Math 4242   **Applied Linear Algebra Spring Semester 2017**

Homework Assignment 1 - Due Friday 1/27/2017 in class or in my mail box before 2:30.
The first quiz will be held on this date, on the material of the exercises listed below.

Comments: You already know how to do Gaussian elimination, solve equations, put equations
into matrix form and manipulate matrices. Many homework questions focus on theoretical things
that you might not have done before, and in producing arguments to justify to show things. These
may be the most difficult questions.

The number of questions to be handed in is supposed to be something you can reasonably
manage. You should probably practice more questions than this. I give some extra questions in
parentheses for you to do, but this still may not be enough. Try some others nearby in the book.
You should do these questions until they become something you can do immediately and quickly.

Exercises from chapter 1 of Olver and Shakiban:
Sec 1.2: 7(eg), 14, 32c (not to be handed in: 8, 32abde)
Sec 1.3: 1d, 4, 6a, 15, 19, 22c, 26, 29 (not to be handed in: 3af, 22be, 32b and others if you need
practice).
Sec 1.4: 3(a), 7, 10, 13, 19d, 20b (not to be handed in: 1(bcg), 19cf, 20c)

Homework Assignment 2 - Due Friday 2/3/2017
Again there are questions that are more theoretical than you may be used to. I expect you may
find the most difficult questions to be ones that start 'Prove that ...' I will try to address these
things in class.

Exercises from Olver and Shakiban:
1.5: 4, 7, 19, 24(de)
1.6: 8, 17(c), 25(bd)
1.8: 1(bcf), 5, 6(c), 24
1.9: 1(aef), 4, 5(bcdg)