Department of Mathematics & Statistics
Concordia University

STAT 460 (MAST 677/MAST 881)), Sec. J
Time Series and Forecasting
Winter 2019

Instructor: Dr. Frédéric Godin, Office: LB 921-05 (SGW), Phone: 848-2424, Ext. 3494
Email: frederic.godin@concordia.ca

Office Hours: Monday and Wednesday, 11:45-12:45 p.m.

Textbook: *Introduction to Time Series and Forecasting*, 3rd Edition, by Peter J. Brockwell and Richard A. Davis, Springer, 2016. (*Available for free as an EBOOK on the Concordia library website*)

Other Reference: *Time Series Analysis and Its Applications*, 3rd Edition, by Robert H. Shumway and David S. Stoffer, Springer, 2010.

Assignments: There will be three assignments.

Grading: Assignments (15%), Midterm exam (25%) and Final exam (60%).

If the grading scheme for this course includes graded assignments, a reasonable and representative subset of each assignment may be graded. Students will not be told in advance which subset of the assigned problems will be marked and should therefore attempt all assigned problems.

Topics: This course provides an introduction to the theory and practice of time series analysis. Topics covered include:

- Introduction to Time Series
- Stationary Processes
- ARMA Models
- GARCH Models
- Hidden Markov Models

Academic Integrity and the Academic Code of Conduct
This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: concordia.ca/students/academic-integrity." *[Undergraduate Calendar, Sec 17.10.2]*