Text: <u>Introduction to the Practice of Statistics</u> (IPS) by Moore & McCabe

- **Course Content:**

  - Part I: Looking at data:
  - Distributions
  - Relationships
  - Producing data

  - Part II: Probability and Inference
  - Probability: the study of randomness
  - Sampling Distributions
  - Introduction to Inference
  - Inference for Distribution
  - Inference for Proportions
  - Analysis of Two-Way Tables
  - Inference for Regression
  - ANOVA

- **Course Structure:**

  - Lecture and Activities
  - Class discussions
  - Mini-tab/applet labs
  - Group practice

  - Part III: Additional Topics
  - Nonparametric Tests
  - Statistics for Quality

Course Goals   Successful students will:

- Use statistical methods to organize and describe data.
- Describe and compare distributions graphically and numerically.
- Describe relationships between data and distinguish between association and causation.
- Evaluate sampling designs.
- Design and carry out experiments requiring statistical inferences to draw conclusions.
- Use appropriate statistical inference to draw conclusions from collected data.
- Demonstrate an understanding of basic probability.
- Use the language of statistics and probability to justify conclusions in statistical inference.
- Work with other students to complete group projects and to enhance learning through the analysis and discussion of their own and others' statistical work.
- Accept responsibility for their learning by being prepared for class, by accepting constructive comments and by contributing to class discussions.

Calculator and Computer Requirements:
You may use a school TI-84 to complete your assignments. You are responsible for any damage to the calculator that you are assigned. Please bring the calculator to class daily. **Minitab,** Excel (install the stat add on) and/or calculators are to be used on homework, projects, quizzes, and tests. <u>I will still expect reasonable work to be shown</u>! There is a 30 day trial version of Minitab that you may use or go to www.onthehub.com and purchase a student license. Currently an academic student Minitab costs $30/year.

The book CD has problem data sets in Minitab, Excel and other formats for your use. *You do not have to manually enter the each data point*!

Grading Procedure:

There will be a quiz or test every week and I will grade problems from your homework.

I will drop the lowest quiz score each quarter. If you are absent on a quiz day, that will count as your dropped quiz score. If you miss more than one quiz, you will be required to take an alternate quiz (over the same material).

There will be two or three tests per quarter. There will also be semester exams. Tests will often have 2 parts. One part involves the use of Minitab and the other part is to be completed without using the computer. This is a COLLEGE class so there are no retests!

In addition there will be graded projects, statistical experiments, and computer lab assignments.

Your grade will be computed using a straight point average of all assignments.

The grade for the Kenyon class will be the average of the two semester grades.

Late assignments will not be accepted; they will be assigned a score of zero. The only exception to this policy is as follows:
If you are absent on a day that a test or assignment is due, it is your responsibility to meet with me to explain the reason for the absence, to hand in the assignment, and/or to schedule the missed test. *If you are late to class (school), you need to get the assignments to me; any assignments turned in the following day will be graded as a zero!* It is expected that missed tests are made up on the day you return to class. I will place the test in study hall. It is your responsibility to obtain the test from the study hall monitor. If you do not have a study hall, the test is to be made up in room 401 immediately after school.

Assignments and notes will be posted in Progressbook weekly.

Grading Scale:

100% or above	A+	77-79%	C+
93-99%	A	73-76%	C
90-92%	A-	70-72%	C-
87-89%	B+	67-69%	D+
83-86%	B	63-66%	D
80-82%	B-	60-62%	D-
		below 60%	F

Attendance:

It is expected that you attend class regularly. You are responsible for learning all missed content and announcements, and for completing all missed work!

Please be on time to class. I will start class promptly. Tardiness will disrupt the class. Tardiness is disrespectful to me and your classmates.

Disabilities:

If you have a disability, please notify me during the first week of classes in order to assure that appropriate accommodations are made.

Discipline Code:

You are required to conduct yourself in accordance with all high school policies. Class disruptions will not be tolerated. Copying of homework (or any type of plagiarism) is unacceptable and will result in disciplinary action.

Your Responsibilities are to:

Be Respectful.
Be Attentive.
Be on time.
Bring all materials to class--books, notebooks, pencils, calculators, etc.
Complete assignments in a timely manner.
Be thoughtful.
Work individually and in groups on mathematics.
Seek help when necessary.
Maintain a grade appropriate to your ability in math. (Minimum "C")
Abide by all rules and regulations as stated in the EHS student handbook.
Consequences of not abiding by these expectations are: 1) verbal warning, 2) conference and "no" on responsibility list, 3) detention and/or phone call to parent/guardian, and/or 4) class removal.