## Study Guide for TEST IV MATH 1401

Test IV will consist of 15 multiple-choice questions worth 7 points each. The total number of points on the test is 105. Thus, you have a "built-in" 5-point bonus. <u>The test will be</u> <u>open notes</u>.

| Question No. | Objective(s)   |
|--------------|--|
| 1            | State the null hypothesis and alternative hypothesis used in testing a claim.<br>[Section 8-1, p. 371, #5-8] |
| 2            | Determine the critical <i>z</i> scores used in testing a claim.  |
|              | [Section 8-1, p. 372, #21-23]  |
| 3            | State the final conclusion of in a hypothesis test.  |
|              | [Section 8-1, p. 372, #9-11]   |
|              |  |
| 4-5          | Find the value of the test statistic.  |
|              | [Section 8-1, p. 372, #13-16]  |
| 6            | Calculate a <i>P</i> -value.   |
|              | [Section 8-1, p. 372, #17-20]  |
| 7-12         | Perform a hypothesis test. (The questions will step you through one  |
|              | hypothesis test. It will either be a proportion, a mean, or a  |
|              | variance/standard deviation.)  |
|              | [Section 8-2, pp. 283-386, #9-32;  |
|              | Section 8-3, pp. 396-398, #9-24;   |
|              | Review Exercises, p. 409, #2-6]  |
| 13           | Determine if there is a significant linear correlation using the Critical                                    |
|              | Values of the Pearson Correlation Coefficient Table (it is either A-5 or A-6                                 |
|              | depending on your formula card).   |
|              | [Section 10-1, pp. 475-479, #5-10, 13-28;  |
|              | Review Exercises pp. 503-504, #1(a), 2(b)]   |
| 14-15        | Find the regression equation given a set of data.  |
|              | Find the indicated predicted value using the prediction procedure  |
|              | described in Section 10-2.   |
|              | [Section 10-2, pp. 490-493, #5-8, 13-28;   |
|              | Review Exercises pp. 503-504, #1(c)-(d), 2(c)-(d)]   |