# Syllabus for Math 11

Beginning Statistics: from counting people to determining drug safety

#### **Instructor:**

Mr. Robert Gutierrez

#### Office:

FEM 1 (Math Center)

#### Office hours:

to be announced

#### Classroom:

**CCI 200** at Reedley College

#### **Class times:**

Mon, Tues, Wed, Thu 8:00 am. to 8:50pm.

Course number: 56044 Fall semester 2010

# 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

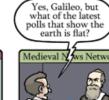
plummeting!

Scientific facts are not determined by public opinion polls.

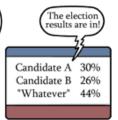
A poll taken of your viewers/internet users is not a scientific poll.

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

**Work Phone:** Email:

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

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

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

**Fun optional reading:** Shin Takahashi Manga Guide to Statistics

Fun optional reading: How to Lie with Statistics Darrel Huff

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

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

# Cheating and Plagiarism:

- A student receives zero credit for the assignment or test if the instructor believes the student has cheated or plagiarized.
- In short, do not cheat nor plagiarize!!!

#### **Student behavior:**

- Silence or turn off your cellphone or any device before entering and during class.
- Do not text message with your cellphone or any device during class. This request is redundant since you cannot use your cellphone or device during class anyway.
- 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>all</u> class meetings, be in class at 7:55am, and be in class the <u>entire</u> class time.
- *Four* absences may result in a drop by the instructor from the course during the first nine weeks.
- Being late twice counts as one absence.
- Leaving class early will be counted as an absence.
- Dense fog is not a valid excuse during the winter months. Drive carefully and slowly by leaving early.
- 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 or an emergency.
- 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, September 6: Labor Day (no class)

• Thursday, November 11: Veteran's Day (no class)

• Friday, October 15: Last day to drop the class

• Thursday, November 25: Thanksgiving (no class)

• Thursday, December 9: Last day of class

Monday, December 13
 Final test at 8:00am to 9:50am in CCI 200

#### **Class materials:**

- Blank AND lined paper (I personally think blank is better overall.)
- Mechanical or wooden pencils (I prefer mechanical.)
- Colored pencils (We may not use these, but it does not hurt to have them anyway)
- Pencil erasers
- Pencil sharpener if you use wooden pencils.
- Three-ring binder or folders
- Small stapler with extra staples
- Graph paper (This may be needed. The instructor will let you know.)
- 6 in or 12 in ruler
- Small basic inexpensive hand-held calculator. (A more complicated, more expensive, and/or bigger calculator will be fine during class, but may not be allowed during a test.)

#### **Tests:**

- There are about *nine* regular in class tests.
   This number may change throughout the semester. These tests will take either half or the whole class time.
- 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 will be used in the final grade.
- You do not need to buy "blue books" or any similar things. The test will be provided by the instructor.
- Even though the instructor wants tests on Thursdays, it may not happen and can occur on any day of the week.
- Collectively, all tests are worth 80% of the total grade.



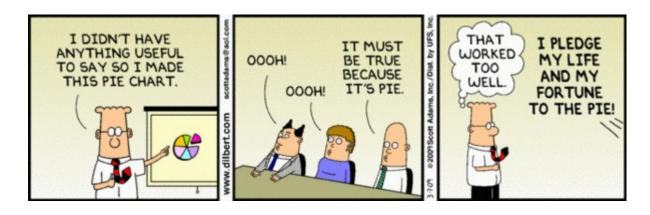
"Every team needs a role player. And your role on this team, Bill, is to sit at that desk and crunch numbers."

# 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 think critically, rationally, sequentially, and meticulously in a safe environment.
- Learn how to solve problems 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.
- etc.

#### **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) to unsure that note taking 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 <u>must</u> attend class to understand what mathematical ideas the notes convey. Although, the student should still bring paper to class.

#### 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.

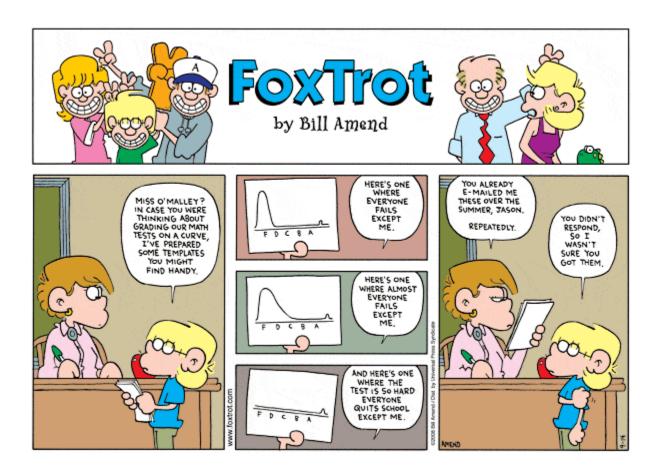
#### Homework:

- Homework is usually assigned **DAILY**. It may or not be turned in for a grade.
- 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, and be organized in a certain way provided by the instructor.
- 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.
- I want homework organized in a certain way and only one way. These instructions are provided by the instructor and are located online in "blackboard" where homework is assigned.
- Show all appropriate work for each problem. Only writing an answer may result in **ZERO** credit.



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

# **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.