STAT 463 Applied Time Series Analysis
Fall, 2014

Instructor: Zhibiao Zhao       Office Hours: Wednesday: 3:40P-4:40P
409 Thomas Building
email: zuz13@stat.psu.edu

T.A.: Hyunphil Choi       Office Hours: Wednesday: 9:00A-10:00A
Stat. Dept. Library, 3rd floor, Thomas Building
email: hzc144@psu.edu

Lecture: MWF: 2:30-3:20P, 303 Willard Building

Web Page: Assignments, lecture notes and some other class materials will be posted on ANGEL (https://cms.psu.edu).


Course Outline:
   Chapters 1 and 2 (4 weeks);  Chapter 3 (5 weeks);  Chapter 4: 2 weeks;  ARCH/GARCH modeling: 1 week

Course Objectives:
   analysis of time series data using some classical time series models (ARMA,ARIMA,SARIMA), spectral analysis, and ARCH/GARCH models.

Required Work: weekly homeworks, one in-class midterm, and one final.

Homework:
   • Due Fridays in class
   • Late homework is NOT accepted
   • The lowest homework will be dropped
   • Credit for the homework is given based on HOW the problems are solved instead of a numerical answer.

Exams:
   Both the midterm and final exams are closed-book and in class, but you are allowed to bring one, 8.5x11(letter size) double-sided formula sheet.

Grading: The final course grades will be based upon:
   Homework: 30% (every Friday)
   Midterm: 30% (tentative date: Friday, October 17)
   Final Exam: 40% (TBA)
The lower cut-off points for the grades are:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Lower Cut-Off Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>0</td>
</tr>
<tr>
<td>D</td>
<td>58</td>
</tr>
<tr>
<td>C</td>
<td>65</td>
</tr>
<tr>
<td>C+</td>
<td>70</td>
</tr>
<tr>
<td>B-</td>
<td>75</td>
</tr>
<tr>
<td>B</td>
<td>80</td>
</tr>
<tr>
<td>B+</td>
<td>85</td>
</tr>
<tr>
<td>A-</td>
<td>90</td>
</tr>
<tr>
<td>A</td>
<td>94</td>
</tr>
</tbody>
</table>

Course Policies:

(1). If you have a University-approved conflict with any of the exams, you must let me know at least one week before the exam. A conflict exam will be scheduled to take place just before or just after the regularly scheduled exam.

(2). No make-up exams will be given.

(3). Attendance to each class meeting is required and beneficial. Students are responsible for all announcements and supplements given within each lecture and/or via course email.

Integrity:
All Penn State and Eberly College of Science policies regarding academic integrity apply to this course. See [http://www.science.psu.edu/academic/Integrity/index.html](http://www.science.psu.edu/academic/Integrity/index.html) for details.

The Eberly College of Science Code of Mutual Respect and Cooperation [www.science.psu.edu/climate/Code-of-Mutual-Respect final.pdf](http://www.science.psu.edu/climate/Code-of-Mutual-Respect final.pdf) embodies the values that we hope our faculty, staff, and students possess and will endorse to make The Eberly College of Science a place where every individual feels respected and valued, as well as challenged and rewarded.

Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services Web site at [http://equity.psu.edu/ods/](http://equity.psu.edu/ods/).

In order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines at [http://equity.psu.edu/ods/guidelines/documentation-guidelines](http://equity.psu.edu/ods/guidelines/documentation-guidelines)). If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.

DISCLAIMER: This syllabus is subject to change. Any change will be announced in class and on ANGEL webpage.