Math 233 WA
Statistical Methods and Theory I (Q)
Summer 2018

Instructor: Kari Salois, M.S.
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Course Description:
An introduction to applied statistics and theory. Topics include measures of central tendency, discrete and continuous random variables, Normal distributions, Binomial distributions, sampling distributions and the Central Limit Theorem, probability, correlation and regression, producing data from sampling and experiments, hypothesis testing using the z, t, chi-square, and F distributions, confidence intervals, and analysis of variance. The statistical software package SPSS will be used to illustrate the material presented. **Prerequisite: B or higher in INT 222 and MATH 159, PSYC 250, or MATH 211*. Spring semester.

Textbook:
Moore, Notz, Fligner. The Basic Practice of Statistics (8th ed.). MacMillan Learning. (Options below)

- Ebook with SaplingPlus (6 month access) ISBN: 978131921327 ($72)
- Loose Leaf with SaplingPlus (6 month access) ISBN: 9781319216245 ($135)

Technology: We will be using the statistical software SPSS in this course. This software is available to you from our IT office. A graphing calculator (such as the TI-83 or TI-84) is required for your homework.

Grading and Assessment:

Your final grade will be based on the following components:	
Homework:	25%
Project:	15%
Quizzes:	20%
Midterm:	20%
Final Exam:	20%

Your final grade will be determined according to the following scale:

A ≥ 93	A- = 90 – 92	
B+ = 87-89	B = 83-86	B- = 80-82
C+ = 77-79	C = 73-76	C- = 70-72
D+ = 67-69	D = 63-66	D- = 60-62
F ≤ 59		

Late Work:
I will not accept all course materials during the month of August. Late assignments will be accepted for one week after the due date with a late penalty. They will be accepted, but not awarded any credit if they are more than a week late. All due dates are posted on Canvas.

All course material will be available at the beginning of the semester, so if you think you might be away, you have the option to work ahead.

Homework and Quizzes:
Students may drop their lowest homework and quiz grade.

Midterm and Final Exam:
Both of these items will only be available for one week. They will not be accepted after the due date.

ET Policy: I will consider ET requests for students with extenuating circumstances who have completed some of the course material. You must have the support of your advisor to request an ET. Remember: ETs are not automatic.

Honor System:
All academic work at Mary Baldwin University is governed by the honor system. The honor system is what enables students to complete exams at home and do == work outside a classroom.
Please read through the Honor Code here: http://www.marybaldwin.edu/student/sga/honorcode/
All tests and quizzes are to be your own work with no input from anyone else.

You may collaborate on homework and the project, but you each must submit the assignment individually. If you do collaborate, list the name of your collaborator on the assignment.

MBU E-mail Addresses:
Emails from the course Canvas site go automatically to your MBU email address. Remember that all students are required to activate their MBU-issued e-mail accounts. All questions concerning the course must be sent via your MBU email address. Be sure to include "Math171 in the subject line, and your full name.

Periodically throughout the semester, you will receive information about the course through your MBU email address. If you have questions about activating your email account or using the Canvas course site, please contact your instructor before the start of the semester.
For technical questions - Computer Help Desk at support@marybaldin.edu or 540-887-7075 or http://www.marybaldwin.edu/oit/help/.

Initial Schedule – subject to change (official schedule in Canvas)

Module	Topics	Chapter & Assignments in Sapling Plus	**Due (Fridays)**
1	Data descriptions and distributions Normal Distributions	Homework 1, 2, 3	May 29th (deadline extended if you add late)
2	Correlation Regression	Homework 4, 5	June 5
3	Producing Data: Sampling Producing Data: Experiments	Homework 8, 9	June 12
4	Intro Probability General Rules of Probability	Homework 12, 13	June 19
5	Sampling Distributions, Central Limit Theorem	Homework 15	June 26
6	Work ahead or enjoy a week off		July 3
7	Confidence Internals Project presentations due	Homework 16	July 10
8	Tests of Significance Inference in practice	Homework 17, 18	July 17
9	Inference About Population Proportion Comparing Two Means	Homework 20, 21	July 24
10	Chi – Square tests Analysis of Variance	Homework 25, 27	July 31
11	Inference for Regression	Homework 26	Aug 7
12	Project & Final Exam		Aug 14