1. Stories.

(a) To avoid bumping noses, people turn their heads slightly to one side when kissing someone. Obviously, both people kissing should turn their head the same way. In a study, 80 of 124 couples kissed with their noses to the right. (I am not making this up.)

(b) Your instructor, while avoiding the pile of grading facing him this spring break, spun a dime (a 1995D dime) 100 times on his desk and noted that it came up heads 79 times.

(c) While imprisoned by the Germans during World War II, the South African mathematician John Kerrich tossed a coin 10,000 times. Result: 5067 heads, a proportion of 0.5067.

(d) The FDA specifies that unused surgical gloves should have a leak defect rate of at most 1.5%. In a test of 347 surgical gloves used in 103 medical and dental surgeries, 18 of these had leaks before they were used. (Critical Care Medicine, Volume 20, Issue 2.)

2. Hypotheses pairs.

3. Hypothesis tests.

4. Two-sided alternate hypotheses.

5. Statistical significance. \( \alpha \) level, significance level

6. What \( P \)-values mean (and do not mean)

7. Hypothesis tests and confidence intervals.

**Homework**

1. Read pages 490-495 and 502-513.

2. Practice Problems (due Monday, April 5): 21.1,3,5,7,9