

CHEMISTRY 211-212

COURSE ORGANIZATION AND CLASSROOM ACTIVITIES

Groups and Student Collaboration:

To aid you in your study of organic chemistry, each of you will be assigned to a **class discussion group**. Each group will consist of four or five students. For most of the laboratory experiments, you will also work in **research groups**. There may be some personnel overlap between class groups and lab groups, but usually, they will operate independently. Each member of your group will have specific duties to assure that the workload is evenly distributed and **to help each student develop the required range of process skills**. Educational research indicates that students who work in groups with their peers tend to learn more in their courses. I hope that you will find that working with the members of your group will give you better insight in your analyses of the daily assignments. Much of the **initial exploratory data analysis** will be done **within your groups outside of class** (See *Class Format* below). Then initial group responses will be discussed in the class as a whole so that we will generally reach a consensus as to the best interpretation of the data. The course structure encourages you to **take responsibility for, and an active part in your education** in organic chemistry. The first set of groups has been assigned alphabetically but the compositions of groups will be changed periodically throughout the semester. Regardless of changes in group composition, specific role assignments will change each class period (See CLASS GROUPS on pp. 4-5.). **You will be expected to work together outside of class in preparing daily class assignments, analyzing lab data and devising answers to questions for exams** (See EVALUATIONS). I believe that you will find that small group discussions are very useful in generating ideas that stimulate your learning.

Class Format:

This course employs a discussion format that is unconventional for science courses. The value of class periods is largely dependent upon what each student contributes. Each day you will be given an activity with specific data and some questions to guide your analysis for the following class period. Then at the beginning the following class, I will randomly select a few groups to present their group responses to the assignment. Generally, these presentations will form the basis for whole class discussion. Consequently, **your group will be asked to draw initial conclusions from data BEFORE any class discussion of the material has taken place**. This process may be a bit uncomfortable at first, since you will have to rely on your group's combined logic rather than something you have gotten from a lecture or textbook. However, as the semester progresses, you will develop a "sense" of organic chemistry and your confidence will increase making you more comfortable with presenting your ideas. After the initial group presentations, we will have a 5 to 10 minute group discussion period for all groups to develop responses to the initial presentations. After the group discussion period, a few additional groups will be selected to respond to the original groups' presentations, and other volunteer responses will be considered in an effort to reach consensus on the best interpretation of the data under consideration. When the first issue is settled, we will move on to the next consideration gradually building our understanding of organic chemistry. After each class each group submits **three reports**:

1. **Group Electronic Activity Report** including the group responses to activity questions (See Recorder in CLASS DISCUSSION GROUPS)
2. **Daily Group Strategy Analyst's Report** assessing the group's work for the day. (See Strategy Analyst in CLASS DISCUSSION GROUPS)
3. **Daily Group Reflector's Report** with the group's general comments and questions (See Reflector in CLASS DISCUSSION GROUPS).