

**Syllabus for STAT 460: Intermediate Applied Statistics**  
**FALL 2009**  
**08/24/2009-12/11/2009**

**Course:**

M W 04:40P - 05:30P 118 THOMAS  
F 04:40P - 05:30P 004 214 BOUCKE

**Lecturer:** Xianyun Mao

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Phone: 865 8635  
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Office Hours: MF 1:00–1:50 or by appointment

**Teaching Assistant :** TBA

**Course Description:** Statistics 460 is a general applied statistics course that involves hands on data analysis. Emphasis will be placed on the use of statistical software Minitab, and the interpretation of the results of data analysis. Students enrolling for this course should have taken at least one other statistics course that covered the basic fundamentals of descriptive statistics, statistical hypothesis testing, and confidence interval estimation. Topics in the course will include basic experimental design, parametric and nonparametric methods for comparing two or more population means, analysis of variance models for multi-factor designs, multiple regression, logistic regression, and methods for analyzing counts data.

**Textbook:** *The Statistical Sleuth: A Course in Methods of Data Analysis* by Fred L. Ramsey and Daniel W. Schafer, 2nd edition (2002)

**Software:** Minitab. It is available in the public computers on campus.

**Course Web Site:**

Every material including Lecture notes, Homework and Solution, Lab activity will be posted through ANGEL. Please check the website frequently for course materials and announcements.

**Required Workload :**

2 in class midterms	30%
1 final exam (watch elion for date and time)	25%
1 Quiz (b/w the 2nd midterm and the final)	10%
Weekly homework assignments (The lowest two dropped)	10%
Weekly lab activity assignments (The lowest two dropped)	10%
Weekly short quizzes (The highest five counted)	15%
Weekly short quizzes II (The next highest five counted)	10%
Total: 110% points	

**Approximate Grading Scale (Borderlines will not be raised):**

A	94	C+	70
A-	90	C	65
B+	85	D	60
B	80	F	<60
B-	75		

Students may be awarded one-level higher grades based on their overall performance, effort and participation.

**Course Policies:**

1. If you have a University-approved conflict with any of the exams (midterms, final and quiz), you must let me know at least one week before the exam. A conflict exam will be scheduled as early as possible.
2. For conflicts due to other legitimate but unavoidable reasons such as illness, injury, family emergency, or religious observance, make-up exams can be scheduled. However, I request documents or notes provided by authority as proof.
3. There is **absolutely** no make-up for short quizzes since they will be posted right away on angel.
4. The questions and the style or the settings of questions in the exams are very similar to those in the short quizzes. Hereby, no sample questions for exams will be needed.
5. Attendance to each class meeting is required and beneficial. Students are responsible for all announcements and supplements given within any lecture.
6. There is **absolutely** no make-up for homework. In the cases of a University-approved conflict, the affected lab activities are waived. And the weights of the unaffected lab activities will be reassigned to reflect the change.

**Policy on Homework and Lab Activity:**

The homework will be posted on angel under HOMEWORK folder by Wednesday and due the following Wednesday before the class. It must be submitted to the Drop box under corresponding folder. You may discuss the homework but must complete your homework independently.

The Lab Activities will be posted on angel under LAB ACTIVITY folder by Thursday and must be submitted to the Drop box under corresponding folder by the class on Friday. You are encouraged to complete in a group of 2-3 students and sign all your members' names.

The submission system of ANGEL does not work well with Mac. So be aware of problems like submitted files gone missing. It is the student's responsibility to submit the assignments on time.

Note: **No late Homework/Lab Activity will be accepted.**

**Policy on short quizzes:**

Close books, notes and anything else.

**Policy on Exam:**

During the 2 midterm Exams, the quiz or the final Exam, you may bring:

- 1) Penn State ID
- 2) One calculator;
- 3) 2-B pencils;
- 4) One 8.5x11 double-side sheet of formula, Theory, Examples, or any other information; (two pages for final

Exam)

5) Close books, notes and anything else.

**Academic Integrity Policy:**

All Penn State policies regarding ethics and honorable behavior apply to this course (see links below for policy statements). Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. All University policies regarding academic integrity apply to this course. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. For any material or ideas obtained from other sources, such as the text or things you see on the web, in the library, etc., a source reference must be given. Direct quotes from any source must be identified as such. All exam answers must be your own, and you must not provide any assistance to other students during exams. Any instances of academic dishonesty WILL be pursued under the University <http://www.psu.edu/ufs/policies/> and Eberly College of Science <http://www.science.psu.edu/academic/Integrity/index.html> regulations concerning academic integrity.