



"I figure that I've got a 50/50 shot at winning the lottery - I can either win or lose."

- Anonymous (thankfully)

"Statistics can be made to prove anything – even the truth." - Noel Moynihan

### **COURSE DESCRIPTION:**

Statistics is a way of reasoning, along with a collection of tools and methods, designed to help us understand the world. In this class you will develop analytical and critical thinking skills, describe data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences.

We'll cover four main themes in AP Statistics:

- Exploring Data
- Sampling and Designing Experiments
- Probability and Patterns
- Hypothesis Testing and Confidence Intervals

### SUPPLIES NEEDED FOR THIS COURSE:

- 1. Notebook to keep your work in
- 2. *GRAPHING* calculator\* –
- 3. Paper and pencil

\*For A.P. Statistics, and all math classes beyond Algebra 2, you are required to have a graphing calculator. I would recommend you only get a TI-84, or 84+ model of calculator.

### FIVE ESSENTIAL THINGS IN THIS CLASS:

 $0.\overline{9}$  – **Honesty**: Be honest in conversation, daily work, assessments, etc.

 $\sqrt{4}$  – **Respect**: Respect yourself, other people, personal property, time in class, and ACHS.

0!+0!+0! - Positive Attitude: Attitude and effort are the keys to success!!  $\bigcirc$ 

 $2^2$  – **Be Prepared**: Do your homework, bring your supplies, and be ready for class.

-(5i<sup>2</sup>) – **Relaxed Environment**: Please ask questions at any time. I welcome any questions you have and want you to feel comfortable learning in our classroom.

### **METHODS OF OBTAINING HELP:**

Math help is usually available from me or other math teachers throughout the day. Help is also sometimes available from me before and after school (you should schedule an appointment with me for this). You can also get help from Mr. Stevens when he is available.

Mr. Lofgren may be available for help during 5<sup>th</sup> and 8<sup>th</sup> periods

Mr. Stevens may be available for help during 2<sup>nd</sup> and 5<sup>th</sup> periods

Please come get help as soon as you are having difficulty!

### **GRADING SETUP:**

**Homework**: Daily assignments will be listed on a chapter syllabus. **These are critical to do in order to prepare yourself for the AP test and our in-class assessments!!** Homework will be collected regularly and checked for accuracy and completeness. No retakes on assessments are allowed unless all homework has been completed <u>prior</u> to the assessment. *Please keep all homework assignments in a class notebook, along with your notes. Number each assignment according to their syllabus number.* Homework will count for up to 10% of your 18-week grade.

<u>**Tests and Quizzes**</u>: During each chapter we will take "11-Minute Quizzes". These are designed to prepare you for the free-response questions on the AP Statistics test held in May. We will also take a test at the end of each chapter. Tests and quizzes will count for at least 90% of your 18-week grade. Test retakes are allowed after all retake conditions have been met. Some assessments may be graded using the 1-4 point AP Statistics rubrics.

**Final Exams / AP Statistics Exam**: We will have a final exam at the end of the course that will count for part of your semester grade. On **Tuesday, May 7<sup>th</sup>, at high noon**, <u>all students</u> will take an AP Statistics exam... the chance to show colleges what you have learned! In addition, the grade reported to DMACC in the spring will be the grade earned during the 2<sup>nd</sup> semester of the school year.

### HOW TO CONTACT ME:

Feel free to e-mail or call with <u>any</u> questions or concerns that you have about the class or how you're doing in the class or anything else on your mind.

warren.lofgren@ankenyschools.org cullen.stevens@ankenyschools.org 515-965-9610

## HOW DO I SUCCEED?

I want each of you to do the very best job you can in your study of statistics. I am willing to help you as much as I can to ensure your success. There are two things that you need to do for yourself though... PRACTICE and ASK QUESTIONS!

Class Grading Scale:													
	Minimum Percent	92.5	89.5	86.5	82.5	79.5	76.5	72.5	69.5	66.5	62.5	59.5	Below 59.5
	Grade	А	A-	B+	В	B-	C+	С	C-	D+	D	D-	F



The textbook used in this class is <u>The Practice of Statistics</u>, 6<sup>th</sup> edition by Starnes, Tabor, Yates, and Moore. **Copyright 2020.** 

As a DMACC class, the class competencies from DMACC will be taught and assessed.

## AP STATISTICS EXAM DATE: Tuesday, May 7<sup>th</sup>, *high noon*. Be there.

f(x)	AP Statistics Retake Requirements	$\mu$ -3 $\sigma$ $\mu$ -2 $\sigma$ $\mu$ - $\sigma$ $\mu$ $\mu$ + $\sigma$ $\mu$ +2 $\sigma$ $\mu$ +3 $\sigma$
	NAME CLASS	

ASSESSMENT TO RETAKE \_\_\_\_\_

DEADLINE TO RETAKE (two weeks from date original assessment is returned)

\* All of the following requirements must be met in order to be eligible to retake an assessment. \*

### The retake grade will replace the original grade.

I completed all of the assigned homework <i>prior</i> to the first assessment.
I have completed all of the in-class activities, work, and notes.
I attended seminar to prepare for the reassessment. Seminar date
I have completed the <i>additional</i> homework to review the assessment topics.
I watched a relevant video on the assessment topic from YouTube, Khan Academy, or class website, AND took <u>thorough</u> notes on it (notes can be in notebook or else on back of this page).
Record video title and web address here
I have corrected and shown all of my work to the problems I missed on the first assessment. I have also written out an explanation for each mistake I made. <i>Attach corrections with explanations to this page.</i>
I have scheduled a time, date, and place for retaking the assessment. <b>Consider retaking in S.O.S. after school on Monday through Thursday.</b>
Time, date, and place of reassessment:

What will you do differently before future assessments to help ensure that you will be more successful the first time?

## **Behavioral Expectations**

The work habits/behavior standards are for grades 6-12 courses in our district. These work habits/behavior standards will be reported throughout the semester and are as follows:

- Organization and Readiness
- Productivity and Accountability
- Collaboration Skills

For those of you accessing this document electronically, the work habits tool can be accessed <u>here</u>. We will be using the following performance levels:

Performance Levels for Work Habits/Behavior Standards							
MS	PM	DM	NE				
Meets Standard	Partially Meets Standard	Doesn't Meet Standard	No Evidence				

These descriptors are intended for feedback and communication and do not impact a student's GPA.

# Formative and Summative Assessment: Definitions

- Formative Assessment: Formal and informal processes teachers and students use to gather evidence for the purpose of improving learning.
- **Summative Assessment:** Assessments that provide evidence of student achievement for the purpose of making a judgment about student competence or program effectiveness.

## How students will be graded on academics:

- Letter grades will continue to be assigned for all courses at the secondary level
- When utilizing the Levels of Proficiency (Beginning, Progressing, Meeting, Advanced), teachers will show the connection between a student's performance on the Performance Scale to the assigned grade. This connection will be communicated at the onset of its use and throughout the learning progression for the purpose of providing feedback.

## **Guiding Practices:**

### **Multiple and Varied Assessment Opportunities**

All students should have multiple and varied assessment opportunities to demonstrate higher levels of achievement. Additional opportunities may include being reassessed on only the content/skills not mastered, spiraling assessment of content/skill on subsequent assessments, reassessment of an alternate form of an assessment (e.g., Form B instead of Form A), student revisions of work products based on descriptive feedback, or alternative methods of assessments (e.g., an oral response rather than a written test).

Guidelines for reassessment opportunities include the following:

- Students will be provided the opportunity to be reassessed best practice is to provide additional opportunities for students to demonstrate learning during future assessments.
- Teachers determine appropriateness and authentic need for reassessments.
- Reassessment method will be provided at the discretion of the teacher.
- Reassessments will be given within a reasonable time frame that the teacher determines and students will be communicated with in advance.

### **Homework / Independent Practice**

Homework is an opportunity for students to practice skills, apply knowledge, review and build on past learning, and extend learning. Homework is individualized and based on each student's progress towards established standards. The purpose of the assignment will determine whether or not a grade is given and will be clearly articulated to students. Through independent learning tasks (homework), students assume more responsibility for their learning and are given opportunities to apply what they have learned to new situations or experiences.

### **Extra Credit and Bonus Points**

To ensure that grades reflect progress toward and achievement of the standards, giving extra credit points or bonus points will not occur in this class.

### Performance Levels for Work Habits/Behavior Standards:

MS = Meets Standard PM = Partially Meets Standard DM = Doesn't Meet Standard NE = No Evidence

These descriptors are intended for feedback and communication and do not impact a student's GPA.

### Regarding the New High School Credit Law

In accordance with a new Iowa law awarding non-high school students HS department credit, Ankeny will be awarding department (Math, Modern Language, PE) credit for any high school course they have taken - such as Algebra I, Spanish I, French I and in some cases, Geometry or Algebra II. While Ankeny Community Schools will be awarding department credit as per the law, students will <u>not</u> have that grade calculated into a grade point average based on their performance in the class. This means they will receive a letter grade on their report card and their transcript but that letter grade will not be included in their grade point average.

### District Office 306 SW School Street PO Box 189 Ankeny, IA 50021-0189 P: 515.965.9600 F: 515.965.4234 W: ankenyschools.org

Ankeny Community School District does not discriminate based on race, color, creed, religion, national origin, sex, gender identity, age, disability, marital status, sexual orientation, physical attributes, physical or mental ability or disability, ancestry, political party preference, military affiliation, socioeconomic status, or familial status. Inquiries or grievances may be directed to Kenneth Morris, Director of Equity, 306 SW School Street, 16 P.O. Box 189, Ankeny, IA, 50021-0189, (515) 965-9600, <u>kenneth.morris@ankenyschools.org</u>; or the Iowa Civil Rights Commission, Grimes State Office Building, Des Moines, IA, 50319-0201, (515) 281-4121; or the U.S. Department of Education, Office for Civil Rights, 500 West Madison Street, Suite 1475, Chicago, IL 60661.