

STA457H1 F

Time Series Analysis

Fall 2025 Syllabus

Course Meetings

STA457H1 F

Section	Day & Time	Delivery Mode & Location
LEC0101	Friday, 10:00 AM - 1:00 PM	In Person: BR 200

Refer to ACORN for the most up-to-date information about the location of the course meetings.

Course Contacts

Instructor: Zhou Zhou

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Phone: 4169783649

Office Hours and Location: Fridays 3 pm to 4 pm. Online.

Course Overview

An overview of methods and problems in the analysis of time series data. Topics include: descriptive methods, filtering and smoothing time series, theory of stationary processes, identification and estimation of time series models, forecasting, seasonal adjustment, spectral estimation, bivariate time series models.

This course is an introduction to Time Series with applications to sciences and economics. This course is designed for senior undergraduate students and graduate students of statistics and other related disciplines.

Prerequisites: STA302H1/ STAC67H3/ STA302H5; MAT235Y1/ MAT237Y1/ MAT257Y1/ (MATB41H3, MATB42H3)/ (MAT232H5, MAT236H5)/ (MAT233H5, MAT236H5)

Corequisites: None

Exclusions: STAD57H3, STA457H5

Recommended Preparation: None

Credit Value: 0.5

Course Materials

P.J. Brockwell and R.A. Davis, Introduction to Time Series and Forecasting, third edition. Springer-Verlag, 2016

Marking Scheme

Assessment	Percent	Details	Due Date
Term Test	35%	2-hour in person exam	2025-10-17
Data analysis report	5%		2025-12-02
In-Person Final Exam	55%		Final Exam Period

Assignments: 5% three times. The lowest assignment score will be dropped.

Late Assessment Submissions Policy

100% penalty for late submission without good reasons. For late submission with plausible causes, the penalty will be determined case by case.