

Statistics MAT 4512 Spring 2021
Dual Credit with BSU MATH 181
Mrs. Wright

Office: Wagoner 151

Email: mewright@bsu.edu

Telephone: 765-273-4773

Office Hours:

Monday: 11 am – 11:45 am in person

Tuesday: 9 am – 11:45 am virtual

**Also always available by appointment.*

Wednesday: 11 am – 11:45 am in person

Text, email, call, or other message me any time!

Thursday: 8 am – 11 am virtual

Friday: 11 am – 11:45 am virtual

Text: *Intro Stats* (fourth edition); by DeVeaux, Velleman and Bock; Pearson

Also Required: TI – 83 Plus or TI – 84 or higher calculator, or equivalent

Prerequisites: Advanced Algebra and Trigonometry (MAT 3001 and 3002), or appropriate score on the SAT/ACT, or appropriate scores on the mathematics placements tests, or permission of the department chairperson.

Course overview:

This course covers and guides students through discovering statistical concepts, explore statistical principles, and apply statistical techniques. The course focuses on developing statistical reasoning through analysis of genuine data. The students will learn to describe the distribution of a variable, compare the distributions of two or more variables, and describe the relationship between two variables. The course introduces the issues of sampling, surveys, and experiments. Probability is introduced through simulations and these simulations build an understanding of the Central Limit Theorem. Inferences from data include confidence intervals and significance tests for a proportion, a mean, the difference between two proportions, the difference between two means, both for matched pair designs and independent samples, and differences in distributions. Exploratory data analysis, data production issues and interpretation of results by the students are emphasized throughout.

Attendance:

You are required to attend every class session, in accordance with Indiana Academy attendance policies. I understand clocks can be a minute or two off, so I will grant leniency for the first few minutes of class, but at 5 or more minutes you are officially “Tardy” and after 15 minutes you are officially “Absent.” However, class time is very valuable, so I strongly encourage you to get to class no matter how late you may be. This will make your process of learning what was covered in class that day much easier. Sleeping in class will result in an unexcused absence without notice.

Evaluation:

In this course you will be given a homework assignment every night, periodic mini projects, and a test every unit. The homework assignments (video notes quizzes and occasional worksheets) are due as listed on the course assignment schedule. Quiz grades are the mini projects for each unit and are worth 20 points each. The tests are not cumulative in the sense that you will see questions directly from previous units, but statistics especially is a cumulative discipline so you will need to apply knowledge from previous units to help solve new problems. There will also be a final project, and it will be due the last day of class. The optional presentation of your project will take place during finals week. For dates of tests please refer to the most recent version of the course schedule.

Grading Scheme:

Your grade in this course will be determined by the following percentage values.

Tests – 50% total

Final Project – 20%

Mini projects – 20%

Homework assignments – 5%

Participation – 5%

Letter grades are determined by the following scale:		80-82	B-
		77-79	C+
93-100	A	73-76	C
90-92	A-	70-72	C-
87-89	B+	69 and below	D*
83-86	B		

Make-up work Policy:

Since much of the work will be done online or in groups, late work should not be much of an issue. If you and/or your group need an extension you must contact me as early in advance of the deadline as you can to arrange that. If you will be missing a test you must contact me as soon as you know you will be missing it and schedule a time for you to take the test with me. **In the event of an unexcused absence, missed homework assignments, quizzes, test, etc. will NOT be accepted for credit** (except when missed work would fail the student). Make-up quizzes, exams, etc. generally are not taken during class time.

Other policies:

- Laptops/cell phones/tablets/other internet devices will be helpful in class for some activities and simulations. When you use your laptop please keep the volume turned off and use it exclusively for class related things. This means no email, Facebook, Twitter, games, etc. While on the device in class do not hide toolbars; keep all items you are working on visible on the screen and available for teacher inspection. Keep the internet device turned off and closed during tests and quizzes. You are expected to bring your graphing calculator to class EVERY DAY, it will be absolutely necessary.
- Any and all work on tests, quizzes, and projects MUST be your own!

Academic Integrity

I support and abide by the academic integrity policy as set forth in the Student Handbook. While you are encouraged to work together in this course at times, here are a few examples of behavior subject to review under the Academic Integrity policy:

- Copying someone's work and turning it in as one's own
- The use of aids or other materials on quizzes and exams without expressed permission
- The use of calculators when explicitly asked not to do so
- Copying another person's work or answers on a quiz or exam

Commitment to Inclusion

Ball State University aspires to be a university that attracts and retains a diverse faculty, staff, and student body. We are committed to ensuring that all members of the community are welcome, through valuing the various experiences and worldviews represented at Ball State and among those we serve. We promote a culture of respect and civil discourse as expressed in our Beneficence Pledge and through university resources found at <http://cms.bsu.edu/campuslife/multiculturalcenter>.

Mask Policy

An effective face covering, such as a face mask, must be worn at all times during face-to-face physical class meetings. The classroom is a small space where the spread of germs is hard to control, so we must all do our parts to cut down on the spread. In this classroom and the Burris building, as well as in the Academy buildings (Wagoner and Elliott) you must wear a face mask, as per [Ball State University's mask policy](#). If a student declines to wear a face mask as required the teacher will remind the student of the requirement and give the student a chance to comply with it prior to referring the matter to the Director of Academic Affairs or the Director of Residential Affairs. Wearing masks is crucial to preventing the spread of COVID-19 to others.

The teacher reserves the right to change this syllabus as situations arise, or add to it as needed.