Chemistry 1211K Laboratory

Instructor: Dr. Jeremiah D. Harden
Contact: 301 Petit Science Center (PSC), jharden@gsu.edu, 404-413-5560
Office Hours: Mondays 9-11 am; Wednesdays 9-11 am, or by appointment.

Withdrawal Date: Friday, June 29 – MUST withdraw from both lecture and lab.

Lab Meetings: 1:00 – 4:25 pm every Monday AND Wednesday
Pre-Lab Lecture: Monday 1:00 - 3:45 pm in NSC 218
Lab: Monday 3:45 - 6:00 pm in NSC 234

Lab Manual: The Identification of an Organic Acid, 3rd Ed.
(supplied by lab coordinator in the first lab period)
Web Site: http://chemistry.gsu.edu/ugrad_students.php

Laboratory Materials Required:
1) A stitched and bound notebook; no spiral notebooks, no tear-out pages
2) Safety goggles or glasses. May purchase from lab coordinator, safety glasses: $4.70; safety goggles: $5.80.

Attendance: Students are expected to attend EVERY pre-lab lecture and lab session.
Grading: Lab Manual pp. 10 -11, 26 - 28. The laboratory constitutes 25% of the course grade. Except for the first experiment on density, the rest of the lab activities are designed as an INDIVIDUALIZED STUDENT PROJECT that will continue throughout the semester.

Lab Notebook: Lab Manual pp. 9 - 10. You must have a bound and stitched lab notebook. Leave three pages blank at the front of the notebook for a Table of Contents. All pages must be numbered and dated. All data must be recorded in this notebook in ink. Do not use pencil. Do not record data on loose sheets of paper. Your lab notebook will be checked from time to time, and signed each lab period.

Data, Quizzes, Examinations and Reports:
Expect a pre-lab quiz covering that day's lab each pre-lab lecture.
Data sheets are due as specified in the schedule below
A formal comprehensive final report due on July 23rd.
Lab notebook due on July 23rd.
Lab drawer checkout due by July 23rd.

Safety: Safety glass or goggles must be worn at all times, no exceptions.
No open-toe shoes (flip-flops, sandals, cros, etc.), no exceptions.
No food, drink, gum, etc., no exceptions.
Failure to follow safety rules will result in expulsion from the lab with no make-up allowed.
Safety glasses required at all time.

Lab appropriate attire is mandatory (No shorts, sandals or open-toed shoes)

Individualized project-type lab.

Notebooks should be kept up to date; bound notebook required.

Notebooks must be signed by TA’s or lab instructor at the conclusion of each lab session.

Quizzes and final exam are closed resource.

Cleaning up is an important part of the lab session. Students should stop working and begin cleaning up their work area no later than 15 minutes before the conclusion of the lab session.

Students must exit the lab by 4:25 pm

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<th>Session</th>
<th>Date</th>
<th>Activity</th>
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<tr>
<td>Session 1</td>
<td>June 6th</td>
<td>Introduction, safety video, check-in.</td>
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<td>Session 2</td>
<td>June 11th</td>
<td>Density experiment</td>
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<td>Sessions 3</td>
<td>June 13th</td>
<td>Recrystallization Experiment</td>
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<td>Session 4</td>
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<td>Melting Point Experiment</td>
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<td>Session 5</td>
<td>June 20th</td>
<td>Standardization of NaOH solution (KHP experiment)</td>
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<td>Session 6</td>
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<td>Titration of HCl</td>
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<td>Session 7</td>
<td>June 27th</td>
<td>Equivalent Weight Determination</td>
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<td>Session 8</td>
<td>July 2nd</td>
<td>Computer Search</td>
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<td>No Session</td>
<td>July 4th</td>
<td>Holiday (No Class)</td>
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<td>Session 10</td>
<td>July 9th</td>
<td>Pka Determination</td>
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<td>Session 11</td>
<td>July 11th</td>
<td>Pka Determination Continued</td>
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<td>Session 12</td>
<td>July 16th</td>
<td>Sodium Fusion Test</td>
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<tr>
<td>Session 13</td>
<td>July 18th</td>
<td>Finish Pka experiment if needed</td>
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<tr>
<td>Session 14</td>
<td>July 23rd</td>
<td>Final Exam and Final Report and Notebook Due</td>
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Students must turn in a report on density and have the instructor record their data for recrystallization, melting point, molarity of NaOH and HCl, and Equivalent Weight of unknown after the conclusion of each of these experiments.

Graded final exams, notebooks 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.

Key Dates

Class Begins Wednesday June 6\textsuperscript{th}

Semester Midpoint is Friday June 29\textsuperscript{th}

A formal comprehensive final report due on Monday July 23\textsuperscript{rd}

Lab notebook due on Monday July 23\textsuperscript{rd}

Lab drawer checkout due by Monday July 23\textsuperscript{rd}
I have read the entire syllabus and understood the grading system and all the additional information provided in it, including the following

1. No make-up quizzes will be given. If a student misses a quiz or a homework it will count as a zero.

2. Late and electronic copies of homeworks/reports will not be accepted.

3. Students need to show their GSU Panther I.D. card when taking quizzes and final test.

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; they should be turned off at all times. In addition, usage of all electronic devices while in the lab, is not allowed.

7. If late for class, please enter through the back door.

8. There are not make-up labs unless students have a legitimate excuse for having missed a lab session. A lab make-up session is scheduled for the 12th lab session. A written authorization signed by the instructor is required.

9. **A lab apron or coat and goggles are required at all times while in the lab.** Students will not be allowed in the lab wearing shorts, sandals or open-toe shoes, or tops that expose shoulders.

10. **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 after the lab. We do not accept any other options of records keeping