

## **STATISTICS 217 Section 2**

**Spring 2015**

**MWF 11:00-11:50 AM**

**Wilson 1-132**

**INSTRUCTOR:**

Kevin Ferris

**OFFICE:**

Wilson 1-105

**OFFICE HOURS:**

Tu 12-1, Th 2-3, Fr 12-1; in MLC on Thursday 5-8

**EMAIL:**

kevin.ferris10@gmail.com

**COURSE WEBSITE:**

[kferris10.github.io/217-website](http://kferris10.github.io/217-website)

**COURSE SUPERVISOR:**

Dr. Mark Greenwood

Department of Mathematical Sciences

**EMAIL:**

greenwood.stat@gmail.com

**REQUIRED TEXT:** A Second Semester Statistics Course with R, V 2.0, (2015) by Greenwood and Banner.

Available in the MSU bookstore in color print for about \$33(?) (request a special order form in the bookstore and they will be printed for you within approximately 24 hours)

**AND/OR**

for digital download here <https://scholarworks.montana.edu/xmlui/handle/1/2999>.

**SOFTWARE:**

**R** is the required statistical software packages for this course. It is available on the university computer network or by free download. The download works best with high-speed internet access, but internet access is usually not required after initial setup is complete. You will have the easiest time using R on a PC in this course but MACs can be configured to work as well. **If you do not have the appropriate computer or have problems with your installation of R, you must use the computer lab computers. Not getting R to work on your computer is not an excuse for failing to complete work.** We will mainly use R-Studio as a GUI-interface to running R commands/functions. R is a GNU software package and so is free to download and use and will remain that way after you complete the course.

### **COURSE GRADEBOOK, SECTION ANNOUNCEMENTS AND FILE REPOSITORY:**

I will use D2L to manage your grades.

Other information including homeworks, handouts, and due dates will be posted on the course website [kferris10.github.io/217-website](http://kferris10.github.io/217-website).

**OBJECTIVES:**

We will review how to do one and two-sample tests and associated confidence intervals for means and proportions. Additionally, we will learn how to do analysis of variance; F-tests, work with correlation and simple linear and multiple linear regression and contingency tables and related tests. All of the statistical concepts and computations will be illustrated using **R**. I hope you will leave this semester knowing many useful basic statistical procedures, have improved your statistical thinking, and have a basic working knowledge of **R**.

**PRE-REQUISITES:**

**Successful completion of STAT 216.**

**GRADING:**

Homework

10%

Projects

20%

Exam 1

20%

Exam 2

20%

Exam 3

30% (Friday, May 8 10:00-11:50 AM)

**GRADE CUT-OFFS:**

>92% A; 90 to 92% A-; 87 to 90% B+; 82 to 87% B; 80 to 82% B-; 77 to 80% C+; 72 to 77% C; 70 to 72% C-; 67 to 70% D+; 60 to 67% D; <60% F

**HW and PROJECTS:** Most Homeworks and all Projects will be assigned as group projects. You can choose your own groups. At least 2 and no more than 5 people per group. Remember when you create a group that you share contact info so it is easy to work together and organize meetings.

You may always use software or calculators to do calculations unless specified otherwise. Whenever you do include software output in your assignment, **you must indicate clearly what the answer to the problem is** (I will take points off if I have to search through output to find the answer).

**Exams:** Make-up examinations will be given only under unusual circumstances and only if prior arrangements have been made. No homework or test grades will be “dropped”. You may use a single page of notes (double sided) and a calculator on the exams. Phones will not be allowed.

**Behavioral Expectations:** Montana State University expects all students to conduct themselves as honest, responsible and law-abiding members of the academic community and to respect the rights of other students, members of the faculty and staff and the public.

**Collaboration:** University policy states that, unless otherwise specified, students may not collaborate on graded material. Any exceptions to this policy will be stated explicitly for individual assignments. If you have any questions about the limits of collaboration, you are expected to ask for clarification.

**Plagiarism:** Paraphrasing or quoting another’s work without citing the source is a form of academic misconduct. Even inadvertent or unintentional misuse or appropriation of another's work (such as relying heavily on source material that is not expressly acknowledged) is considered plagiarism. If you have any questions about using and citing sources, you are expected to ask for clarification.

**Academic Misconduct:** Section 420 of the Student Conduct Code describes academic misconduct as including but not limited to plagiarism, cheating, multiple submissions, or facilitating others misconduct. Possible sanctions for academic misconduct range from an oral reprimand to expulsion from the university.

Section 430 of the Student Code allows me to impose the following sanctions for academic misconduct: oral reprimand; written reprimand; an assignment to repeat the work or an alternate assignment; a lower or failing grade on the particular assignment or test; or a lower grade or failing grade in the course. More serious sanctions will require a Conduct Board hearing.

**Disabilities:** If you have a documented disability for which you are or may be requesting an accommodation(s), please contact your instructor and Disabled Student Services as soon as possible.

### **Academic Expectations:**

Section 310.00 in the MSU Conduct Guidelines states that students must:

1. Be prompt and regular in attending classes;
2. Be well prepared for classes;
3. Submit required assignments in a timely manner;
4. Take exams when scheduled. Exceptions:
  - a conflict with an exam in another class
  - university-sponsored activities (athletes, field trips)
  - military obligations
  - illness
  - death or illness in the immediate family
  - other family emergency
  - emergency which is out of your control

Documentation will be required. Work schedule is NOT a valid excuse. Leaving early at the end of the semester is NOT a valid excuse.

5. Act in a respectful manner toward other students and the instructor and in a way that does not detract from the learning experience; and
6. Make and keep appointments when necessary to meet with the instructor.

***Cell phones must be turned off in class, and are not permitted during exams. You need a calculator that is not your cell phone for daily class use.***

**Student Educational Records:** All records related to this course are confidential and will not be shared with anyone, including parents, without a signed, written release. Students have the right to access their educational records by appointment. This information is protected by the Family Educational Rights and Privacy Act (FERPA). For more information contact the Dean of Students office at 994-2826.

**Math Sciences Departmental Policies:**

-The math office cannot accept assignments and cannot answer questions about grades.

**Math Learning Center:** The MLC has hours where STAT 217 qualified instructors are available which will be posted on the course website. Do not expect help for this course outside of those times.

**Disruptive Behavior:** Will not be tolerated.

Montana State University expects all students to conduct themselves as honest, responsible and law-abiding members of the academic community and to respect the rights of other students, members of the faculty and staff and the public to use, enjoy and participate in the University programs and facilities. For additional information reference [www2.montana.edu/policy/student\\_conduct/cg600.html](http://www2.montana.edu/policy/student_conduct/cg600.html)

*All aspects of this syllabus are subject to change. Changes will be announced in class.*