

Chem 2320
Homework #1 (due 01/27/2005, 5:00 pm)

Cover Page

Name:

(Please **print**)

Score:

/20

I. Please circle the **last** number of your student I.D. **Do not circle the wrong number or penalty will be imposed.** Do **not** write down your full student I.D. on your homework.

1 2 3 4 5 6 7 8 9 0

II. Select and download your designated problem based on the **last** number of your student I.D. following the steps below:

Step 1. Go to the website of Department of Chemistry and Biochemistry (<http://www.chem.usu.edu/>)

Step 2. Move cursor to Undergrad Resource, then from the pop-up window, click "Online Course Resource"

Step 3. Click "Chemistry 2320 Organic Chemistry II"

Step 4. Click "Chem2320"

Step 5. In the column with "Spring 2005" heading, click "Homework 1"

Step 6. Click and download your designated problem. If you circle 1 then work on Compound 1, and 2 for Compound 2, 3 for Compound 3...etc. If you circle 0 then work on Compound 10.

If you have any question or if you wish to have the hardcopy of your designated problem, send me an email (chang@cc.usu.edu) and indicate the problem number.

III. Provide the compound structure for your designated homework problem. Explain how you come up with the structure you identify. For example, explain how you obtain the formula corresponding to molecular ion and how you rationalize the fragments from MASS, the functional group absorptions from the IR, and the chemical shift and the coupling pattern from the NMR. Provide explanation for the coupling pattern and the coupling constant that will help to support your analysis. **You may be awarded with significant partial credits from your explanation even when the proposed structure is wrong.**

**Staple all your work sheets with clear handwriting or typing
along with the cover page and your homework problem**

**Students who take this course for honor need to work on at
least 5 problems. Your homework will be graded based only
on your assigned problem. Put your assigned problem as the
first one.**