Stat 10, Section 1A Thursday, April 1st, 2010

David Diez

1 General section info

- TA: David Diez
- Email: david@stat.ucla.edu
- Office hours: determined in class & by appointment.
- Section specific information will be posted to statgrad.com (links to Stat 10 section webpage)
- Familiarize yourself with the Moodle course site and check it every day.

http://moodle.stat.ucla.edu/

Moodle is regularly updated for labs, quizzes, handouts, etc.

• You are responsible for checking your email each day.

There are two quizzes per week on Moodle. Your weekly quiz grade is the top score each week, and your worst week will be dropped. **Quizzes cannot be made up**. Your dropped score serves as a way for you to not lose out if your computer fails during a quiz or you have an emergency where you cannot take a quiz. Also, don't get worried if you do poorly on one or two quizzes... you should focus most heavily on completing all coursework and doing well on the exams.

2 Open Intro – openintro.org

Mission: produce an open source (forever free) textbook for introductory statistics. Our team has released several chapters, and I hope you will take a look at these and try them out. The Stat 10 version of the book will be complete before the end of this quarter, and you can download chapters for the first 75% of the Stat 10 course now. Later this quarter I will send out an email for feedback on the book.

Reading the Open Intro book is completely optional, however, your feedback can help us improve the book so it can be used sooner. The sooner it is ready as the main text, the sooner students can save money on statistics textbooks.

3 What is statistics?

There are many steps in the problem solving process. One outline of the process:

- 1. Identify an interesting issue or question.
- 2. Carefully collect data on the topic. Data = recorded information.
- 3. Examine and process the data.
- 4. Form a conclusion based on the data.
- 5. Make important decisions based on the conclusion.

Statistics focuses on making steps (2)-(4) as objective as possible. It is the study of how best to collect, analyze, and draw conclusions from data.

4 Review of three case studies

Our aim here is to examine two articles. Case study (1) is *Cell phone-cancer link found by Tel Aviv University scientist*, and case study (2) is *Brain function gets a boost from walking* (there are actually two case studies in the second article). The relevant articles can be found on the Moodle website. When reading these articles, think about the following questions.

- What is the purpose of these studies?
- Who or what did the researchers observe to collect their data?
- What are the explanatory and response variables?
- How was the data collected? Was it an experiment or an observational study?
- In the second article, there were actually two studies. Does it appear that their results pointed in the same direction? Why or why not?