Instructor: Dr. Erning Li
Office: 231 Schaeffer Hall
Phone: 335-0820
Email: erning-li@uiowa.edu
Office hours: MWF 12:30—1:30 pm or by appointment

Grader: Rui Luan  rui-luan@uiowa.edu

Class Meeting: Lectures 9:30—10:20am MWF 22 Schaeffer Hall

Lab sessions will be incorporated into lectures. Fundamental R commands for statistical analysis will be discussed. For lab sessions, the entire class will meet in 41 Schaeffer Hall.

Department Information: Department of Statistics and Actuarial Science, 241 Schaeffer Hall, Phone 335-2082

Departmental Executive Officer: Professor Luke Tierney, 241 Schaeffer Hall, Phone 335-0712, Email luke-tierney@uiowa.edu

Course Prerequisite: STAT:2010 (22S:030) or STAT:2020 (22S:039) or equivalent.

Course Description and Objective: Regression analysis with focus on applications; examining and transforming data; simple, multiple and dummy variable regressions; one-way and two-way ANOVAs; diagnostics of unusual and influential data, nonlinearity, nonconstant variance, nonnormality and multicollinearity; model selection; logistic regression; interpretation and presentation of analysis results; hands-on data analysis with computer software.

At the end of the semester, students are expected to acquire a strong foundation in basic methods required for data analysis and interpretation.

Course Webpage:  http://www.stat.uiowa.edu/~ernli/stat3200.html

My lecture notes (viewed as our “textbook”) will be intensively used during class meetings and will be posted on the course webpage in advance. It is highly recommended that students bring a copy of the lecture notes to class meetings.

Course materials such as syllabus, lecture notes, R scripts, homework assignments, data, answer keys, etc. will be posted on the course webpage.

All grades will be posted on ICON. Make sure your email address on ICON class roster is valid, since I use ICON to email the class important announcements.
Reference Books: The chapter numbers in my lecture notes are consistent with the following book.


R Software: R is open-source statistical software and freely available at [http://www.r-project.org](http://www.r-project.org). You can download R from this website for free. It is available in Instructional Technology Centers (ITCs) such as 41 Schaeffer Hall. See our course webpage for useful links.

Homework: Homework will be assigned periodically and posted on the course webpage. An assignment will be collected at the beginning of class on the date it is due. Unless prior or prompt arrangements are made for reasons judged to be acceptable by Dr. Li, homework turned in after it is due will receive 0 (zero) credit. No soft (electronic) copies of homework will be accepted.

Homework should be neat and stapled with all work should be shown. Students are allowed to discuss homework assignments, but everyone should do his/her own programming and turn in their own homework; no blind “copying” permitted.

Exams:

- **Midterm Exam 1**: 50 minutes in class; tentative date Monday, February 24, 2014
- **Midterm Exam 2**: 50 minutes in class; tentative date Monday, March 31, 2014
- **Midterm Exam 3**: 50 minutes in class; tentative date Monday, April 28, 2014
- **Final Exam**: see university finals schedule, TBA; comprehensive with emphasis on newer materials

Calculators may be used for exams. You can bring one standard size (8.5” × 11”) sheet of paper with anything you want written on it (both sides) to each midterm exam, and four such sheets of paper to the final exam. Other than these, they are all closed-book exams.

Students who miss a midterm exam without documented university-approved excuses will receive zero score on that exam. If you have university accepted reasons, *notification and written evidence of the missed midterm exam must be provided to the instructor as soon as possible and no later than one week after the exam*. If the absence for a midterm exam is approved, the final exam grade will be used as the grade for the missed midterm exam. If the final exam is missed, a make-up final will be permitted only if the circumstances of missing the exam satisfy university policies.
Grading: A numerical final score on a scale of 0 to 100 will be determined according to the following breakdown

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Midterm 1</td>
<td>20%</td>
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<tr>
<td>Midterm 2</td>
<td>20%</td>
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<tr>
<td>Midterm 3</td>
<td>20%</td>
</tr>
<tr>
<td>Final</td>
<td>25%</td>
</tr>
</tbody>
</table>

Conversion of these scores into letter grades will be made according to the following scale:

- [90, 100] A
- [80, 90)  B
- [70, 80)  C
- [60, 70)  D
- < 60      F

Plus (+) and minus (-) gradings will be given as deemed appropriate. At the discretion of Dr. Li, depending on overall class performance, these ranges may be adjusted (but only downward - criteria would only become easier, not harder). All grades will be posted on ICON.

Attendance: Attendance is very vital to your success in the class. Regular attendance at lectures is expected. Students who are absent from class without acceptable excuse should not seek help regarding missed lectures during office hours.

UI and CLAS policies and procedures

Administrative Home: The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS Student Academic Handbook ([www.clas.uiowa.edu/students/academic_handbook/index.shtml](http://www.clas.uiowa.edu/students/academic_handbook/index.shtml)).

Electronic Communication: University policy specifies that students are responsible for all official correspondences sent to their University of Iowa email address (@uiowa.edu). Faculty and students should use this account for correspondences. (Operations Manual, III.15.2. Scroll down to k.11.)

Accommodations for Disabilities: A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. See [www.uiowa.edu/~sds/](http://www.uiowa.edu/~sds/) for more information. I would like to hear from anyone who has a disability that may require some modification of seating,
testing, or other class requirements so that appropriate arrangements can be made. Please see me about this as soon as possible.

Academic Honesty: The College of Liberal Arts and Sciences expects all students to do their own work, as stated in the CLAS Code of Academic Honesty. Instructors fail any assignment that shows evidence of plagiarism or other forms of cheating, also reporting the student’s name to the College. A student reported to the College for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled. All forms of plagiarism and any other activities that result in a student presenting work that is not his or her own are academic fraud. All academic fraud is reported first to the departmental DEO and then to the Associate Dean for Academic Programs and Services. See the CLAS Student Academic Handbook for the complete policy.

CLAS Final Examination Policies: Final exams may be offered only during finals week. No exams of any kind are allowed during the last week of classes. Students should not ask their instructor to reschedule a final exam since the College does not permit rescheduling of a final exam once the semester has begun. Questions should be addressed to the Associate Dean for Undergraduate Programs and Curriculum.

Making a Suggestion or a Complaint: Students with a suggestion or complaint should first visit the instructor, and then the departmental DEO. Complaints must be made as soon as possible within six months of the incident. See the CLAS Student Academic Handbook.

Understanding Sexual Harassment: Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment for assistance, definitions, and the full University policy (http://www.sexualharassment.uiowa.edu/).

Reacting Safely to Severe Weather: In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Public Safety web site.