## **STATISTICS 217 Section 001**

# Spring 2015

Wilson 1-121 (although I'm looking to change the room) MWF 9:00-9:50 AM

**INSTRUCTOR:** Leslie Gains-Germain

**OFFICE:** Wilson 1-105

**OFFICE HOURS:** Monday 11-12, Tuesday 5-8 in the MLC, Wednesday 12-1, Thursday 2-3, or by

appointment

**EMAIL:** leslie.gainsgermain@msu.montana.edu

COURSE WEBSITE: D2L

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). Will also be available on D2L and <a href="https://scholarworks.montana.edu/xmlui/handle/1/2999">https://scholarworks.montana.edu/xmlui/handle/1/2999</a>.

**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. See page 8 in the textbook for instructions on how to download R and Rstudio.

## COURSE GRADEBOOK, SECTION ANNOUNCEMENTS AND FILE REPOSITORY:

Information including homeworks, handouts, projects, reviews, and due dates will be posted on the course D2L page. Announcements will be posted on the D2L news page and you are expected to check D2L daily.

**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:** Worksheets 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

**PROJECTS:** Projects will be assigned as group projects. You must work in a group of 2-3 people (of your choosing). Remember when you create a group that you share contact info so it is easy to work together and organize meetings.

**WORKSHEETS**: Almost every day, we will do in class 'worksheets'. You will be given time in class to complete these worksheets in a group. The worksheets usually can be completed during class, but if you do not finish they are homework and due the following class period (unless stated otherwise). Everyone is strongly encouraged to do their own worksheet, but only one per group needs to be turned in. It will be graded for correctness. The worksheets are also a measure of attendance, and your two lowest will be dropped at the end of the semester. No late worksheets will be accepted.

**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". Exams are in class.

Exam 1 Friday, February 27th Exam 2 Friday, April 10th

Exam 3 Friday, May 8 10:00-11:50 AM

**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. <u>You need a calculator that is not your cell phone for daily class use.</u>

**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

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