Chemistry 441L Course Syllabus – Spring 2011

Intermediate Analytical Lab

Faculty Adviser: Professor Tiani  
Office: Kenan Labs Room B128  
Email: tiani@email.unc.edu

Lab Coordinator: Dr. Sherryl Yu  
Office: Morehead Labs Room 208  
Email: syu@email.unc.edu

Lab Location: Morehead Labs Room 305

CHEMISTRY 441L TAs AND TA CONTACT INFORMATION

Ms. Rebecca Hunter (rahunter@unc.edu): AA and GC-FID
Ms. Katey Reighard (reighard@email.unc.edu): Electronics and Electrochemistry
Mr. Will Black (blackw@email.unc.edu): Fluorescence and GC-MS
Mr. James Treadway (jtreadwa@email.unc.edu): CE and HPLC

- If you need help or have questions regarding a specific experiment, please email the TA who is teaching that experiment.
- Each TA is in charge of teaching 2 of the 8 experiments you will cover throughout the semester; I have included those experiments next to each TAs name above.
- The TAs will answer questions regarding those experiments they have been assigned to teach and they will also grade all the reports for their assigned experiments.

LAB CHECK-IN

- There will be a required organizational meeting on Friday, January 21st from 12:00-12:50 in Kenan Labs Room B125 for all students enrolled in Chemistry 441L.
- The Chemistry 441L labs will begin the week of January 24th, this is the first week of experimental work.

COURSE PRE- AND COREQUISITES

- Chemistry 441 is a pre- and corequisite for Chemistry 441L.
- Chemistry 441 and 441L is required for the B.S. Chemistry degree.

FRIDAY RECITATION: This course has a required recitation component that will be held on Fridays from 12:00-12:50 in Kenan Labs Room B125. The recitation is primarily reserved for use by the laboratory course (Chemistry 441L). A number of these recitation slots, indicated on the class schedule at the end of the Chemistry 441 syllabus, will be used for lectures on elementary electronics and instrumentation.

TEXTBOOKS & EQUIPMENT

- Chemistry 441L Lab Manual (Student Stores, Coursepacks) – Required.
- **Laboratory Notebook (Required):** Pages must be pre-numbered and it must have carbonless duplicate pages. You may use an old lab notebook if it meets the criteria listed here. Alpha Chi Sigma (AXE) chemistry fraternity will be selling lab notebooks outside of Morehead Labs 102 the week of lab check-in for $10.00 (cash or check). You may use left over lab notebooks as long as they meet the specified criteria.
- **Scientific calculator.**
- **Safety glasses.** If you forget your safety glasses you will have to go to Morehead Labs 102 and purchase a new pair. If you have never had a chemistry lab at UNC you will receive a free pair the day of lab check-in. You will receive instructions during the lab check-in lecture.
- **Flash Drive.**

**EXPECTATIONS AND LAB PERFORMANCE:**

The TA’s will evaluate lab performance based on preparedness, how well you maintain your lab notebook, the completion of pre-lab assignments, general laboratory skills and your contribution to the group work in lab.

- **Arrive to lab on time.**
- **Follow all safety regulations and policies (see handout on Blackboard).**
- **Complete any pre-lab assignment before the scheduled lab period.**
- **Read and understand the laboratory procedures for your scheduled experiment before arriving to lab.**
- **Perform all calculations for your scheduled experiment before arriving to lab.**
- **Any student who arrives to lab unprepared can be sent home and not be permitted to perform the scheduled experiment.**
- **We understand that you may be graduating and thus may need to miss lab for professional travel. If you inform Dr. Tiani at the beginning of the semester, we can work with the schedule to make other arrangements that will allow you to complete the lab work.**
- **Please do not ask your TA to excuse a lab absence; only Dr. Tiani can excuse a lab absence.**

**BLACKBOARD**

- The 441L syllabus, announcements, grades, lab safety policies, lab report criteria, lab notebook criteria and other important lab information will be posted on Blackboard ([http://blackboard.unc.edu](http://blackboard.unc.edu)).
- If you cannot login to Blackboard, please email Dr. Tiani ([tiani@email.unc.edu](mailto:tiani@email.unc.edu)).
- If you are not receiving emails from your TA, let them know ASAP.
GRADING AND GRADING POLICIES

The points available in this class will be assigned in the following manner:

- 7 Lab Reports (100 points/lab): 700 points
- Lab Performance (15 points/lab): 150 points
- Electronics Final: 100 points

The grades for the lab will be weighted as follows:

- Lab Reports – 72 %
- Lab Performance – 23 %
- Electronics Exam – 5 %

LAB REPORTS

- All lab reports are due one week after the experiment is completed and are to be turned in at the start of the lab period at 1:00 p.m. Lab reports are not uploaded electronically; instead a physical copy is submitted.
- Follow the general lab report criteria posted on Blackboard.
- Follow the specific lab report criteria for each individual experiment (Blackboard).
- In many instances this semester you will work with a partner or as part of a group, carrying out the experiment and acquiring data collectively. However, there is no collaboration on the writing of lab reports, this includes working up the data, answering experiment questions, discussing your data, and constructing plots. All the work within your report must be your own.
- If you are having difficulties writing your report or have questions, seek help from the 441L teaching assistants.
- You are prohibited from using old lab reports or old Chemistry 441L lab material. Any use of old lab reports or 441L material will be treated as an honor code violation.

LATE LAB REPORTS

- Late lab must be taken to Morehead 102 and you must have it physically time stamped before leaving. Do not slide your report under the door and do not email your reports to Dr. Tiani or your TA. Every late report must be time stamped and signed in to be accepted.
- Late reports must be turned in no later than 2 days after the scheduled due date, after this time a late report will not be accepted. Example: If your report was due on Wednesday by 1:00 p.m., your late report must be submitted no later than Friday by 1:00 p.m., it will not be accepted after this time.
- Late lab reports will be penalized 10 % per day.

PRE-LAB_ASSIGNMENTS

- At the beginning of each lab experiment is a pre-lab assignment. You are required to complete this pre-lab assignment before the start of the lab period.
- Any student who arrives to lab unprepared can be sent home and not be permitted to perform the scheduled experiment.
- ALL pre-lab assignments are to be completed in the lab notebook.
- Points can be deducted from your lab performance grade if you do not complete your pre-lab assignment.
- The pre-lab assignments are designed to help prepare you for that days scheduled experiment and help ensure that you can complete all the scheduled experimental work within the allotted time.

LAB NOTEBOOKS
- Students must turn in the duplicate pages from their lab notebooks at the end of each lab period. If you leave lab without submitting your lab notebook pages, you will have points deducted from your lab report.
- Part of your lab performance grade will come from how well you maintain your lab notebook. The TA will check lab notebooks before each class and throughout the lab.
- Follow the lab notebook criteria posted on Blackboard under the Lab Notebook tab.
- All your calculations, observations, experimental parameters, experimental problems, file names and data must be recorded in your lab notebook.

HONOR CODE
The Department of Chemistry faculty adopted the following policy on September 9, 1977.

“Since all graded work (including homework to be collected, quizzes, papers, mid-term examinations, final examination, research proposals laboratory results and reports) may be used in the determination of academic progress, no collaboration on this work is permitted unless the instructor explicitly indicates that some specific degree of collaboration is allowed. This statement is not intended to discourage students from studying together or working together on assignments which are not to be collected.”

Additional information regarding the Honor Code at UNC-CH can be found at the following website: http://www.unc.edu/depts/honor/