# Syllabus for Math 11

Beginning Statistics: from counting people to determining drug safety

## **Instructor:**

Mr. Robert Gutierrez

#### Office:

FEM 1 (Math Center)

### Office hours:

whenever I am available outside

#### Classroom:

FEM 4

at Reedley College

#### **Class times:**

Mon, Tues, Thu, Fri 11:00 am. to 11:50pm.

Course number: 56034 Spring semester 2011

## Dear News Media,

When reporting poll results, please keep in mind the following suggestions:

If two poll numbers differ by less than the margin of error, it's not a news story.

Candidate O's

poll numbers are plummeting!

Scientific facts are not determined by public opinion polls.

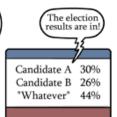
A poll taken of your viewers/internet users is not a scientific poll.

And now to fill

What if all polls included the option "Don't care"?







## Signed,

 Someone who took a basic statistics course.

WWW.PHDCOMICS.COM

**Email:** 

Work Phone:

robert.gutierrez@reedleycollege.edu Ask the Switchboard to find me on campus.

Essentials of Statistics, 4<sup>rth</sup> Edition **Textbook:** Mario F. Triola

Larry Gonick Cartoon Guide to Statistics **Fun optional reading:** 

Fun optional reading: Shin Takahashi Manga Guide to Statistics

Darrel Huff How to Lie with Statistics **Fun optional reading:** 

**Subject Prerequisites (requires C grade or better):** 

**Basic Skills Prerequisites:** 

Eligibility for ENGL 125 and ENGL 126 **MATH 103** 

#### **Cheating and Plagiarism:**

A student receives zero credit for an assignment or test if the instructor believes the student has cheated or plagiarized.

## **Student behavior:**

- Do not use in any way your cellphone or any device before entering and during class.
- Please do not arrive late to class.
- Please do not leave class early.
- Please do not eat nor drink in class except for water.
- Be considerate and polite to others.
- You may not study for another class or read a book, newspaper, magazines, etc. during class.
- Please no guests in the classroom.
- In short, be polite and see page 44 in the Reedley College Catalog.



## **Attendance and Participation:**

- Students are expected to attend <u>every</u> time there is class, be in class at 10:55am, and be in class the <u>entire</u> class time.
- **THREE** absences may result in a drop from the course by the instructor during the first nine weeks.
- Being late to class counts as an absence.
- Leaving class early counts as an absence.
- Contacting me about a future absence does not excuse the absence unless the absence is related to a school-related activity, family emergency, or some other valid reason.
- Not being present during class for an unnecessary amount of time, determined by the instructor, may be counted as an absence.
- Not participating in class by not responding to questions, ignoring the instructor, or any other undesirable behavior shows an unwillingness to learn and/or study previous math knowledge. This behavior may cause the student to be dropped from the course by the instructor.
- If you decide to drop the course, it is your responsibility to make the drop official in the Administrations and Records office or else possibly receive a grade of F.

## **Important Dates:**

Monday, January 17: Martin Luther King Jr. day (no class)

• Friday, February 18: Lincoln's birthday (no class)

• Monday, February 21: Washington's birthday (no class)

• Friday, March 11: Last day to drop the class

• April 18 through 22: Easter Vacation (no classes)

Friday, May 13:
Last day of class

Monday, May 16: Final test at 11:00am to 12:50am in FEM 4

## Class materials:

- Blank or lined paper (I personally think blank is better overall.)
- Mechanical or wooden pencils (I prefer mechanical.)
- Colored pencils
- Pencil erasers
- Pencil sharpener if you use wooden pencils
- Three-ring binder or folders
- Small stapler with extra staples
- Graph paper
- Ruler
- Calculator

#### **Tests:**

- There are about *five* regular tests and a final test. This number may change throughout the semester.
- The lowest test score (only among the regular tests) will not be used in the final grade.
- Cellphones or any other similar electronic devices are NOT allowed during any test. If you use one during any test, then you will receive a zero for the test.
- A calculator may be used only at the discretion of the instructor.
- If a student must *absolutely* be absent on any test day, then discuss taking the test at another time with the instructor.
- THE FINAL TEST WILL BE CUMULATIVE AND MUST BE ATTENDED AS SCHEDULED.
- The final test grade will be used in the final grade.
- You do not need to buy "blue books" or any similar things. Paper test will be provided by the instructor.
- Even though the instructor wants tests on Fridays, it may not happen and can occur on any day of the week.
- Collectively, all tests are worth 80% of the total grade.



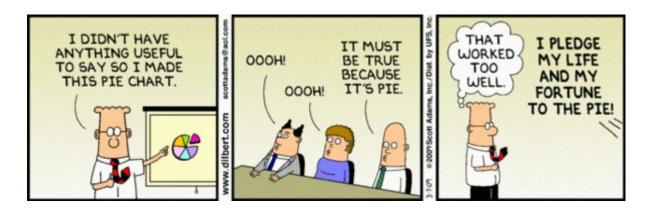
"Every team needs a role player. And your role on this team, Bill, is to sit at that desk and crunch numbers."

## Why you are in this class?

- Learn and understand the importance of basic statistics and how it helps our day-to-day lives.
- Be a more well-informed decision maker.
- Be able to analyze and to make predictions from sets of collected data, typical in any science class.
- Learn how to approach solving a problem in a critical, rational, sequential, and meticulous way in a safe environment.
- Be a more patient problem solver.
- Learn that math problems are **never usually** solved in a one, quick, easy, and/or painless way and are not just purely algebraic and computational in nature.

## **COURSE OBJECTIVES:**

- A. Summarize and describe given data sets.
- B. Apply the methods of descriptive statistics to determine the measures of central tendency and variability to a variety of problems.
- C. Apply basic principles of probability to determine probabilities of a variety of events.
- D. Analyze discrete and continuous probability distributions.
- E. Explore the basics of sampling theory.
- F. Estimate population parameters through studying confidence intervals.
- G. Examine hypothesis testing for small and large samples and multiple populations.
- H. Determine if a relationship exists between quantitative variables.



## **Class structure:**

#### Class notes:

Your instructor believes paying attention in class is more important than purely writing notes and not understanding what one is writing. However, writing notes is important. Consequently, class notes are provided by the instructor (to the best of his ability) on occasion to unsure that notetaking is less of a chore and to increase the student's ability to pay more attention during class. However, these provided notes are **not complete.** The student **must** attend class to understand what mathematical ideas the notes convey. Although, the student should still bring paper to class.

The instructor will never write "step-by-step" notes in class because the instructor wants the student to figure out on his own what the "step-by-step" is, then the student will learn.

## • Class format:

Your instructor believes more in active learning than in passive learning. Only sitting and barely thinking about the math presented in class will most likely result in a poorer understanding of the material which will cause lower grades. Thus, your instructor will ask questions during class to encourage a class dialogue. We are all in the same boat when learning mathematics.

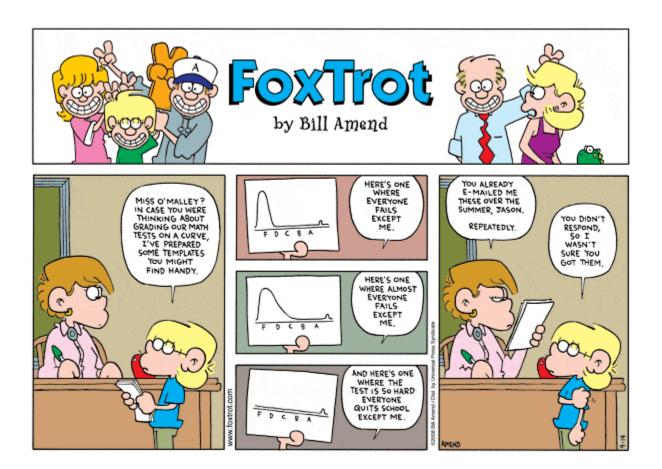
#### Homework:

- Homework is usually assigned **DAILY**. It may or not be turned in for a grade. In other words, there is always something to study.
- Homework can range from a list of book problems to do at home to a small project.
- Homework should take about less than two or three hours of consistent thinking and/or trial-and-error.
- Homework is graded in one of two ways. One way is by completeness and effort; it receives full, half, or zero credit. The other way is by completeness, understanding, and effort.
- LATE HOMEWORK IS NOT ACCEPTED and it receives a ZERO grade!!!! Homework is considered late if it is not placed in the instructor's folder by the beginning of class.
- Collectively, all homework assignments are worth 20% of the total grade.

#### **Homework format:**

If you do not follow these instructions, then the homework assignment receives a **ZERO** grade.

- Homework will be written legibly, look neatly, on **both** sides, and be organized in a certain way provided by the instructor. These instructions are provided by the instructor and are located online in "blackboard" where homework is assigned.
- Write the homework with a sharpen pencil (preferably a mechanical pencil) or with **ONLY** a black or blue pen. I highly recommend that the student writes the homework with pencil since one cannot generally erase ink.
- You will use standard 8.5in. by 11in. sheets of blank or lined paper (no spiral paper accepted) and be **STAPLED** in the upper left-hand corner. NOTE: staples are not always provided by the instructor.
- Show all appropriate work for each problem. Only writing an answer may result in **ZERO** credit.



**Grading scale:**  $89\% \le A \le 100\%$   $78\% \le B < 89\%$   $67\% \le C < 78\%$   $56\% \le D < 67\%$   $0\% \le F < 56\%$ 

## **Students with Disabilities:**

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

## Disclaimer:

Due to time constraints and/or unforeseen circumstances during the semester, your instructor reserves the right to alter anything in the syllabus when deemed necessary for the educational welfare of the students.