CHEM 1211K – Laboratory Syllabus

Fall 2015
CRN 80171 & 80175

Instructor: Dr. Nilmi Fernando
Office: 434D Kell Hall
Email & Phone: nfernando1@gsu.edu, 404-413-5490
Office Hours: Mondays 11:00 -12:00 pm
Wednesdays 11:00 -12:00 pm

Pre-Lab Lecture: Monday 12:00 pm - 12:45 pm in 218 NSC
Lab: Monday 12:45 pm - 3:00 pm in 234 NSC

I DO NOT CURVE YOUR GRADES. YOU WILL BE ASSIGNED THE GRADE YOU EARN.

1) Goggles/safety glasses and a lab apron must be worn all time during lab.
2) Bound, stitched composition notebooks are required. Notebooks must be updated. TAs and the instructor will check your notebooks constantly.
Leave the first two pages of the notebook blank for the 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. Do not write on other pieces of paper and record all your data at the time of lab to the notebook. Do not tear out pages, or whiteout data. Instead cross-out the incorrect data and present corrected data on another blank page.
3) Notebooks must be signed by TA’s or lab instructor at the beginning and conclusion of each lab session.
4) There will be a quiz on every lab day before the pre-lab lecture starts. No makeup quizzes will be given.
5) Cleaning up is part of the lab session. Students should stop working and begin cleaning up their work area no later than 20 minutes before the conclusion of the lab session. Students must exit the lab no later than 3:00 pm
6) Students must turn in data sheets on due dates or expect deduction of points.

Session 1 Introduction, safety video, check-in.
Session 2 Density experiment
Sessions 3-12 Purification and characterization of an unknown carboxylic acid.
Session 13 Final exam and check out.

Final report and lab notebook due before the exam.
<table>
<thead>
<tr>
<th>Date</th>
<th>Week</th>
<th>Experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/31/15</td>
<td>1</td>
<td>Introduction, safety video, check-in, check-out the density unknown</td>
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<tr>
<td>09/07/15</td>
<td>2</td>
<td>Labor Day Holiday</td>
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<tr>
<td>09/14/15</td>
<td>3</td>
<td>Safety quiz, Density experiment</td>
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<tr>
<td>09/21/15</td>
<td>4</td>
<td><strong>Density data sheet due</strong>&lt;br&gt;Reacrystallization of an unknown compound&lt;br&gt;Check-out the unknown organic acid</td>
</tr>
<tr>
<td>09/28/15</td>
<td>5</td>
<td>Density data sheet is late (-2 pts)&lt;br&gt;Weigh and record the %yield&lt;br&gt;<strong>Reacrystallization data sheet due</strong>&lt;br&gt;Measure solubility and melting point of the unknown acid acid Prepare ~ 1M NaOH solution</td>
</tr>
<tr>
<td>10/05/15</td>
<td>6</td>
<td>Recrystallization data sheet is late (-2 pts)&lt;br&gt;<strong>Unknown carboxylic acid melting point data sheet due</strong>&lt;br&gt;Start KHP titration</td>
</tr>
<tr>
<td>10/12/15</td>
<td>7</td>
<td>Melting point data sheet is late (-2 pts)&lt;br&gt;Finish KHP titrations and start HCl titration</td>
</tr>
<tr>
<td>10/13/15</td>
<td>8</td>
<td>Semester midpoint; last day to withdraw from class with a ‘W’</td>
</tr>
<tr>
<td>10/19/15</td>
<td>9</td>
<td>Finish HCl titration&lt;br&gt;<strong>NaOH and HCl molarity data sheet due</strong></td>
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<tr>
<td>10/26/15</td>
<td>10</td>
<td>Molarity data sheet is late (-2 pts)&lt;br&gt;Start equivalent weight titration</td>
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<tr>
<td>11/02/15</td>
<td>11</td>
<td>Finish equivalent weight titration&lt;br&gt;<strong>equivalent weight data sheet due</strong>&lt;br&gt;start computer search</td>
</tr>
<tr>
<td>11/09/15</td>
<td>12</td>
<td>Equivalent data sheet is late (-2 pts)&lt;br&gt;<strong>Submit copy of computer search</strong>&lt;br&gt;Start pKa titrations&lt;br&gt;Submit a test tube for Na fusion, start writing the lab report</td>
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<tr>
<td>11/16/15</td>
<td>13</td>
<td>Your computer search is late (-2 pts)&lt;br&gt;Finish pKa titrations and Na fusion, <strong>submit copies of pKa titration plots</strong>, continue working on the lab report, check-out from lab</td>
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<tr>
<td>11/30/15</td>
<td>14</td>
<td>Finish pKa titrations and sodium fusion, continue working on the report, check-out from lab&lt;br&gt;<strong>Finish all your experimental work this week.</strong></td>
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<tr>
<td>12/07/15</td>
<td>15</td>
<td>Submit the lab report and the notebook. Both should be submitted for credit.&lt;br&gt;Final exam check-out from lab</td>
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</tbody>
</table>

October 13th, 2015 is the semester mid-point and the last day to drop a course with a ‘W’.

Graded data sheets, quizzes, final exam and lab reports can be viewed at the instructor’s office but WILL NOT BE returned to the students.

**No grades will be discussed or provided by e-mail or 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 have to be present for the pre-lab lecture at 12:00 pm. **If more than 10 min. late to class you will not be allowed to do the lab.**

2. Students have to bring their notebooks everyday to class completed with the summary of the experiment to be performed that day. Students cannot go to the lab with incomplete or missing notebooks.

3. All notes should be taken in your notebooks in ink at the time of the experiments. Copying data, recording data on other paper, etc are strictly prohibited. The student must have the lab notebook signed by the TA or instructor at the beginning and conclusion of the lab. **No other option of record keeping is accepted.**

4. **No make-up quizzes or the final exam will be given.** If a student misses a quiz or the final exam it will count as a zero in their gradebook.

5. Students cannot miss labs for unexcused reasons. **There are no make-up labs unless a student has a legitimate excuse (i.e. hospitalization) for a missed lab and only one make-up session will be allowed.** An authorization from the instructor is required.

6. 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 a coat and goggles/safety glasses are required at all times during lab.

7. Lab report and notebooks are due before the final exam. Late and electronic copies of reports and/or notebooks will not be accepted. You must submit both to obtain a grade for the lab.

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

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

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

11. Cell-phones need to be kept either in purses or book-bags during exams or quizzes and should be turned off at all times. Using cell phones for calling or texting purposes during lab lecture or the experiment is prohibited.

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

Name (print in ink): ______________________(Last)________________________(First)

Panther # (in ink) __________________________________________________________

Signature (in ink): __________________________________________________________

Date: ______________________________