Math 410/510   **Spring 2010**   **Guide for the Final Exam**

- The exam is on Thursday June 10 at 10:10am in our regular classroom.

- The deadline for any late good problems is at the exam.

- The exam is cumulative. The study guides and tests are a good guide for the material covered by them.

- The exam also covers new material from Sections 10.1, 10.2, and 10.5.

- Math 510 students will have an extra question.

Here are some sample test questions/topics from Sections 10.1, 10.2, and 10.5. Things written in [brackets] are comments.

1. Use the Gram-Schmidt process to convert the set of vectors $\{****\}$ to an orthonormal set. [Probably 3 vectors each of length 3.]

2. Determine the least-squares straight line to fit the data $\{****\}$. [Like 10.5 example 3.]

3. Find the least-squares solution to the system of equations ***. [Like 10.5 problems 1–8.]