all of Part V.
All appropriate components of line graph are included: 3 marks.
Components of graph missing: -½ mark each.
1. Correct and appropriate assessment of goal and behavioural change: 3 marks.
   Lack of appropriate assessment of behavioural change: -2 marks.
   Lack of correct assessment of goal: -1 mark.
   Incorrect or missing assessments of goal and behavioural change: 0 marks.
2. Correct, specific application of procedures of generalization or maintenance, or other appropriate principle of behaviour modification: 3 marks.
   Application of behaviour modification procedures, but lacking appropriate terminology: -1 mark.
   Incorrect, vague, or incomplete application of behaviour modification procedures: -2 marks.
   Lack of appropriate application of behaviour modification: 0 marks.