**Montana State university, Bozeman**

STAT 217-001 Intermediate Statistical Concepts

Fall 2015

**Classroom: Herrick Hall 313**

**Times:** MWF 1:10 – 2:00 pm

**Instructor Contact Information**:

Leslie Gains-Germain

Office location: Wilson 1-105

E-mail: leslie.gainsgermain@msu.montana.edu

Course website: D2L

Office Hours: Mondays 11:00-11:50am

Tuesdays 2:00-3:00pm

Wednesdays 11:00-11:50am

Or by appointment

Math Learning Center Hours: Tuesdays 5-8 PM

**Course Supervisor:** Dr. Mark Greenwood, Email: greenwood.stat@gmail.com

**Instructional Methods:**

One learns mathematics by doing mathematics. This is a lecture course, in which the students are expected to provide extensive work. Students are expected to attend every class, participate and work on course material outside of class.

**Required Text: A Second Semester Course with R, V 2.0, (2015) by Greenwood and Banner.** Available at the MSU bookstore in color print for about $33 (request by special order form in the bookstore and they will be printed fro you within approximately 24 hours). Will also be available on D2L and <https://scholarworks.montana.edu/xmlui/handle/1/2999>

**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, simple linear regression, multiple linear regression, contingency tables, and related tests. All of the statistical concepts and computations will be illustrate with **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**.

**Prerequisites:** Successful completion of STAT 216

**Expectations and policies:**

* **Grading:** Section Grade 15%

Projects 20%

Exam 1 20%

Exam 2 20%

Final Exam 25% (Friday, May 8th 10:00-11:50 AM)

* **Grading Scale:** >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%-67% D; <60% F
* **In Class Worksheets and Quizzes:** Make-ups are not allowed for in class work. At the end of the semester, the lowest worksheet score will be dropped.
* **Homework and Projects:** Some homeworks and projects will be assigned as group projects. You can choose your own groups. At least 3 and no more than 4 people per group. Remember when you create a group to share contact information so that it is easy to work together and organize meetings. You may always use software and/or calculators to do calculations unless otherwise specified. Whenever you do include software output in your assignment, you must clearly indicate what the answer to the problem is (I will take points off if I have to search throughout output to find the answer). Homeworks and projects will be accepted up to one week late (or up until the time solutions are posted). 10% will be deducted for each day late.
* **Exams:** Make-up exams will be given only under unusual circumstances and only if prior arrangements have been made. No homework or test grades will be dropped.
* **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 is located in Wilson Hall 1-112 and is open Monday through Thursday from 9:00am to 8:00pm, and on Fridays from 9:00am to 3:00pm. You must have your Cat Card to enter. The MLC has hours where STAT 217 qualified instructors are available. Do not expect help for this course outside of those times, which will be posted on D2L.
* **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.*