

Course Administrator:	Dr. James C. Horvath (horvath@chem.ufl.edu)	LEI 132
Laboratory Manager:	Ms. Donna Turner (donnat@chem.ufl.edu)	LEI 136-138
Asst. Lab Manager:	Ms. Candace Schwartz ( <a href="mailto:ccschwartz@chem.ufl.edu">ccschwartz@chem.ufl.edu</a> )	LEI 136-138

**To the Student:** READ AND RETAIN THIS SYLLABUS! It contains details pertinent to CHM 2045L. YOU ARE RESPONSIBLE FOR THIS INFORMATION! IGNORANCE IS NOT AN EXCUSE!

**General Education Credit for CHM 2045L:** CHM2045L is available for General Ed Credit since it is a 1st-semester UF lab course which introduces students to fundamental chemistry concepts and basic laboratory techniques including balance and volumetric glassware use and computer skills for the chemistry laboratory.

**Students With Disabilities:** Students needing special accommodations in CHM 2045L must register with the Disability Resource Center (001 Reid Hall) to get documentation for Dr. Horvath in order to obtain the accommodations.

**Corequisite:** CHM 2045L is to be taken with CHM 2045.

**E Learning (EL on Sakai):** EL (Sakai) will be used for grade maintenance, message-posting, etc. Login to EL using your GatorLink ID and password at: [lss.at.ufl.edu](http://lss.at.ufl.edu) **IT IS YOUR RESPONSIBILITY TO CHECK EL REGULARLY FOR INFORMATION & MESSAGES REGARDING CHM 2045L!**

**Beginning the Term (Read Carefully!):** CHM 2045L begins M:1/12/15 - F: 1/16/15. On these days all sections check in and get going with Assignment 1 (A1) in the CHM 2045L Lab Manual.

**ATTEND YOUR FIRST SCHEDULED LAB SESSION (LS)! YOUR 45L SPACE CAN BE LOST BY NON-ATTENDANCE!**

**During the Term (Read Carefully!):** There are no LSs on M: 1/19/15 which is a holiday honoring Dr. Martin Luther King's Birthday (MLK Day). The missed LSs for MLK Day will be made up on M: 3/30/15. (See Schedule - pg. 3.) Also note:

There are no LSs M: 3/2/15 - F: 3/6/15 (Spring Break). The last (13th) LS for 45L is during M: 4/13/15 - F: 4/17/15.

**Each 45L student gets a max of 12 working LSs for the term including makeups. See pg. 3 for complete 45L Schedule.**

**Makeup Week:** From M: 3/30/15- F: 4/3/15 students who missed one LS for excusable cause from A1 thru A7 will make up that LS during their regular Lab time. Students needing more than one makeup are to schedule such at the Lab StockWindow. For more information on "Makeup", see p. 3 of this Syllabus.

**Required Equipment:** Each listed item is to be in your possession at the first LS and will be used in all other LSs. See that you have these items.

1. CHM 2045L Lab Manual, Gen Chem Lab I, EIGHTH Ed. (by Horvath). Purchase at UF bookstore or other local bookstore. **NOTE:** You may NOT attend Lab without the Lab Manual.
2. Chemistry Department approved eye protection. UVEX S2500-S2530 plastic safety glasses (available at UF bookstore or Florida Bookstore) or full safety goggles must be used as these can cover prescription glasses. **NO EXCEPTIONS.** Avoid the use of contact lenses in the Lab.
3. Towel and sponge (for clean up).
4. Ink pen (nonerasable). All entries in the Lab Manual must be made in indelible ink. **NO pencil. EVER!**
5. "Sharpie" permanent felt-tip glass marking pen.
6. Pocket calculator. Note that many calculations will be done in Lab.
7. Lab apron (optional). You are urged to protect your person and clothing by wearing an apron in Lab.

**Safety & Clean-Up:** See GENERAL CHEMISTRY LABORATORY REGULATIONS (GCLR). Students may not work in the Lab without complete compliance with these rules. (You will receive a copy of the GCLR in your first LS.)

1. APPROVED EYE PROTECTION MUST BE WORN ON ENTERING, WORKING IN, AND LEAVING LAB. **NO EXCEPTIONS.** (See GCLR.)
2. Complete lace-up shoes (not sandals, thongs, etc.) are required Lab footwear. (See GCLR.)
3. Long hair is to be appropriately constrained. Hair is very flammable!
4. **Full-length JEANS** (other leg attire not acceptable in Lab) are required for both males and females.
5. No visitors or browsers are permitted in the Lab.
6. Note location of fire extinguisher, overhead shower, and eyewash station. Use safety devices as necessary.
7. **NO EATING, DRINKING, OR SMOKING PERMITTED IN THE LAB AT ANY TIME.**
8. Use only required amounts of chemicals. **NEVER** return unused portions to original container. Use supplies **ONLY** from your Lab Area. As necessary, get additional supplies at Stockwindow – not from another Area.
9. **CLEAN UP ANY MESS YOU MAKE.** Discard waste materials appropriately -- ask TA if you have questions. **CLEAN YOUR WORK AREA AT CONCLUSION OF EACH LAB SESSION. PENALTIES WILL BE APPLIED FOR FAILURE TO CLEAN UP PROPERLY!** (See "HOUSEKEEPING" in GCLR.)
10. Do not leave lit burners unattended. Extinguish burner after use.
11. Perform **NO** unauthorized experiments.

**Information on Student Honesty:** UF's policy on honesty and cheating can be seen at the following web site: [www.chem.ufl.edu/~itl/honor.html](http://www.chem.ufl.edu/~itl/honor.html) All students should visit this site and read the information which it offers.

**Cell Phone Use:** Turn **OFF** cell phones. Cell phone use in Lab costs 10 pts from Subjective Grade (SG) per call up to 3 calls after which the SG is ZERO. But, if you receive an emergency call, tell your TA and leave Lab during the call.

**Attendance:** ALL student are expected to be on time for each scheduled LS and work until the Assignment for the LS has been completed. Note that there is ample time during each LS to do all required work, some limited repeat work, and, for certain Assignments, extra credit work -- **provided you & your Lab Team are prepared and work expeditiously.**

**Work in Lab is permitted ONLY during the scheduled LS for which the student is enrolled.** (Authorized makeup is the only exception -- see p. 3 at "**Makeups**".) Moreover, students may not work until their TA arrives and must finish work, CLEAN UP, and leave Lab by the end of the LS. **Clean up during last 10 minutes of 3<sup>rd</sup> Lab period.** (See GCLR.)

**NOTE: REGARDLESS OF UF SCHEDULE, pers 11-E2 LSs END AT 9:15 pm – thus, ALL 45L SECTS HAVE 3-hour LSs.**

**Preparation:** Preparation is required prior to each Assignment. This includes careful pre-reading of the "Discussion" (**ESPECIALLY!**), and the "Experiment". This practice will help form a strong understanding of the Assignment before it is tackled in Lab.

**Punctuality:** Students must be "on time" for Lab. You **cannot** contribute properly to the progress of your Lab Team if you are late and/or unprepared. Your TA will note lateness which will deduct severely from your "SG" (see below) and possibly from your Assignment grade (see below at "Team Work".)

**Lab Teams:** In LS 1 "Lab Teams" will be created by Locker Assignment. (Students may NOT choose team members.) Teams consist of three nearest-neighbor students (or two, depending on section enrollment) with each Team Member designated as "BLUE", "GREEN" or "RED". Be sure to note the color designation for each Member of your Team.  
**Team Work:** Except for Quizzes & Final Exam, Teams work as a team for the term. Thus, Team Members get the same grade for each "Experiment" provided that each Member contributes a "fair share" of work to Team progress during each LS. A Team Member not contributing to Team progress on a "fair-share" basis is subject to grade penalty (severe if non-contribution is blatant) by SG and possibly by CG (course grade). You cannot learn if you do not contribute!

SPECIFICALLY, IF YOUR TA OBSERVES A TEAM MEMBER TO NOT PARTICIPATE IN PERFORMING WORK FOR ANY "EXPERIMENT", the non-participating Team Member will receive ZERO as the minimum penalty for the Assignment regardless of the grade earned by other Team Members. You cannot learn in Lab without doing experimental work!

**RESPONSIBILITY:** IN CONJUNCTION WITH THE ABOVE, EACH STUDENT IS RESPONSIBLE FOR ALL 45L WORK AS IF HE/SHE WORKED INDIVIDUALLY THROUGHOUT CHM 2045L.

**"OK" Checkpoints:** For your benefit your TA will examine Lab Manual EXP work at each EXP "OK" Checkpoint. This will give the opportunity to repair/redesign inadequate or unacceptable work before continuing and wasting valuable Lab time.

**Deadlines:** The "Experiment" (EXP = entire EXP Section for an Assignment = Lab Report) for each Assignment is due from the designated Team Member – BLUE, GREEN, or RED, in accordance with the following:

- EXPS for A2, A3, and each part of A5 thru A8 ARE DUE AT THE END OF THE LS IN WHICH THE EXP WAS DONE.
- Due to time required for Check-In, A1 EXP may be due at start of LS2. Your TA will announce accordingly.
- Due to time required for A4, A4 EXP may be due during LS5. Your TA will announce accordingly.

**Late Work:** Late Work is devalued at 10% per day late up to one week. Zero credit for any work later than one week.

**Submission of Lab Report (EXP):** Remove each page of the EXP Section (this is the Lab Report) at the perforation in the Lab Manual, staple in sequence, and give to your TA. After grading, the Lab Report will be returned to you and is to be repaginated in your Lab Manual kept and maintained in a 3-ring binder. (See below at "Lab Report".) Now note:

ALL Lab Reports are to be turned in directly to your TA. However, if you are unable to contact your TA, work may be turned in at the Lab Stockwindow (but NOT during the last LS). IF YOU MISS LAB, WORK MUST STILL BE TURNED IN "ON TIME"! NEVER TURN IN WORK VIA CHEM. DEPT. MAIL! See TA for instructions on turning in work out of Lab.

**Lab Report:** For each Assignment, the entire completed EXP including acceptable responses to Qs constitutes the Lab Report for the Assignment. Submit nothing else for grading unless directed otherwise.

Responsibility for Lab-Report submission per Team will rotate based on "color" (see above at "Lab Teams"). This practice will be explained by your 2045L TA during LS 1.

**Problems:** Solutions to "Problems" (found at end of each Assignment) are posted on EL so that you can check your "Problems" solutions. "Problems" (except for Assignment 8) are not to be submitted for grading. BUT, 2045L Quizzes (see below) and Final will be based primarily, if not entirely, on "Problems". So, YOU BETTER DO "Problems"!

**Lab Quizzes (Qzs):** Qzs (3) are individual activities (each student must take) and issued "online". Dates/times are in the Schedule (p. 3) and announced/issued on Sakai. Qzs will be challenging and based on all to-date graded A's & Probs.

**Coverage:** Qz 1: A1-3 → 40 pts. Qz 2: A1-6 → 50 pts w. emphasis on A4-6. Qz 3: A1-8 → 60 pts. w. emphasis on A6-8.

Any Qz you cannot access is YOUR problem to resolve since all UF students are expected to be "computer savvy"!

**Grading per Assignment:** Most of each EXP will essentially be graded in Lab as the work is done. "OK" checkpoints facilitate this purpose. However, certain "Experiment" work such as "unknown results" are not graded until the Lab Report is turned in for formal grading. (See "Deadlines" above.)

**Total Pts Earnable Per Assignment (A).** Subject to change! (Any change will be announced.)

A1 → 75 A2 → 75 A3 → 125 A4 → 125 A5 → 150 A6 → 150 A7 → 125 A8 → 125 Σ = 950 for Assignments

**NOW NOTE:**

- YOUR TEAM MUST DO THE LAB WORK REQUIRED BY CHM 2045L TO BE SUCCESSFUL. REGARDING THIS, NOTE THE "OK" CHECKPOINTS IN THE LAB MANUAL. NO WORK MAY PROCEED PAST AN "OK" WITHOUT INSTRUCTOR (TA) APPROVAL. THUS, YOUR TA HAS THE RIGHT TO INSPECT YOUR LAB MANUAL AT HIS/HER DISCRETION. NONCOMPLIANCE WITH THIS POLICY RESULTS IN ZERO CREDIT FOR ALL NON-"OK'd" WORK.
- FORGING TA's "OK" or "DRY-LABING" (WRITING ENTRIES IN THE "EXPERIMENT" FOR ANY ASSIGNMENT OUTSIDE OF LAB) IS CHEATING. PENALTY IS AUTOMATIC GRADE OF "E".
- IF YOU HAVE LAB WORK FROM STUDENTS NOT ON YOUR TEAM YOU WILL AUTOMATICALLY BE ASSESSED AN "E" GRADE. NO EXCEPTIONS. NOTEBOOKS, BACK PACKS, etc., WILL BE INSPECTED AS NECESSARY TO ENFORCE THIS POLICY.
- IF YOU HAVE LAB WORK FROM A STUDENT WHO HAS ALREADY TAKEN 2045L, BOTH YOU AND THE FORMER STUDENT WILL BE ASSESSED A GRADE OF "E"! THUS, THE FORMER STUDENT WILL HAVE HIS/HER GRADE CHANGED RETROACTIVELY!
- LAB MATERIALS/ EQUIPMENT MAY NOT BE REMOVED FROM THE LAB. VIOLATION RESULTS IN GRADE OF "E".
- CHANGED LAB-REPORT ENTRIES MUST BE "LINED OUT" AND REWRITTEN. ERASURES, OBLITERATIONS, etc., ARE NOT ALLOWED. ALL ENTRIES MUST BE WRITTEN IN INDELIBLE INK. EACH VIOLATION → 10 pt LOSS FROM ASSIGNMENT GRADE.

**Subjective Grade (SG) by Lab Instructor:** The SG is a 25-pt max grade resting mainly on factors such as preparedness, neatness, improvement, demonstrated interest in learning, and exhibited contribution to Team Work. Thus, the SG is principally a character-assessment grade (like a reference letter) made by your TA and if you simply meet minimum requirements as a 2045L student – but no more – your demonstration of character is average, hardly good enough to get you hired, and your SG will be ~15-18 pts. YOU MUST EXCEL TO BE EXCELLENT!

**CHM 2045L Course/TA Evaluation:** This eval will be conducted AT THE START of LS 12. All students are to participate.

**Checkout & Last (13<sup>th</sup>) LS:** Students may work during the first 90 minutes (absolute maximum!) of LS 13 to complete the "Experiment" for Assignment 8. At the 90-minute mark work will cease and students will clean up and check out.

**More on Checkout:** All students checked into 45L must check out. If you leave 45L before the end of the term by drop, withdrawal, or "I" grade, you must still check out. Students completing 45L must check out in LS 12 (or LS 13).

**CHM 2045L Schedule -- Spring, 2015 (subject to change -- *any changes will be announced*)**

Week of:	Assignment(A):	Week of:	Assignment(A):
Jan 12	Check in. A1 - Measurement	Mar 9	A6 - Structure, etc. (Part 2). <u>Qz 2 issued.</u>
Jan 19*	A2 - Density	Mar 16	A7 - Solutions (Part 1)
Jan 26	A3 - Stoichiometry	Mar 23	A7 - Solutions (Part 2)
Feb 2	A4 - Soln Cond, etc. <u>Qz 1 issued.</u>	Mar 30	Makeup Week.
Feb 9	A5 - Reactions (Part 1) – <u>Before Lab</u> View Redox Rxns Video @jchorvath.wikispaces.com	Apr 6	A8 - Kinetics(begin) & Evals. <u>Qz 3 issued.</u>
Feb 16	A5 - Reactions (Part 2) – <u>Before Lab</u> View B/L A/B Rxns Video @jchorvath.wikispaces.com	Apr 13	Finish A8 & Check Out.
Feb 23	A6 - Structure, etc. (Part 1 .	Apr 20	No Labs this week.
Mar 2	No Labs - Spring Break.	T: Apr 28	<del>45L Final Exam (10:00 am - Noon; loc TBA)</del>

\*M: 1/19/15 is MLK Day. So, **MONDAY 45L students will do A2 on Monday: March 30, 2015.**

**Final Exam:** The CHM 2045L Final Exam is a minimum 125-pt exam given T: 4/28/15, 10:00 am - Noon at a location to be announced. If you intend to take the exam but have a legitimate conflict with the schedule you must see Dr. Horvath in person during the last week of class in LEI 132 to arrange a makeup. Exam Qs & Ps depend on understanding work in CHM 2045L. Extra credit can also be earned. **A SOLUTION KEY TO A PAST 2045L FINAL EXAM IS AVAILABLE ON SAKAI.**

**Course Grade:** The CHM 2045L grade is based on total pts earned (not %'s – **IGNORE “OUT OF” VALUES in SAKAI**) including extra credit (XC). Note: *Without* XC work in certain Assignments, earnable pt totals are: 950 (for A's 1-8) + 150 (3 Qzs) +25 (max SG) + 125 (min for Final) = 1250 to which this grade scale rigidly applies:

A: 1100 or up	B+: 1000-1049	B-: 900-949	C: 800-849	D+: 700-749	D-: 600-649
A-: 1050-1099	B: 950-999	C+: 850-899	C-: 750-799	D: 650-699	E: below 600

**I Grade:** An I grade can be issued only if the requesting student meets each of the following requirements:

- (i) 50% or more of course work (at least thru A5) has been successfully completed (i.e. student is in passing mode).
- (ii) Student has legitimate reason for not completing course (e.g., serious illness, accident, etc.).

Any student receiving an "I" must still check out. "I" grades must be discussed with Dr. Horvath. **NO** exceptions.

**Makeup (MU):** All MUs prior to A8 take place during the week of March 30 as indicated in Schedule above.

M Sects make up A2 on M: 3/30/15 at regular Lab time. Now note:

- If possible, MU will be scheduled when your TA is on duty\*. In this case, on completion of MU, see your TA in the Lab Area where he/she is on duty to submit your work for formal grading.
- \*Be sure to ask your TA when he/she teaches 45L for sections other than yours.
- If MU is done when your TA is not on duty, get a *Makeup Form (MF)* at the StockWindow and have TA sign, date, and indicate on MF Assignment to be made up. After MU MF must be signed by MU TA and given to regular TA to verify that the MU was done properly. Failure to comply results in zero credit as a minimum penalty for work made up.
- After the MU dates indicated above, MU will be scheduled only for having missed A8 unless the student can provide documented proof that he/she could not do MU for earlier A's during the indicated M U dates.
- MU s are issued only to replace LSs missed for excusable cause. Each student is entitled to no more than 12 working LSs for the term INCLUDING makeup.
- For questions on MUs and MU scheduling see Donna Turner or Candace Schwartz (Lab Managers).

**Do NOT contact Dr. Horvath about missed Labs or MU unless absolutely necessary – and, only in person!**

**Assembly Exam & MU:** Students with night Lab (pers 11-E2) may have to take assembly exams which begin at 8:20 pm. Each such student is to request an exam MU from the professor giving the exam -- but, if the request is not granted, the student must attend Lab on the day of the exam until 8:00 p.m. As necessary, a student will be granted MU time during MU Week to complete unfinished work attributable to Assembly-Exam conflict.

**STUDENTS OPTING TO MISS LAB FOR AN EXAM RECEIVE A “ZERO” FOR THE MISSED WORK. NO EXCEPTIONS!**

**Out-of-Class Help:** Out-of-class help for Gen Chem students will be provided on a regular daily basis in the Chemistry Learning Center (CLC) which is FLI 257. (Do NOT eat, drink, or socialize in the CLC.) All Gen Chem TAs conduct their office periods in CLC. So, note your TA's office periods, and, if you need out-of-class help but cannot contact your TA, you may request help from any 2045L TA who is on duty in the CLC. A help-schedule will be posted on Sakai and help will generally be available throughout the week. *But do check the help-schedule.*

**PLEASE REPORT THE NAME OF ANY 2045L TA ABSENT FROM SCHEDULED CLC DUTY TO DR HORVATH**

**COMPLAINTS/CONFLICTS/Qs ON GRADES, etc:** If you experience issues with CHM 2045L (ex: Qs on grading) which you cannot resolve with your TA, IN PERSON see DR. HORVATH IN LEIGH 132.

**DR. HORVATH MUST BE SEEN IN PERSON TO RESOLVE ANY ISSUE REGARDING CHM 2045L. Email or telephone contact may be used ONLY to establish a meeting time if the student cannot attend Horvath's Ofc Periods\*. Beyond that, email and/or telephone messages WILL BE DELETED! This policy remains in effect during and after the Term.**

\*To arrange to see Dr Horvath send him your schedule. Do NOT ask Dr Horvath when he can see you!

**HAVE A GREAT SEMESTER**

*Those who who never try are those who really fail! Much more is gained from a hard-earned “C” than from a soft, easy “A”!*