

The official prerequisite for this course is PSYC 532 (GLM: Univariate). If you have not completed this introductory course (or a comparable course such as PSYC 400A), please contact me to discuss your background. I would be happy to provide suggestions for supplementary reading material.

This graduate course on select multivariate applications of the GLM (factor analysis, structural equation modeling, repan 1D 2 BDC EMC /Span 4Lang (en-US)/MCID 3 BDa/TT0gac3 612 792 reW*nBT/TT0 12 7

You are personally responsible for checking your registration status before the end of the course-add period (Wednesday, January 26, 2022). Please verify and confirm your registration status with me as, according to University policy, I am unable to facilitate a course addition after this date even if you have been attending class. Also note that Monday, February 28, 2022 is the last day for officially withdrawing from PSYC 533 without academic penalty. University policy states that failing to attend lectures does not constitute official withdrawal.

Evaluation of your progress toward the course objectives will be based upon several graded requirements including: (a) in-class and take-home *practical assignments*; and (b) two written *take-home examinations*.

(a) Practical Assignments

Each assignment will be *completed in groups of 3* to foster collaboration and collective learning. The number of assignments and their associated due dates will be determined according to weekly progress in covering the conceptual material. Approximately **4-5 assignments** will be distributed across the entire term. Each brief assignment will be due **ONE WEEK** after it has been distributed in class.

The purpose of each assignment is to have you gain experience in computing analyses and interpreting results for a given multivariate technique. Assignment questions are constructed to

5	Mon., Feb. 7	<ul style="list-style-type: none"> • CFA Data analysis examples 	_____
	Thu., Feb. 10	<ul style="list-style-type: none"> • Model specification and identification • Evaluation and model fit • Model comparisons 	<ul style="list-style-type: none"> • Klem (1994)

6 Mon., Feb. 14

There is no required textbook for this class. In part, this decision reflects the diversity of analytic topics that we will cover and the fact that no single multivariate text provides sufficient coverage of these techniques. In lieu, I have carefully identified select chapters and articles that overview a given week's theme and that provide the foundation for group discussions, practical demonstrations, assignments, and take-home exams. Each article identified below represents a core reading for a given week's theme that I may supplement with additional suggested readings. Please note that this is a *tentative reading list* that will most likely evolve.

JANUARY 10 & 13

Introduction and GLM Overview

Required Reading:

Rodgers, J. L. (2010). The epistemology of mathematical and statistical modeling: A quiet methodological revolution. *American Psychologist*.

Secondary Readings:

Judd, C. M., McClelland, G. H., & Ryan, C. S. (2008). Data analysis: A model comparison approach (pp. 1-8).

JANUARY 17

Principal Components Analysis (PCA)

Suggested Readings:

JANUARY 31

Structural Equation Modeling: Confirmatory Factor Analysis

Suggested

MARCH 3 ± Repeated Measures Analysis of Variance (ANOVA)Suggested Readings:

Weinfurt, K.P. (2000). Repeated measures analyses: ANOVA, MANOVA. *Journal of Applied Behavior Analysis*, 33, 569-588.

UNIVERSITY OF VICTORIA
Department of Psychology

A note to remind you to take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. All of us benefit from support during times of struggle. You are not alone.

Grad school can involve a lot of time studying and researching on your own but it does not have to be an isolating experience. There are a lot of other grad students out there like you who are looking to connect outside of academics.

www.uvic.ca/mentalhealth/graduate/connect/index.php

Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students. www.uvic.ca/services/counselling/

University Health Services (UHS) provides a full service primary health clinic for