

# MATH 682. STATISTICAL INFERENCE.

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Credits: 4

Offered by: Mathematics and Statistics (Graduate Studies)

Terms offered: Fall 2025

[View offerings for Fall 2025 in Visual Schedule Builder.](#)

## Description

Conditional probability and Bayes' Theorem, discrete and continuous univariate and multivariate distributions, conditional distributions, moments, independence of random variables. Modes of convergence, weak law of large numbers, central limit theorem. Point and interval estimation. Likelihood inference. Bayesian estimation and inference. Hypothesis testing.

- Prerequisite: MATH 141 or equivalent
- Restrictions: Not open to students who have taken MATH 324, MATH 357, MATH 557. Intended for graduate students working on quantitative research questions related to life sciences who have had differential and integral calculus.

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