Instructor: DAELYOUNG KIM  
Office Hours: Tuesday and Friday 2:30 p.m. – 4:00 p.m.,  
LGRT 1434 or by appointment  
email: daeyoung@math.umass.edu

Lecture: Tuesday and Thursday 9:30AM - 10:45AM Lederle Graduate Research Tower 323

Web Page: Such materials as lecture notes and homework assignments will be posted  
on [http://www.math.umass.edu/~daeyoung/Stat515](http://www.math.umass.edu/~daeyoung/Stat515)

Required Text: Mathematical Statistics with Applications(7th Edition),  
D. D. Wackerly, W. Mendenhall and R. L. Schaeffer

Prerequisites: Math 131-132 (univariate calculus covering both differentiation and integration  
for single variables). The necessary concepts for multiple integration or  
partial derivatives will be introduced in the course as needed.

Course Description:  
This course provides a calculus based introduction to probability  
(an emphasis on probabilistic concepts used in statistical modeling)  
and the beginning of statistical inference (continued in Stat516).  
Coverage includes basic axioms of probability, sample spaces, counting rules,  
conditional probability, independence, random variables (and various associated  
discrete and continuous distributions), expectation, variance, covariance and  
correlation, the central limit theorem, and sampling distributions.  
Introduction to basic concepts of estimation (bias, standard error, etc.) and  
confidence intervals. We will cover much of chapters 2-7 in the text  
(with some omissions) and probably some portions of chapter 8.

Required Work: The required work for the course will consist of homework  
assignments, 5 in-class attendance quizzes, 2 in-class midterms and a final exam.

Grading: The final course grades will be based upon:  
Homework 25% tentative exam dates:  
1st Midterm 20% TBA  
2nd Midterm 20% TBA  
Final (comprehensive) 30% TBA  
Performance 5% (Attendance, etc.)  
[Note] If one does not take all five attendance quizzes, one might not  
eget 5% performance scores.

The lower cut-off points for the grades are:

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Homework: Homework is due at the beginning of class on the due date.
No late hw will be accepted, as the solutions of the assignments will be posted
on the course website after each due date.
Unreadable work, scratching out, etc. will not be graded.
The homework can be discussed with your classmates but you have to turn in your own hw.
Your work will be evaluated on the method of solution and the ability to apply
concepts, rather than the numeric answer to the problem.
As the numeric answers to some hw questions may be found at the end of the book,
you will not receive credit unless you show your work.

Exam: For both the midterm and final exams, you are allowed to bring one, 8.5x11(letter size)
double-sided formula sheet. You are responsible for taking the final exam at the time
it is scheduled by the University. Do not make travel plans that may conflict with
the final date before knowing when the exam is scheduled for.

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. Make-up exams will only be given for legitimate, documented reasons
(e.g., serious illness, injury, or death in the family) and with approval
before the exam occurs.

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.

4. Any objections to the homework grading, the midterm or final grading
should be directed to the instructor. All requests will be considered by the instructor
and the student will be notified if a grade change occurs.

Add & Drop: Last day to add/drop a course with no record is scheduled 02/01/2010.

Late Drop: Last day to drop a course with “W” is scheduled 03/23/2010.