Summer 2018

**Statistics** 

Math 10.05 (CRN:00676) Math 10.61(CRN: 12580) **Instructor**: Parviz Sales Room: MLC255 & S16 **Phone**: (408) 342-4291 **Email:** psales@mitty.com Prerequisite: Passing grade (C or better) in Intermediate Algebra (Math 114) or equivalent.

**Course Description**: Introduction to data analysis making use of graphical and numerical techniques to study patterns and departures from patterns. The student studies randomness with an emphasis on understanding variation, collects information in the face of uncertainty, checks distributional assumptions, tests hypotheses, uses probability as a tool for anticipating what the distribution of data may look like under a set of assumptions, and uses appropriate statistical models to draw conclusions from data. The course introduces the student to applications in engineering, business, economics, medicine, education, the sciences, and other related fields.

Textbook & Relate Materials: Statistics Labs and Study Guides (Required). TI 83, or TI 84 Graphing Calculator (Required). Collaborative Statistics, by Illowsky / Dean (Optional) which is a free download from the url: www.cnx.org/content/col10522/latest/.

Attendance: Success in the class requires regular and consistent attendance. I will take roll everyday. I also take attendance in the lab. Nonetheless the students have complete responsibility for withdrawing from the course for any and all their reasons. Please check "MyPortal" for the last day to drop the class with a "W". Students who don't withdraw in a timely manner and stop attending class will receive a final grade of "F".

**Laboratory**: There are 10 lab assignments. These are assigned randomly during the quarter. All the labs will be worth as 100 points. Late Lab Assignment will not be accepted unless you are absent on a turn-in day.

**Quizzes:** There will be 5 quizzes containing problems from homework or similar to the homework according with the date on the calendar on page 2. All of your quizzes will count as 100 points test. There will be no make-ups for missed guizzes.

Tests: Four one-hour tests will be given and each test is worth 100 points, according with the date on the calendar on page 2. From the five grades, the 4 test scores and the sum of all the quiz grades, I will drop the lowest grade. In case you miss a test, that will be the grade that I will drop. Final Exam will be comprehensive and worth 120 points. Final Exam is mandatory and not taking it translates to a final quarter grade of "F". (Department policy.) Final Exam will be given on Thursday, 8-9.

**Grading**: Your quarter grade will be determined with the following scale:

| 97% - 100% | A+ | 93% - 96% | А  | 90% - 92%     | A- |
|------------|----|-----------|----|---------------|----|
| 87% - 89%  | B+ | 83% - 86% | В  | 80% - 82%     | B- |
| 77% - 79%  | C+ | 70% - 76% | С  | 67% - 69%     | D+ |
| 63% - 66%  | D  | 60% - 62% | D- | 59% and below | F  |

|                  | Monday                                   | Tuesday                                 | Wednesday                            | Thursday                             |
|------------------|--|---|--------------------------------------|--------------------------------------|
| July             | 2<br>Chapter 1                           | 3<br>Ch. 2                              | 4<br>Independence<br>day holiday, no | 5<br>Chapter 3<br>Quiz 1             |
| July             | 9<br>Chapter 3                           | <b>10</b><br>Chapter 4<br><b>Test 1</b> | class<br>11                          | 12<br>Ch. 4<br>Quiz 2                |
| July             | 16<br>Chapter 5                          | 17<br>Test 2                            | <b>18</b><br>Chapter 5, 6            | <b>19</b><br>Ch. 6,<br><b>Quiz 3</b> |
| July             | 23<br>Chapter 7                          | 24<br>Chapter 8<br>Test 3               | 25                                   | <b>26</b><br>Ch. 9,                  |
| July /<br>August | <b>30</b><br>Chapter 10<br><b>Quiz 4</b> | 31<br>Chapter 10                        | 1<br>Test 4                          | 2<br>Chapter 11                      |
| August           | <b>6</b><br>Ch. 11                       | 7<br>Chapter 12<br>Quiz 5               | 8<br>Final Review                    | 9<br>Final Exam                      |

## *Tentative Schedule for Math 10, Summer 2018*

## Math 10 Assignments

| Chapter | Page | Problem #      |
|---------|------|----------------|
| 1       | 36   | 1,4,6          |
| 2       | 87   | 1a-i,3a-i,5a-i |
| 3       | 137  | 7,17,19        |
| 4       | 184  | 1,3,10,28      |
| 5       | 238  | 1,6            |
| 6       | 265  | 1,8            |
| 7       | 298  | 5              |
| 8       | 343  | 1,2,4          |
| 9       | 396  | 1,5,11,28      |
| 10      | 442  | 14             |
| 11      | 487  | 3,13           |
| 12      | 544  | 5a-f           |



## Student Learning Outcome(s):

\*Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data.

\*Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.

\*Collect data, interpret, compose and defend conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.