Learning Objectives
In completing this project, you will:
1. Apply the fundamental principles of interaction of affordances/constraints, signifiers, feedback, mapping, and conceptual model (Norman, 2013) to a case study, which will help you learn and remember foundational knowledge in the course.
3. Further develop your scientific research and writing skills, which are important abilities that are highly valued by employers.
2. Engage in a unique experiential learning activity in human factors, ergonomics, and design that is beyond the scope of the lectures.
4. Have some fun!

Introduction
Grant MacEwan University’s City Centre Campus (10700 - 104 Avenue NW), designed by Barry Johns Architects, Wood O’Neill Architects, and Wensley Spotowski Architects, opened on May 16, 1993. It has been described by many casual visitors as “a nice place.” Critically evaluate this statement in terms of the principles of Natural Design presented in class and in the readings.

Walkthrough
Follow the walkthrough below. Be sure to describe how easy or difficult it is to find each of the locations below, and explain why. (If you are familiar with the campus, go with someone who is unfamiliar with it, and have them do the walkthrough while you “shadow” them.)

Imagine you are a student here. You have just arrived on campus.
• Give the pros and cons of parking/taking the bus/taking the LRT.

It’s time for your first class, a psychology lab, in room 5-177.
• How well does the signage aid you in finding this room?

A friend texts you and asks you to meet at the campus pub, Towers (also called Towers on Fourth). Before you can ask directions, your battery dies.
• Where is the entrance, and what is the room number? What does its name refer to?

Now you have to do some research for one of your classes, so you decide to go to the library.
• Where is the library? What is its actual name?

Next, you want to one ask of your instructors some questions, so you go to their office in 6-392.
• Briefly describe the steps you took in getting to this office. Whose office is this?
You are having problems with your student logon, so you decide to seek help from Information Technology Services (ITS) in 7-306.

- How easy is it to get from 6-392 to 7-306? Were you able to take the route you expected, based on your understanding of the layout of rooms in the buildings?
- It turns out that ITS is no longer in this location. What is office 7-306?

The staff in 7-306 tell you that you actually need to go to “Technology Support” to get help. They look it up and tell you the room number is 6-209.

- Where is room 6-209?

You have a seminar in the Kate Elizabeth Stollery Nursing Wing.

- Go to a map, and try to find this location. Where is it located? (Does it even still exist?)
- Along the way, make note of the vending machines. How do you pay—student card, credit card, app, bills, or change? Are there change machines close to any machines that take only change?

Finally, to relax you visit the John and Maggie Mitchell Art Gallery in Allard Hall.

- If it is open, give the name of one of the artworks. Alternatively, what colour are the couches outside the gallery?
- If you look out the windows to the north, you can see building R. What is it? For that matter, what is building 10 (also named “University Service Centre”)?

In your write-up, make sure that you address these specific issues:

- What do the room numbers (e.g., “6-392”) mean?
- How does a room number correspond to the physical location of the room on each floor?
- Are there any issues with maps/directories? (e.g., the Main Directory just north of the cafeteria.)
- What is the designer’s conceptual model for the design and layout of the campus?

**Submitting Papers**

Your applied project write-up is due by the end of class on Thursday, February 13. You are required to hand in a paper copy, and submit an electronic copy via eClass. Both copies must be identical. The paper copy should be handed in during class on the due date. To avoid late penalties, at least one copy (paper or electronic) must be handed in before the deadline.

**Late Policy**

Paper copies of late write-ups must be handed in to the Department of Psychology office (BS P217, open 8:30-12:00 and 1:00-4:30); electronic versions may be submitted late via eClass. Late assignments will lose 10% 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 10%. If you submit your assignment 23 hours and 59 minutes after class is over, you will still lose only 10%. But if you submit your assignment 24 hours and 1 minute after class is over, you will lose 20%.

**Alternate Assignment**

If you have a compelling reason that prevents you from doing the walkthrough (e.g., you are banned from Grant MacEwan University, or you have an allergy to the large towers on the City Centre Campus), you must contact the instructor as soon as possible. You will be given an alternate assignment of comparable scope to the applied project.
Write-Up
The body of your paper must be at least 5 full pages long, but not longer than 10 pages. You may use the first person (“I”) in your write-up. Otherwise, you must write and format your paper in APA style. No abstract is required. A marking rubric is included attached at the end of this document.

The walkthrough is not intended to dictate the structure of your write-up. You may organize it any way you like, but you must address the goals of this assignment—do not just answer the questions in the walkthrough. A significant portion of the marks for your write-up will be given to your critical evaluation of the design of the campus, based on the principles of Natural Design presented in class and in Norman’s (2013) book, The Design of Everyday Things (Revised and expanded edition).

APA Style
You may be familiar with MLA (Modern Language Association) style, often used for high school papers. (MLA style is about the mechanics of writing, such as punctuation, quotation, and documentation of sources.) However, psychology term papers and professional journal articles require APA (American Psychological Association) style, updated to the 6th edition. APA style dictates fonts, spacing, margins, etc. It also explains how to cite, in the appropriate format, all sources of information—otherwise, you are claiming those ideas as your own (i.e., plagiarism); and how to reference all cited sources at the end of the paper.

The University of Alberta Libraries have an APA Citation Style Guide; there are also more links to resources in the term paper document. Or see the recommended readings for the course: A Short Guide to Writing About Psychology, 3rd edition (2011), and Publication Manual of the American Psychological Association, 7th edition (2020).

Critical Questions
Come up with two different critical questions about problematic design of the City Centre Campus, and answer them (i.e., propose a redesign) using what you have about Natural Design. For example:

• Consider your typical day as a student: What amenity is lacking or particularly difficult to find?
• Consider the typical day for a person who is differently abled: What aspect of the design makes it challenging for someone who has a disability to use the campus?

Place these questions in a separate section from the walkthrough. To receive marks for these critical questions, you must not repeat what you did for the rest of the walkthrough (e.g., “I tried to find another classroom/office” or “I tried to find the RGO Collaboration Centre”).

The Fine Print
The University of Alberta is committed to the highest standards of academic integrity. 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 Libraries can help:

• Academic Integrity: Introduction to Academic Culture - videos on citing, quoting, summarizing, and paraphrasing
• Plagiarism - plagiarism definition, and tips for avoiding plagiarism
• Citing, Quoting, Paraphrasing & Summarizing - how-to document from the UAlberta Centre for Writers
• Foundational Tutorials: Citing - interactive tutorials on citing, plagiarism, and paraphrasing, with examples

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PSYCO 494
Human Factors and Ergonomics
Applied Project Marks

Student name: __________________________ OVERALL MARK: _______/100

General presentation: _______/10 (spelling, grammar, etc.)
    comments:

APA style: _______/10 (title page, margins, citing, references, etc.)
    comments:

Walkthrough: _______/10 (give a brief description)
    comments:

Critical questions: _______/20 (10 each; 5 for listing an issue, 5 for “solving” or interpreting it)
    comments:

Application of natural design principles: _______/50
    affordances/constraints: _______/10
        comments:

    signifiers: _______/10
        comments:

    feedback: _______/10
        comments:

    mapping: _______/10
        comments:

    conceptual model: _______/10
        comments: