

Statistics: Syllabus and Course Policies Mansfield High School

Teachers: Ms. Knight Class Website: <u>http://KnightSchool.weebly.com</u>

School Website: <u>www.mansfieldisd.org/schools/mansfield</u> Phone: (817) 299-7500

The purpose of this statistics course is to introduce students to the major concepts & tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to the four broad conceptual themes:

Exploring data - observing patterns and departures from patterns;

Planning a study – deciding what and how to measure;

Anticipating patterns – producing models using probability and simulation; and Statistical inference – confirming models.

This is a communications course in which students are taught to analyze data utilizing calculators and computers. Statistics will be different from any math course students have taken to date. Although numeric calculations are important, a greater emphasis is placed on a student's ability to arrive at a conclusion, make a judgment, and articulate how their statistics supports their conclusion.

Textbook and Supplementary Resources

<u>The Practice of Statistics – TI-83 Graphing Calculator Enhanced, Second Edition</u>, by Daniel Yates, David S. Moore and Daren S. Starnes, W. H. Freeman and Company, 2002.

	Class Supplies & Materials Must be brought to class DAILY	<u>Recommended</u> • headphones/earbuds
Behavior Expectations Be Prepared Be Polite Be Punctual Be Productive	 Paper (spiral or loose) Folder or Binder Pencils and Red Pens Stylus for iPad 	• Graphing Calculator (TI-84+)* * It is highly recommended that students have their own calculator. However, there are graphing calculators available for in-
	 Choose 2 to be left in room Large Box of Tissues OR Hand sanitizer OR 4-pack AAA batteries 	class use only. Each student will assume full responsibility for their borrowed calculator during class time. If the calculator is damaged in any way, that student (and parent/guardian) will be required to replace the calculator. The cost for a TI-84+ is approximately \$110.

Statistics Teacher	Room #	Email Address	Conference Period	Tutorials
Michele Hamilton	W10	MicheleHamilton@misdmail.org		
MaryAnn Knight	W3	MaryAnnKnight@misdmail.org	4 th 9:55-10:45	<i>Tues-Thurs AM by appt</i> Mon & Tues 2:55-3:30pm

Grade Distribution

<u>6-week grades</u> Test/Project – 60% Quiz – 35% Daily work – 5% At least 2 tests will be administered each 6wks

<u>Semester grades</u> 1st six weeks – 26% 2nd six weeks – 27% 3rd six weeks – 27% Semester exam – 20% **Academic Honesty** Although peer-tutoring is permitted and encouraged for in-class assignments, students are expected to work together rather than copy work from each other. *Cheating is not tolerated*. Copying answers from another student is cheating. Allowing another student copy your answers is also considered cheating. Students caught cheating will earn a grade of 0 on that assignment/quiz/test with no opportunity for make-up work to replace the grade.

iPad Ettiquette The use of iPads & other electronic devices during class time is for instructional use only (per AUP & BYOD agreement). Devices need to be out of sight when not in use.

Tardies Students should be prepared to begin class as soon as the bell rings. Students should have their book/notes, homework, writing utensil and calculator ready when the bell rings. A student, who is outside of the classroom when the tardy bell rings, is tardy. All tardies for the school are cumulative and handled by the administrator per campus policy.

Absences & Missed Work A student is absent if he/she misses over ten minutes of class. It is the student's responsibility to obtain and complete make-up work from absences. *All make-up tests and quizzes must be completed outside of class time, not during class.* See the tutorial schedule. You must let me know in advance if you are coming in to make up a missed assignment/quiz/test. Afterschool time for make-up tests may be extended as needed.

Late Work & Re-tests Late work will only be accepted *1 class day* late for a maximum possible grade of a 70. A student earning a test grade below 70% may request a re-test, given that they also come in for a tutorial session to review their original test. Retests are offered afterschool during a *1-week window* after the original test grades are posted. The maximum possible grade for retests is a 70.

Restroom Privileges Students are expected to take advantage of the passing period to handle personal issues. If a student must leave during class time, a restroom pass may be issued during *non-instructional* time. It is the responsibility of the student to return within 5 minutes. The pass only applies to the restroom & water fountains within U & W halls. It is imperative that students use their time wisely. Abuse of this policy may result in a referral &/or an absence.

Food & Drinks Food & drinks (except water) are not permitted inside the classroom.

Statistics topics

1st 6 weeks: Equations Chapter 1 – Exploring Data Chapter 2 – The Normal Distribution

2nd 6 weeks: Linear Functions Chapter 3 – Examining Relationships Chapter 4 – More on Two-Variable Data

3rd 6 weeks: Linear FunctionsChapter 5 – Producing DataChapter 6 – Probability: Foundations of Inference

January 12-16 Semester review & exam

4th 6 weeks: Linear & Quadratic Functions Chapter 7 – Random Variables Chapter 8 – The Binomial and Geometric Distributions Chapter 9 – Sampling Distributions

5th 6 weeks: Quadratic & Other Non-linear Functions Chapter 10 – Introduction to Inference Chapter 11 – Inference for Distribution

6th 6 weeks: Non-linear Functions & Geometry prep Chapter 12 – Inference for Proportions Chapter 13 – Inference for Tables: Chi-Square Procedures Chapter 14 – Inference for Regression

May: End-of-Course exam (exact date TBA) June 1-4: Final review & exam

Math Department Calculator Contract

It is highly recommended that students use their own calculator for their math classes; however, every student will have a TI-84+ calculator available to use during class time.

These calculators are available for in-class use only. Each student will assume full responsibility for their assigned calculator during class time, even if a student lends their assigned calculator to another student. Student must have a valid student ID in order to use their assigned calculator. Students must always take the calculator assigned to them and notify their teacher immediately if there is any prior damage to the calculator or if someone else is using their calculator.

If a teacher observes a student either using a calculator inappropriately or damaging a calculator in any way the following consequences will occur:

- 1st offense the student will lose school graphing calculator privileges for the next 5 class periods and could be required to pay a fine up to the value of the calculator for any damage caused
- 2nd offense the student will lose school graphing calculator privileges for the reminder of the school year and could be required to pay a fine up to the value of the calculator for any damage caused

In the event that a student loses or damages a calculator, a fine will be assessed to the student for the replacement cost of the calculator. Approximate cost for a TI-84+ calculator is \$110.

By submitting the electronic Acknowledgement form, it is expected that each student is responsible for the calculator used during class.