

Hello,

If you haven't read the previous email about the final exam very carefully, we suggest that you do so. The purpose of this email is to help you prepare for the final exam.

Chapter 25 will not be covered on the final exam.

As we mentioned, the final exam has 15 multiple choice questions worth four points each and 14 written problems worth a total of 190 points for a grand total of 250 points. The final exam may be a bit longer than two semester exams combined. It will have many questions that are similar in format and approach to questions on the semester exams. It will also have some that are a little different.

We suggest that when you are taking the final exam you go through and be sure to answer the questions that you believe you can answer quickly and correctly first. Then you can spend the remaining time on questions that you find more challenging. Don't forget to mark the answers to the multiple choice questions on the scantron early. Some of you may find that time is a factor and things may be rushed at the end.

The final exam is comprehensive and is the culminating experience of the year of Organic Chemistry. There will be slightly more emphasis on the material that was presented since the last exam. But the final exam will cover material from the entire semester and will also require understanding of the general principles that have been presented through out the year.

Here is a partial description of the exam:

1. There will be a number of questions on the exam that ask you to write mechanisms of reactions.
2. There will be a number of questions on the exam that ask you to synthesize compounds.
3. There will be a number of questions on the exam that ask you to give the products of reactions and there will be a number of questions that ask you to identify the reactants that form given products.
4. There will be a spectroscopy problem on the exam in which you will be given spectroscopic data and asked to identify the compounds.
5. There will be a nomenclature question on the exam in which you will be given names and asked for structures.
6. There will be a question in which you will be asked to write structures of species with certain properties
7. There will be a question in which you are asked to write balanced chemical equations for some organic reactions.

Study Hints:

Be sure you can write out the answers to every question on the three exams given this semester without looking at the key while you are answering them.

Be able to answer the practice problems without referring to the answers that are provided.

### LEARN THE REACTIONS.

1. You should know the reactants and products and stereochemistry when relevant of the very large number of reactions presented this semester. Remember your text book has a section at the end of each chapter summarizing the important new reactions presented and summarizing reactions that can be used to prepare particular functional groups or carbon skeletons. Focus on the reactions that were mentioned or alluded to in lectures, in homework problems, or in Webassign.

2. You should know how to use these reactions in synthesis when appropriate and you also should know those reactions from last semester that are especially useful in synthesis.

3. You should be able to write mechanisms for reactions whose mechanisms were presented in lecture or in your text book. Your approach should be to understand the general principles of organic reaction mechanisms that we have presented and to know any unusual mechanistic features of specific reactions.

4. You should understand and be able to predict trends in acidity, basicity, and reactivity.

Above all, your goal should be to acquire active knowledge, understanding, and skills. To achieve that goal requires you to devise efficient, honest methods for self testing. You want to be able to say: "I can do that." rather than just "I understand that."

To help you study the massive amount of material we have covered this semester, below is a list of some things that will not be on the final exam. There are also many other things that do not appear on this list and are not on the final exam. We can't test on everything.

**Not on Final Exam:** Mass Spec, Names from Structures, Memorization of Numerical Data, Sections 13,10, 13.11, 14.10, 17.14, 19.13, 20.5, and 22.9,

Reminder: Review Sessions are scheduled for Friday May 9 at times and in rooms mentioned in the email about the final exam we sent last week. The lecturers will all be having our regular office hours next week.

Reminder: Make your index card

Good luck

Robert Boikess  
Leslie Jimenez  
Pat O'Connor