The University of Iowa  
College of Liberal Arts and Sciences  
Department of Statistics & Actuarial Science

22S:235 Time Series Analysis  
Fall, Semester, 2007, 151 SH  
Course web-page: www.stat.uiowa.edu/~kchan/S235.htm  
The administrative home of this course is the College of Liberal Arts and Sciences.

- Instructor: Kung-Sik Chan
- Office hours: 263 SH, Monday and Friday 9:30-10:30, Wednesday 10:30-11:30, and by appointment
- Phone: 335-2849
- Email address: kchan@stat.uiowa.edu
- DEO: Luke Tierney, 241 SH, 335-0712, luke-tierney@uiowa.edu
- Textbook: Time Series Analysis. Author: Jonathan Cryer and Kung-Sik Chan
- Topics include: Time Series Regression including intervention analysis, outlier detection and stochastic regression; time series models of conditional heteroscedasticity, spectrum analysis, and nonlinear time series analysis.
- Students are expected to have rudimentary knowledge of univariate time series analysis similar to the level of 22S:156.
- Prerequisite: 22S:156 Applied Time Series Analysis, or equivalent. 22S: 153 and 154 or equivalent
- Course requirements:

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<tr>
<th>date</th>
<th>percent</th>
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<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
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<tr>
<td>Exam 1 Oct, 12 (Wednesday)</td>
<td>30%</td>
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<tr>
<td>Exam 2 Dec, 7 (Wednesday)</td>
<td>30%</td>
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<tr>
<td>Final project Monday, December 14 2007</td>
<td>30%</td>
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Several homework assignments will be given. Homework must be handed in by the BEGINNING of the lecture on the due date. Late homework will be marked but NO CREDIT will be given. Discussion with fellow students on the exercises of the homework is allowed. Exams are open book. Each student is required to do a project analyzing some time series data, and write a project report. Dependent on the final student size, each one will be required to do an approximately 10-minute presentation on December 14. The “powerpoint” presentation file and the project report has to be submitted on December 14.

- Grades: Your grade for this course will be assigned according to the following approximate scale:

<table>
<thead>
<tr>
<th>score</th>
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<tbody>
<tr>
<td>90 to 100</td>
<td>A</td>
<td>90</td>
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<tr>
<td>80 to 89</td>
<td>B</td>
<td>80</td>
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<tr>
<td>70 to 79</td>
<td>C</td>
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<tr>
<td>60 to 69</td>
<td>D</td>
<td>60</td>
</tr>
<tr>
<td>0 to 59</td>
<td>F</td>
<td>0</td>
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This scale is not absolute, and the cutoff points may vary depending on the
difficulty of the exams. Also, borderline cases may receive a + or −.

- Computer package. We shall mainly use SAS and the freeware R for doing computations and model fitting. SAS is available in the ITC, or in the form of an annual license for PC at an affordable fee of 11.5. See the web-site http://www.its.uiowa.edu/its/cs/software/softwarelisting.html R, with both windows and linux versions, is available in the ITC, and can be freely downloaded at http://lib.stat.cmu.edu/R/CRAN/

- Internet Resources My home-page http://www.stat.uiowa.edu/~kchan/S235.htm provides some links to useful Internet resources related to our course.

- Academic Fraud
Plagiarism and any other activities that result in a student presenting work that is not his or her own are academic fraud. Academic fraud is reported to the departmental DEO and then to the Associate Dean for Academic Programs and Services in the College of Liberal Arts and Sciences.
www.clas.uiowa.edu/students/academic_handbook/ix.shtml

- Making a Suggestion or a Complaint
Students have the right to make suggestions or complaints and should first visit with the instructor, then with the course supervisor if appropriate, and next with the departmental DEO. All complaints must be made within six months of the incident.
www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5

- Accommodations for Disabilities
A student seeking academic accommodations first must register with Student Disability Services and then meet with a SDS counselor who determines eligibility for services. A student approved for accommodations should meet privately with the course instructor to arrange particular accommodations. www.uiowa.edu/~sds/

- Understanding Sexual Harassment
Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. Visit www.sexualharassment.uiowa.edu/ for definitions, assistance, and the full policy.

- Administrative Home of the Course
The administrative home of this course is the College of Liberal Arts and Sciences, which governs academic matters relating to the course such as the add / drop deadlines, the second-grade-only option, issues concerning academic fraud or academic probation, and how credits are applied for various CLAS requirements. Please keep in mind that different colleges might have different policies. If you have questions about these or other CLAS policies, visit your academic advisor or 120 Schaeffer Hall and speak with the staff. The CLAS Academic Handbook is another useful source of information on CLAS academic policy:
www.clas.uiowa.edu/students/academic_handbook/index.shtml