

PSYC 5412 W – TOPICS IN ADVANCED STATISTICAL METHODS: LATENT CLASS/CLUSTER ANALYSIS

Course	PSYC 5412 W: Topics in Advanced Statistical Methods: Latent Class/Cluster Analysis
Instructor	Dr. Craig Leth-Steensen
Term	Winter 2023
Course Delivery	In-Person
Email Address	craig.lethsteensen@carleton.ca
Office Location	A535 LA
Office Hours	TBA

COURSE DESCRIPTION/INSTRUCTORS STATEMENT

The objective of this course will be to provide students with an in-depth understanding of person-centered statistical approaches (i.e., cluster analysis, latent class/profile analysis, and factor mixture modeling). As opposed to variable-centered, factor-analytic dimensional approaches to examining the nature of the individual differences, person-centered approaches consider the possibility that there exist various subtypes of individuals who differ either qualitatively or quantitatively. The goal of analyses conducted with this latter approach is to use the patterns of responding across individuals to identify such subtypes (which up to that point could be regarded as having been unobservable).

EVALUATION

1. I will have students write a term paper that will involve applying one of the person-centered methods (i.e., cluster analysis, latent class/profile analysis, and factor mixture modeling) to a set of data (where one can be provided if necessary).
2. All students will also be expected to orally present a published paper (of their choosing) that demonstrates the application of a person-centered technique.
3. As well, I anticipate two small take-home quizzes that will allow students to work through these techniques a bit.

TEXT

Selected weekly readings.