

**STAT:6560 (22S:156)**  
**Applied Time Series Analysis**  
**31 SH**  
**1:30-2:20 p.m.**  
**Spring 2016**  
**Stramer**

**Instructor:** Osnat Stramer, 370 SH, phone: 335-3182,  
Email: [osnat-stramer@uiowa.edu](mailto:osnat-stramer@uiowa.edu)

**Office Hours:** Monday 11:30 a.m. -1:00 p.m., Friday 11:30 a.m.-12:30 a.m. or by appointment.

**DEO:**

Prof. Joe Lang, 241 SH, 335-0712  
[joseph-lang@uiowa.edu](mailto:joseph-lang@uiowa.edu)

**Course Website:** <http://icon.uiowa.edu>

**WEB:** Be sure to check out the book's web page at  
<http://www.stat.uiowa.edu/~kchan/TSA.htm>

Professor Chan has provided R scripts for everything in the book.  
Copying from them saves a lot of typing and you can learn a lot about R  
by looking through the code provided.

**Text:** “Time Series Analysis with Applications in R” By Jonathan Cryer and Kung-Sik Chan. 2nd edition (October 17, 2008), published by Springer Verlag.

**Course Coverage:** most of the material in Chapters 1-10. We may not have enough time to cover chapter 10.

**Computer Package:** We will mainly use R (GNU Splus) for statistical analysis. R will be available at the ITC in Schaefer Hall. R can be freely downloaded from <http://www.r-project.org/>. An R package called TSA has been specifically developed that implements almost all methods introduced in the book.

**Prerequisite:** STAT:3101 (22S:131), and STAT:3200 (22S:152) or STAT:5200 (22S:164).

**Grading System**

**Assignments (10 %):** Homework will be assigned **nearly** each Monday and due the next Monday.

**Quizzes (15%):** There will be 4-5 announced quizzes.

**Projects (10 %):** A few projects will be assigned during the semester

**Exam 1 (15%):** The first exam is on Tuesday March 1 from 6:30-8:00 pm, SHAM LIB.

**Exam 2 (30%):** The second exam is on Thursday April 28 from 6:30-8:30 pm., 125 TH.

Exams are closed book and closed notes, except that you may use a “crib sheet”-one page (8.5 x 11) of notes written on both sides for exam 1 and two pages of notes written on both sides for exam 2.

**Final is the Final project (20 %):** See directions in a different file under syllabus. The oral presentation is a part of the grade. The project presentation TBA later in the semester by the University.

**Note:** Students will work in a group of 1-3 on assignments, projects, and the final project. The groups will be assigned by me. However, on the first homework students should work individually and submit it individually. Homework must be handed in the beginning of the lecture on the due date.

**I reserve the right to give bonus points at any time. The bonus points may be applied to any part of your grade.**

As an approximate guide, grades will be given as:

90-100: A  
80-90: B  
70-80: C  
60-70: D  
Below 60: F

Plus and minus grades will be given.

\*No make-up exams will be given unless there is an absence due to unavoidable circumstances as stated by University policy.

**Resources:** The Writing Center service offers twice a week tutoring, appointments, and online tutoring at 4 different locations on campus. Please see [www.uiowa.edu/~writingc](http://www.uiowa.edu/~writingc)

### **Course Policies**

**Course attendance:** Students are responsible for all material covered in the lectures.

**It is essential that you attend all classes. The instructor reserves the right to fail any student who misses more than 30% of the classes.**

**E-mail Account:** Every student in the class is required to check his/her UIowa e-mail often (every other day.)

**INFORMATION FOR STUDENTS WITH DISABILITIES:** I would like to hear from anyone who has a disability which may require some modification of seating, testing, or other class requirements so that appropriate arrangements can be made. Please see me as soon as possible.

**COLLEGE OF LIBERAL ARTS AND SCIENCES POLICIES AND PROCEDURES:**

This course is governed by the policies and procedures of the College of Liberal Arts.

These policies address

- \* the administrative home of the course;
- \* electronic communications;
- \* academic fraud;
- \* students with disabilities;
- \* procedures for student complaints;
- \* sexual harassment policy;
- \* weather emergencies.

These policies can be found at

<http://clas.uiowa.edu/faculty/teaching-policies-resources>