NAME: ____________________________

INCLUDE SYLLABUS AS 1ST PAGE IN BINDER

UTRGV CHEM for ENGINEERS LAB 1107 SYLLABUS

SPRING 2017 {JAN 17 – MAY 11}

INSTRUCTOR/LAB COORDINATOR: S.G. DIAZ, M.A. (956)665-2172 sylvia.diaz@utrgv.edu
OFFICE: SCNE 3.108 {By email appointment or drop by my office, I am usually there}.


1107 Date: _______ Time: _______________ PM SCNE 3.2 __ __

TA: ____________________ email: ________________________________@utrgv.edu

TA Chemistry Nook Office Hour: ______________________________

FOLLOW BLACKBOARD NOTES AND ONLINE QUizzes

*Lab Techniques & ICON Reference is found inside Manual front cover.

*{C} = Calculations & {Q} = Questions

<table>
<thead>
<tr>
<th>EXP</th>
<th>DATE</th>
<th>ACTIVITY</th>
<th>DUE</th>
<th>COMMENTS</th>
<th>CALC[C]/QUES[Q]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB</td>
<td>Wed8–Fri10</td>
<td>EXP 7 [Empirical Formulas]</td>
<td>Quiz 7 Report 1</td>
<td></td>
<td>[C] 1-8, 11 [Q] 1,2,4</td>
</tr>
<tr>
<td>MAR</td>
<td>Wed1–Fri3</td>
<td>EXP 38 [Qual I] MID REVIEW</td>
<td>Quiz 38 Report 9</td>
<td>Skip Part A &amp; B</td>
<td></td>
</tr>
<tr>
<td>MAR</td>
<td>Wed8–Fri10</td>
<td>MIDTERM EXAM (1 HOUR) [LABS 1-5] &amp; EXP 13 [Calcium Carb]</td>
<td>Quiz 13 Report 38</td>
<td>*Use Appendix C</td>
<td>[C] Handout [Q] 1,3,4</td>
</tr>
<tr>
<td>MAR</td>
<td>Mon13–Fri17</td>
<td>SPRING BREAK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAR</td>
<td>Mon20–Fri24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAR</td>
<td>Wed29–Fri31</td>
<td>EXP 25 [Calorimetry] (Use Rods)</td>
<td>Quiz 25 Report 28</td>
<td>Skip Part C Excel Graph</td>
<td>[C] All A &amp; B Trial 1</td>
</tr>
<tr>
<td>APR</td>
<td>Mon10–Fri15</td>
<td>EASTER BREAK</td>
<td></td>
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</tbody>
</table>


**GRADE:**
- A 89.5-100
- B 79.5-89.4
- C 69.5-79.4
- D 59.5-69.4
- F below 59.4

<table>
<thead>
<tr>
<th>Report &amp; Technique</th>
<th>Mid-Term Exam</th>
<th>Presentation/Helper</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>23%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Pre-Lab Quiz 10% Final Exam 23%

*Drop Lowest Lab Report grade if class average is below 80%.

**PREREQUISITE:** Credit/Registration in CHEM 1307.

**2 Mandatory Safety Quizzes:**
1) Students must view the Safety Video and take the required Safety Quiz 1 and pass it with an 80 or higher. **There is a deadline.**
2) Students must also take the online Environmental Health and Safety Quiz 2 by Michelle Salazar.

**CHEM 1107 CHEMISTRY for ENGINEERS LAB** FALL, SPRING, SUMMER

An introduction to basic laboratory techniques using experiments to understand chemical concepts including reactions, titrations, and analytical techniques plus experiments related to engineering operations.

**Student Learning Outcome for General Chemistry after completing 8-hour block:**
1. To understand and apply method and appropriate technology to the study of natural Sciences and engineering.
2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
3. To identify and recognize the interaction of chemistry with engineering materials.
4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

**Learning Objectives for Core Curriculum Requirements**

This course meets 1 hour of the core requirement for Integrative and Experiential Learning Courses (up to 3 hours from science labs) in this category involve interdisciplinary topics or approaches and/or learning through direct experience. Science Labs (maximum 3 hours; offered in conjunction with science courses listed in the Life and Physical Sciences component area).

**NOTICE:** Students will Not be allowed into Lab if they are Not on time.

**LAB REQUIREMENTS:***
- **PPE (Personal Protective Equipment): Must be Worn at ALL times.**
  - Safety Glasses/Goggles – Can be worn over prescription glasses. No contact lenses.
  - Lab Coat – Non-flammable garments. NO synthetic fibers or loosely woven natural fibers.
  - Closed-Foot Shoes - Footwear should NOT readily absorb chemicals during a chemical spill.
  - Long Pants – No part of the legs should be exposed. (No Leggings or Capris)
- **Blackboard** is Your Responsibility. If you are not on Blackboard – Submit a Helpdesk Ticket at [https://colttapps.utrgv.edu/helpme/](https://colttapps.utrgv.edu/helpme/) or call (956) 665-5327.

NO food, drink (water bottle), or Gum allowed. NO horseplay or unauthorized experiments.

**Students in violation of Safety regulations will NOT be allowed in Lab!**

If you allow your Lab partner to work without PPE, you will both be removed from Lab and will not receive credit for experiment! **We are ALL responsible for Safety!**

*MAINTAIN A CLEAN LAB AT ALL TIMES – BENCHTOPS, SINKS, BALANCES, WASTE CONTAINERS*
Report & Lab Technique  40%

REQUIRED JOURNAL: (20 points) Needed to Run Experiment, Signed by TA at Start of Lab.
In Composition Book or Spiral: Write Experimental Procedure Summary with ALL info needed to run experiment. Include Blackboard changes. Include Objective. You will Not be allowed to bring Lab Manual to Lab. Data will be collected in Lab Report sheets (from Lab Manual).

REQUIRED WET LAB: (30 points) You must participate in each experiment (No virtual labs).

REQUIRED REPORT: (50 points)
YOUR ORIGINAL WORK – NO XEROX COPIES or LATE REPORTS!
LAB PARTNERS have same DATA but NOT identical WORDING. (DO NOT COPY MANUAL)

If you are CAUGHT COPYING REPORT information on DUE DATE, it will NOT be ACCEPTED.

Type Lab Report if writing is NOT legible. {-5 pts if not Stapled.}

Lab Reports via Email NOT accepted – Must turn in a hard copy.

- OBJECTIVE: Purpose of experiment? Be Specific. Include Names of Chemicals used.
- INTRODUCTION: Write 2 paragraphs. Include important terms and definitions.
- DATA SHEET: Make copy of blank Lab Manual Report Sheets or tear them out.
  Bring with you to Lab. Input Data into Report Sheets during Experiment.
- CALCULATIONS: WRITE FORMULA - INPUT DATA – BLOCK IN FINAL ANSWER – SHOW UNITS.
  FOLLOW CORRECT SIGNIFICANT FIGURES. REPORTS WITHOUT CALCULATIONS WILL NOT BE ACCEPTED!

Answer assigned QUESTIONS.

- CONCLUSION: SHOW YOUR RESULTS, (NUMBER OR OBSERVATION). WHAT IS MEANING OF RESULTS?
  EX: THE DENSITY IS… COMPARE TO EXPECTED RESULTS. ARE THE RESULTS GOOD? WHY?
  *EXPECT TO GET YOUR GRADED REPORT BACK EVERY WEEK.* DON’T LET TA FALL BEHIND.

Pre-Lab Quiz  10%

QUIZ: Done at beginning of Lab or Online before Lab. If Late – Zero will be recorded.

Mid-Term Exam  23%
Final Exam  23%

EXAM: Multiple Choice. Scantron 882-E, pencil, and calculator required. No extra materials.
Indicate Exam (A, B, C…) on Scantron “TEST NO.” or 10 points deducted from Exam.
Answers must be bubbled in completely and as dark as possible.

Presentation/Helper  4%; (2 Lab partners)

(10pt): Must be Approved by TA during their Office Hour!
(20pt): Make 22 Summary Handouts with pics – Pass out to Lab. Follow Blackboard Notes.
(40pt): Present a short Summary to Lab with Important Details.
Highlight important parts of Experiment, Lab Techniques, and Calculations.

(30pt): Know experiment Very Well and Walk around during lab to get full credit!
Check Data Sheets to make sure everyone is working well.
At lab End - Check student stations and back bench to make sure everything is in order.

*You need to Collect Data from group of choice to complete your lab report.
(Extra 10pt): Do mini Post lab presentation Next week when Report is due to explain Conclusions.

EXTRA CREDIT Binder: +5 Midterm Exam & +5 Final Exam.
Must be turned in on Exam day at beginning. If NOT in order Please Do Not turn in.
Include: 1st page: Syllabus; 2nd page: Periodic Table of IONS, 3rd page: Mid & Final Review Sheets.
ALL parts of each Experiment must be in Chronological order.
Pre-labs (try to do them), Quizzes, Notes & Handouts, Reports…
*ATTENDANCE:
Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV’s attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. **Students should contact the instructor in advance** of the excused absence and arrange to make up missed work or examinations.

*ABSENCE POLICY: LIMIT: 2 MAKE UP LABS.
Make Ups are done during week Experiment is running ONLY. Follow Make Up Sheet below.
OR - Turn in a report on time with a 50% deduction (will lose Journal + Wet Lab points).
MAKE UPS ARE RESERVED FOR ACCEPTABLE REASONS SUCH AS SUDDEN ILLNESS, UTRGV ACTIVITY, UNFORSEEN EMERGENCY (FORGETTING YOUR GOGGLES/LABCOAT IS NOT AN ACCEPTABLE REASON).

*COURSE DROPS:
According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

*SCHOLASTIC INTEGRITY:
As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism, and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the **Dean of Students**.

*ACADEMIC DISHONESTY:
Includes but is not limited to- copying from other students’ reports, quizzes/exams; copying material word for word from written sources or the internet without properly citing the source; using notes, books, handouts or any information stored in any electronic device (programmable calculators, cell phones, computers, etc) during exams; requesting re-grading of any work that was altered after it was graded; representing anyone else’s work as your own. Looking at an electronic device during an exam is not allowed. Talking or looking at another student’s exam during an exam is not allowed.

*STUDENT ACCESSIBILITY SERVICES:
If you have a documented disability (physical, psychological, learning, or other disability which affects your academic performance) and would like to receive academic accommodations, please inform your instructor and contact Student Accessibility Services to schedule an appointment to initiate services. It is recommended that you schedule an appointment with Student Accessibility Services before classes start. However, accommodations can be provided at any time. **Brownsville Campus:** Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at accessibility@utrgv.edu. **Edinburg Campus:** Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at accessibility@utrgv.edu.
**SEXUAL HARASSMENT, DISCRIMINATION, and VIOLENCE:**
In accordance with UT System regulations, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at [www.utrgv.edu/equity](http://www.utrgv.edu/equity), including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.

**MANDATORY COURSE EVALUATION PERIOD:**
Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account ([http://my.utrgv.edu](http://my.utrgv.edu)); you will be contacted through email with further instructions. Online evaluations will be available near the end of the semester. Students who complete their evaluations will have priority access to their grades.

**TURN OFF ALL Electronic Devices DURING LAB!**
**NO MUSIC ALLOWED DURING LAB. REMOVE HEADPHONES.**
**IF YOU ARE TEXTING, YOU WILL BE ASKED TO LEAVE AND WILL NOT RECEIVE CREDIT FOR EXPERIMENT.**

**KEEP TRACK OF YOUR GRADES:**

| Mid Exam | Final Exam | Pres/Helper | | | | | | | | SQ |
|---|---|---|---|---|---|---|---|---|
| 1BLO | 7EF | 6A&B | 9Vol | 38Qual | 13CO2 | 28Cu | 25Cal | 23RR | 11PT | Q1 | Q7 | Q6 | Q9 | Q38 | Q13 | Q28 | Q25 | Q23 | Q11 |

Mid Exam x 0.23 = 
Final Exam x 0.23 = 
Presentation/Helper x .04 =
Lab Reports → Drop lowest → Get Average x 0.40 =
Quizzes → Drop lowest → Get Average x 0.10 =

Add: ______ + ______ + ______ + ______ + ______ =

A 89.5-100  B 79.5-89.4  C 69.5-79.4  D 59.5-69.4  F below 59.4
UTRGV CHEMISTRY DEPARTMENT      SPRING 2017
1107 MAKE UP LAB      1107 MAKE UP LAB      1107 MAKE UP LAB

Turn IN this signed form to Your TA with Your Lab Report to get credit for missed lab.

PRINT STUDENT NAME & ID: ___________________________ & __ __ __ __ __ __ __

YOUR LAB:  1107. __ __

DATE ABSENT:  W  R  F  __ __ - __ __ - 2017

CIRCLE MISSED EXPERIMENT:

1 BLO   7 Emp. Form   6 Acids & Bases   9 Vol. Anal.   38 Qual I
13 CaCO₃   28 Cu   25 Cal   23 RRates   11 Per Table./Dry Lab 3

*MUST MAKE UP DURING WEEK EXPERIMENT IS BEING CONDUCTED*

1107 LAB SCHEDULE: CONTACT Mrs. Diaz FOR PERMISSION: sylvia.diaz@utrgv.edu

W  4:30-7:10 PM
R  4:30-7:10 PM
F  1:30-4:10 PM

___________________________________________

PRINT LAB INSTRUCTOR NAME:

LAB INSTRUCTOR SIGNATURE: ______________________________________

DATE: __________________________________________

TA  After completion, send email to sylvia.diaz@utrgv.edu with Student Name.
1. Students are required to be covered from wrist to ankles. This means:
   - A lab coat that extends from the wrist to 10 inches below the Bench Top.
   - Long pants without tears or holes that cover the tongue of the shoe.
     (No Leggings, Jeggings, Yoga pants, Tights, Capris, or Shorts)

2. Everyone is required to wear goggles or protective eyewear at all times when experiments are being conducted in the lab. Prescription lenses without side shields are Not considered safety glasses. Safety glasses must have side shields.

3. Everyone is required to wear closed-foot shoes that cover the entire foot at all times in the lab. Must be footwear that does not readily absorb chemicals during a chemical spill. (No Sandals or Ballerina slippers).

4. Do not wear flammable garments, anything with synthetic fibers, or loosely woven natural fibers.

5. Food, drinks, and chewing gum are NOT allowed in Lab.

6. Students are required to tie back loose or long hair.

7. Students are not allowed to Text while conducting experiments.

8. Students violating any item(s) 1 through 7 will be noted by lab instructor. If the student’s name appears 3 times on the list, the student will be dropped from the lab. The student will check out at this time.

9. Students are required to observe cleanliness of the work area at all times. This includes their personal workspace, sinks, and the area in the back of the lab.

10. At the beginning of the semester, students will sign a document that declares understanding of the Safety Policies and consequences of policy violations. A signature is considered an agreement to abide by the policies and accept the consequences of violation of said policies.

I have read the “Laboratory Safety Policy” above for the UTRGV Chemistry Department. I agree to follow this policy. Failure to do so may result in removal from the course.
UTRGV DEPARTMENT OF CHEMISTRY: LABORATORY SAFETY POLICY

1. Students are required to be covered from wrist to ankles. This means:
   - A lab coat that extends from the wrist to 10 inches below the bench top.
   - Long pants without tears or holes that cover the tongue of the shoe.
     (No Leggings, Jeggings, Yoga pants, Capris, Tights, or Shorts).

2. Everyone is required to wear goggles or protective eyewear at all times when experiments are being conducted in the lab. Prescription lenses without side shields are not considered safety glasses. Safety glasses must have side shields.

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I have read the “Laboratory Safety Policy” above for the UTRGV Chemistry Department. I agree to follow this policy. Failure to do so may result in removal from the course.

Printed Name: ________________________________
Signed Name: ___________________________________________ Date: __________

Printed Name: ________________________________
Signed Name: ___________________________________________ Date: __________