

The Midterm

STAT 464/864 ~ Fall 2024

Discrete Time Series Analysis | *Skye P. Griffith* ~ Queen's University

Monday, October 21st ~ 10:30-11:20 (in class)

Learning Outcomes

If you successfully complete the midterm, you will have demonstrated an understanding of most of the following themes (depending on which stars you choose to complete).

Room 1: The Terrace | *Classical Time Series Modelling*

1. Trends
2. Seasonality
3. Autocorrelation & Stationarity
4. White Noise hypothesis testing

Room 2: The Fountain | *Filters, $MA(q)$ and $AR(p)$*

1. Linear Filters & Proposition 2.2.1
2. Causality
3. $MA(q)$ processes
4. $AR(p)$ processes

Galaxy Grading

The Terrace contains 3 Stars. So does the Fountain. Each Star is worth 5 points.

Undergraduate students: Complete any 4 Stars.

Graduate students: Complete any 5 stars.

There are no alternate stars or anything because, like... this is a test.

50min. Calculators permitted. By that I mean like a Casio 991, not a computer.

No R, no cheetsheet.