Course Objectives:

Students are expected to learn about descriptive statistics, probability, and inferential statistics. This involves learning in four areas:

1) concepts and terminology
2) statistical methodology as applied to data from population samples
3) software syntax/usage for computing results and producing graphics
4) interpretation and communication of results.

Students are expected to gain a beginning appreciation of the important role that statistical methods play in making technological and scientific decisions. Students are expected to learn statistical principles, methods, and tools that will prove useful in later course work and be relevant to some data analysis situations that may be encountered at work.

Course Scope relative to the text:

This is the first course of the two-course introduction to statistics. This first course focuses

Guidance: Buy a used version if possible. The 8th edition became available this January. The decision was made to continue using the 7th edition for this semester and revisit the text selection for the Fall 2011 semester.
on the topics of statistics and probability found in Chapters 1 through 9. Stat 354 is the follow-on course. Text related materials have examples using R. The course goes further and teaches the use of R scripts to produce graphs, compute probabilities, calculate confidence intervals and produce hypothesis tests. A few related text topics are skipped such as obtaining probabilities from tables and approximations.

Class Materials:
Class materials are made available via Blackboard. The class website include the syllabus, the class schedule with book sections and exam days, and weekly learning modules. The modules assignments, suggest reading, R scripts when applicable additional course materials and often select lecture examples. The first module contains guidance in terms of learning approaches and directions for installing R and the Devore package. Some learning modules will contain detailed topic lists, selected lecture examples, sample exam questions, bonus work, and other class related materials.

Class attendance, attention and short quizzes:
I expect student to learn in class. Presentations include instruction on using R and examples from personal experience that are found not in the text. Student can learn from other student questions, class discussions and class activities.

Students are expected to avoid attention distracting activities such as surfing the web on their laptops.

The tentative plan for around 12 short quizzes during the semester that are graded in class. These will help to assess learning and attendance. Often the question will stress a key concept or be will be similar to a question that will be on an exam. Quizzes are scored as 1 for taking the quiz and attempting to provide a reasonable answer. A response of I don’t know is a reasonable answer. The score is 0 otherwise. Two quizzes may be missed without penalty. Quizzes may be discontinued or reduced in frequency. In this case the percent of the grade for quizzes will be reduced and the reduction reallocated to exams proportional to the exam percents.

Homework Assignments:
Assignments will typically be due in class on Thursday, graded over the weekend return on Tuesday. Students are expected to bring the homework to class. If you must be absent, the best option to have classmate bring homework to class. The instructor and teaching assistant do not routinely accept emailed homework. Exceptions will be made for special circumstances. Contact the instructor.

Late homework will be accept on the next class after the due date and penalized 20%. Homework past due longer this is not normally accepted.*

Students must put their name on their homework. Answers are to follow the same order as the questions, be legible and internally well-organized. Homework or parts of homework not meeting standards will be not graded.

Most data sets for homework problems are as part R package Devore7 as will described in class. Data sets also available via the textbook publisher’s website: www.thomsonedu.com/statistics/devore.

Exams: The Honor Code applies to the exams. All work is to be independent.
**Grading Weights:**

- Homework 20%
- Midterm #1 Exam 20%
- Quizzes 10%
- Midterm #2 Exam 20%
- Final Exam 30%

As indicated above the instructor reserves the right to give fewer quizzes and allocate part of the quiz percent to the exams.

The instructor uses the weights to compute the composite percent for each student. The instructor sets thresholds that convert the composite percents to letter grades.

Students can verify correct grade entry via Blackboard

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*Special Circumstance.* A missed homework or exam can be made up in special documented circumstances such as a serious illness or injury or death in family.

**Academic Integrity**

Mason is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. Students are to work independently on quizzes and exams, and to follow the guidelines provided. Typically one page of notes from and back are allowed.

Working together on homework is encouraged provided the objective is to learn and is not to copy solutions.

**Mason Email Accounts**

Students must use their MasonLIVE email account to receive important University information, including messages related to this class. See [http://masonlive.gmu.edu](http://masonlive.gmu.edu) for more information.

**Office of Disability Services**

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474. All academic accommodations must be arranged through the ODS. [http://ods.gmu.edu](http://ods.gmu.edu)

**Other Resources**

- **Writing Center:** A114 Robinson Hall; (703) 993-1200; [http://writingcenter.gmu.edu](http://writingcenter.gmu.edu)
- **University Libraries** “Ask a Librarian” [http://library.gmu.edu/mudge/IM/IMRef.html](http://library.gmu.edu/mudge/IM/IMRef.html)
- **Counseling and Psychological Services (CAPS):** (703) 993-2380; [http://caps.gmu.edu](http://caps.gmu.edu)
- **University Policies:** The University Catalog, [http://catalog.gmu.edu](http://catalog.gmu.edu), is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at [http://universitypolicy.gmu.edu](http://universitypolicy.gmu.edu). All members of the university community are responsible for knowing and following established policies.