Instructor: Wesley Burr, Jeffrey Hall 239, `wburr@mast.queensu.ca`

Office Hours: By appointment.

Course Website: `http://www.mast.queensu.ca/~wburr/STAT464/`

Textbook: *Introduction to Time Series and Forecasting*, Brockwell and Davis, 2nd Edition.

Prerequisites: STAT 361 (or equivalent) **or permission of the instructor.**

Course Outline: The course will roughly follow the first six chapters of the assigned textbook. Focus will be heavier on chapters 3-5, with additional material presented that goes beyond the level presented in this text. Students will be expected to attend lectures on all topics, although material will be made available via the website.

Grading for undergraduate students: Your grade for the course will be split into three parts.

- Homework: 30% (split between theory and practical)

- Project: 35% (report-style)

- Exam: 35% (take-home, during Christmas exam period))))

Grading for graduate students: Your grade for the course will be split into four parts.

- Homework: 30% (split between theory and practical)

- Presentation: 10% (material scaled for student level, undergraduate or graduate)

- Project: 30% (report-style, topics TBD)

- Exam: 30% (take-home, during Christmas exam period)

Homework: There will be 5 homework sets assigned bi-weekly. These will be comprised of theoretical questions and applied questions involving some coding. Graduate students will be responsible for extra material on each assignment.

Project: Each student will be responsible for completing a term project involving data analysis. Students are responsible for finding a suitable time series data set and confirming its suitability with the instructor. The deadline for submission of data sets is November 1st.

Presentation: Graduate students are expected to give one in-class presentation based on a journal article. Students are responsible for finding a suitable journal article and confirming its suitability with the instructor. The presentations will take place near the end of term, likely in the final week of class.

Exam: The take-home exam will be given to students in the last class of the term. Students will be given a reasonable length of time to work on the exam, most likely 2 weeks.

Academic Integrity: The university has a statement which I will reproduce here:

Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see www.academicintegrity.org). These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University.

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1), on the Arts and Science website (see http://www.queensu.ca/artsci/sites/default/files/Academic_Regulations.pdf), and from the instructor of this course.

Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Important Dates:

Add Deadline ....September 24, 2011
Drop Deadline .... November 5, 2011
Data Set submission ....November 1, 2011
Project Deadline .... December 7, 2011