CHEM 1211L – Laboratory Syllabus
Summer Semester 2014
CRN 50132

Pre-Lab Lecture: TR 9:00 am - 9:45 am 218 Natural Science Center
Laboratory: TR 9:45 am – 12:25 pm 234 Natural Science Center

Instructor: Dr. Nilmi Fernando
211 Courtland North
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Office Hours: TR 12:30 pm – 1:00 pm in 211 Courtland North or by appointment.

Comments on Lab:
* Individualized project - type lab.
  * After check-in students are responsible for the content in their drawers. The cost of any lost or broken glassware will be added to the student account.
  * Notebooks should be kept up to date; bound composition notebook required starting the first experiment. Leave the first two pages of the notebook blank for Table of Contents. All pages must be numbered, dated and initialed at the top right corner. All data must be recorded in ink directly in the notebook during lab. Writing on other pieces of paper will result in deduction of points.
  * Do not tear out pages, or whiteout/markout data. Instead cross-out the incorrect data and present corrected data on another blank page.
  * Notebooks must be signed by TA’s or lab instructor at the conclusion of every lab session. Points will not be given to an experimental without a signature. Notebooks will be checked every lab.
  * Quizzes and final exam are closed-book. Students have to take the lab final exam to pass the lab.
  * Safety glasses and a lab apron are required at all times. Safety glasses can be purchased on the first day of lab while an apron will be given to each student for the semester.
  * Cleaning up is part of the lab session. Leaving an uncleaned lab work area will result in points deduction.
  * Students should stop all experimental work and begin cleaning up their bench area 30 minutes before the conclusion of the lab session.
  * Students must exit the lab by 12:25 pm

* Students must turn in data reports on density, percent yield, melting point, molarity of NaOH and HCl, Equivalent Weight, computer search and pKa graph of unknown organic acid after the conclusion of each of these experiments.
Tentative lab schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab</th>
<th>Experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/17/14</td>
<td>1</td>
<td>Introduction, safety video, check-in, check-out the density unknown, start the density experiment.</td>
</tr>
<tr>
<td>06/19/14</td>
<td>2</td>
<td>Safety quiz, finish the density experiment, solubility and recrystallization of the recrystallization unknown</td>
</tr>
<tr>
<td>06/24/14</td>
<td>3</td>
<td><strong>Quiz 1, Density data sheet due</strong>, % yield of recrystallization of an unknown compound, check-out the unknown organic acid and check its solubility and melting point</td>
</tr>
<tr>
<td>06/26/14</td>
<td>4</td>
<td><strong>Recrystallization yield data sheet due</strong>, finish melting point and solubility of unknown organic acid, prepare ~ 1M NaOH solution</td>
</tr>
<tr>
<td>07/01/14</td>
<td>5</td>
<td><strong>Unknown carboxylic acid melting point data sheet due</strong>, Finish three HCl titrations and start three KHP titrations</td>
</tr>
<tr>
<td>07/03/14</td>
<td>6</td>
<td>Finish three KHP titrations and <strong>submit molarity data sheet</strong></td>
</tr>
<tr>
<td>07/08/14</td>
<td>7</td>
<td>Start three equivalent weight titrations</td>
</tr>
<tr>
<td>07/10/14</td>
<td>8</td>
<td>Finish three equivalent weight titrations and <strong>submit equivalent weight data sheet</strong></td>
</tr>
<tr>
<td>07/15/14</td>
<td>9</td>
<td>Do computer search, <strong>submit a copy to the instructor</strong> and start pKa titrations, start writing the lab report</td>
</tr>
<tr>
<td>07/17/14</td>
<td>10</td>
<td>Continue three pKa titrations, submit a test tube for Na fusion (if necessary), <strong>submit your best pKa titration curve</strong>, continue working on the report</td>
</tr>
<tr>
<td>07/22/14</td>
<td>11</td>
<td>Finish pKa titrations and Na fusion, continue working on the lab report, check-out from the lab</td>
</tr>
<tr>
<td>07/24/14</td>
<td>12</td>
<td>Submit the lab report and the notebook, final exam and check-out from lab</td>
</tr>
</tbody>
</table>

07/07/14 is the drop day. This is the last day to withdraw from the lab/lecture with a ‘W’.

Graded final exams and final reports can be viewed at the instructor’s office but will not be returned to the students.

No grades will be given via e-mail or by phone.
I have read the entire syllabus and understood the grading system and all the additional information provided in it, including the following:

1. **Students cannot make-up quizzes or the final exam.** A total of 7 in-class quizzes and a lab final exam will be given. If a student is late to pre-lab he/she will miss the quiz. A missed quiz or the final exam will count as a zero.

2. Students need to submit a completed lab note book and a lab report on the lab final exam day. **Late and electronic copies of lab reports will not be accepted.**

3. Students need to show their GSU Panther I.D. card when taking the final exam.

4. The instructor reserves the right to assign seating during quizzes and final test.

5. Cell-phone calculators and programmable calculators are not allowed.

6. Cell-phones need to be kept either in purses or book-bags during exams or quizzes and should be turned off at all times. In addition, usage of all electronic devices while in the lab is not allowed.

7. **Students who miss the pre-lab lecture will not be allowed to do any experiment that day. No make-up lab will be allowed either.**

8. Hats and hoods that partially cover the face will not be allowed during tests/quizzes.

9. **There are no make-up labs unless students have a legitimate excuse for having missed a lab session;** in those cases, the make-up lab session will not take place until after 07/07/2014 depending on availability of space in other labs. An authorization by the instructor is required. **Only one make-up lab is allowed.**

10. Students will not be allowed in the lab without safety goggles, nor will they be allowed to wear shorts, sandals or open-toe shoes. A lab apron or coat and goggles are required at all times while in the lab.

11. **Notebooks:**

   A. The student must bring to lab the write-up for the experiment to be performed on each session; this must includes “bullets” of the procedure(s) to be carried out and data tables to be fill out.

   B. **The student must have the lab notebook signed by the TA or instructor at the conclusion of the lab.** No other option of record keeping is accepted.

Name (print in ink): _____________________________________________________________

Signature (in ink): _____________________________________________________________

Date: _______________________________