

# CHEMISTRY C107 – FRONTIERS OF CHEMICAL RESEARCH

Spring, 2007

## Course Requirements and General Information

***Class Meetings:*** Tuesday and Thursday, 11:15 a.m.–12:05 p.m., in Chemistry A500.

***Grading:*** Grades will be based equally on attendance and on a final paper.

***Attendance:*** Be sure that you attend every lecture and that you sign the attendance sheet and include your student number. You are expected to miss no more than two lectures. In order to get full attendance points you must also ask at least 3 questions of the faculty speakers during the course of the semester.

***Final paper:*** Toward the end of the semester, you will be required to choose one of the faculty speakers and to prepare a 4–5 page paper about the research of that faculty member. More information about the details of this assignment will be provided later.

***Getting more information about the faculty speakers:*** You can obtain more information about the various faculty speakers by accessing the following website: <http://www.chem.indiana.edu/personnel/faculty/faculty.htm>

## C107 Term Paper

A term paper describing the research of one of the faculty speakers this semester is due on Monday, April 23, 2007. There can be no exceptions to this deadline.

***Selection of a Faculty Speaker about Whom to Write.*** Use the accompanying list of faculty speakers to remind you of the choices available. **Each student should send an email message to Dr. Robinson no later than Friday March 30, indicating a first, second, and third choice of faculty speaker about whom to write.** Hopefully, every student will get her or his first choice; however, if too many students select the same faculty speaker, it may be necessary to seek some compromises.

***Selection of Topic.*** Select a well defined topic in consultation with your assigned faculty member. If you need help see Dr. Robinson.

***The Paper Itself.*** The term paper should be typed (word-processed), double-spaced, and equivalent to a minimum of five pages of elite-sized (12-point) print; the left-hand margin should be 1½ inches, and all other margins should be 1 inch. In the paper, you are to write about some research problem (topic) discussed (or being studied) by one of the faculty speakers. You should answer the following kinds of questions:

- (a) What is the research problem and why is it significant (important)?
- (b) What experimental methods or techniques are used to solve the problem, what is the experimental approach being used by the faculty member, and what is unique about this experimental approach?
- (c) What will be the future direction of this research?

In getting information for your paper, meet with the faculty member **as soon as possible** either by appointment on an individual basis or in a group at a time scheduled by the faculty member. **It is crucial that you not copy verbatim from papers, books, or the internet.** In consultation with the faculty member, determine the topic for your paper. You must understand the subject well enough to discuss it in your own words.

***Grading.*** Your paper will be reviewed first by the faculty member about whose research you write. You should allow time to rewrite the paper if the faculty member requests that you do so; this means that you should plan on an early draft of the paper. For the final grade, one copy of the final version of the paper should be given to the faculty member no later than Monday, April 24, 2006, and a second copy should be delivered to the Undergraduate Office (Chemistry 021). Your grade for the paper will be based on how well you treat your subject in terms of the questions listed above. Your paper will also be judged for correctness in spelling, grammar, punctuation, and general appearance. Your final grade in the course will be based both on your attendance throughout the semester and on your paper.

### C107 Lecture Schedule

<b>Date</b>	<b>Speaker</b>
T 1/9	Professor Robinson- class introduction
Th 1/11	No class
T 1/16	Professor Reilly
Th 1/18	Professor C. Jarrold
T 1/23	Professor Mindiola
Th 1/25	Professor Lee
T 1/30	Professor Dragnea
Th 2/1	Professor Bronstein
T 2/6	Professor Flood
Th 2/8	TBD
T 2/13	Professor Zhang
Th 2/15	Professor Peters
T 2/20	TBD
Th 2/22	TBD
T 2/27	Professor Li
Th 3/1	Professor Stevens
T 3/6	Professor Jacobsen
Th 3/8	Professor Hieftje
T 3/20	Professor Raghavachari
Th 3/22	Professor Tolbert
T 3/27	Professor Baker
Th 3/29	Professor Stone
T 4/3	TBD
Th 4/5	TBD