FALL 2015 - STAT 485 E100
APPLIED TIME SERIES ANALYSIS (3)

Class Number: 3475   Delivery Method: In Person

COURSE TIMES + LOCATION:

Mo 5:30 PM – 6:20 PM
AQ 3154, Burnaby

Th 4:30 PM – 6:20 PM
AQ 3154, Burnaby

EXAM TIMES + LOCATION:

Dec 17, 2015
7:00 PM – 10:00 PM
Burnaby

INSTRUCTOR:

Steven Thompson
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Office: SC-K10556

PREREQUISITES:

Prerequisite: : STAT 285 or STAT 302 or STAT 305 or equivalent.

Description

CALENDAR DESCRIPTION:

Introduction to linear time series analysis including moving average, autoregressive and ARIMA models, estimation, data analysis, forecasting errors and confidence intervals, conditional and unconditional models, and seasonal models. This course may not be taken for further credit by students who have credit for ECON 484. Quantitative.

COURSE DETAILS:

Outline:

1. Autocorrelation, seasonality, and trends in time series and their impacts on standard statistical inference techniques.
2. Autoregressive models: definition, model formulation, and data analysis
3. Moving average models: definition model formulation, and data analysis
4. ARIMA models: definition, model formulation, and data analysis
5. Introduction to forecasting with linear time series models
6. Introduction to nonparametric fitting of trends and cycles to time series data

Grading

Assignments	20%
Midterm	30%
Final	50%

All grading is subject to change.

Materials

Required Textbook:

Time Series Analysis and Its Applications: With R Examples (3rd ed.) by Robert Shumway and David Stoffer. Publisher: Springer

- Some copies of the book have been made available to purchase in the SFU bookstore
- Book is also available on-line for free **here**
- EZ version of book is also available for free **here**

Students with Disabilites:
Students requiring accommodations as a result of disability must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Tutor Requests:
Students looking for a Tutor should send an email to stat@sfu.ca with "Tutor Request" in the subject line. Please only include information that you would like forwarded to our tutors mailing list (contains people external to the University). We accept no responsibility for the consequences of any actions taken related to tutors.

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Each student is responsible for his or her conduct as it affects the University community. Academic dishonesty, in whatever form, is ultimately destructive of the values of the University. Furthermore, it is unfair and discouraging to the majority of students who pursue their studies honestly. Scholarly integrity is required of all members of the University. http://www.sfu.ca/policies/gazette/student/s10-01.html

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