

Course Administrators:	Dr. James C. Horvath (horvath@chem.ufl.edu)* & Dr. Simon E. Lopez (simonlopez@chem.ufl.edu)	LEI 132 SIS 329B
Lab Mgrs:	Donna Turner & Candace Biggerstaff (see below):	LEI 136-138
Contact Lab Mgrs at:	CHEM-2045L-L@lists.ufl.edu	LEI 136-138

* **BEFORE** contacting Horvath by email, SEE bottom of pg. 3 of this Syllabus at **COMPLAINTS/CONFLICTS**, etc.

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

General Education Credit for CHM 2045L: CHM 2045L is available for General Ed Credit since it is a 1st-semester UF lab course which introduces students to fundamental chemistry concepts and basic lab techniques, including use of balance, volumetric glassware, and computer for the chemistry lab. Also see 45L Syllabus Addenda on pg. 4.

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

Canvas: Canvas is used for grade maintenance & message posting. Login to Canvas using your GatorLink ID and password at: lss.at.ufl.edu **CHECK CANVAS REGULARLY FOR INFO & MESSAGES ABOUT CHM 2045L!**

Beginning the Term (Read Carefully!): CHM 2045L begins M: 8/29/16 - F: 9/2/16. On these days, all 45L sections check in and start with Assignment 1 in the CHM 2045L Lab Manual.

ATTEND YOUR 1ST SCHEDULED LAB SESSION (LS). YOUR 45L SPACE CAN BE LOST BY NON-ATTENDANCE.

During the Term (Read Carefully!): There are no regular LSs on: M: 9/5/16 (Labor Day); F: 10/14/16 (Homecoming); F: 11/11/16 (Veteran's Day); and CHM 2045L classes for Fall, 2016, will end on F: 11/18/16. So note:

M Sects Labor Day Makeup: On M: 11/7/16, M Sects will make up Assignment 2 (A2 - Density).

F Sects Homecoming (10/14/16) & Vets Day (11/11/16) Makeup: See p.3 just below 45L schedule for Fall 16.

Makeup Weeks: During T:11/8/16 - R:11/10/16 and/or M: 11/14/16 - F: 11/18/16 individual makeups can be scheduled for work missed for excusable cause from Assignments 1 thru 7. For more info, see p. 3 of this Syllabus at "Makeups". Note that each CHM2045L student is allotted a maximum of 12 LSs for the term including makeups.

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 Manual AND MANUAL MUST BE NEW (i.e., unused)!
2. Chemistry Department approved eye protection. UVEX S2500-S2530 plastic safety glasses (available at UF bookstore or other local 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, closed-toe shoes (no 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/~tl/honor.html All students should visit this site and read the information which it offers.

Cell Phone Use: Turn OFF cell phones in Lab! Lab cell phone use costs 10 pts from SG per call up to 3 calls – then SG = zero! If you are to get an emergency call, tell your TA and when call comes step out of Lab to answer the call.

Attendance: Each student is expected to be on time for every 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 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 is during last 10 minutes of LS. (See GCLR.)

Preparation: Preparation is required prior to each Assignment (A). This means careful pre-reading and study of each "Discussion" (**ESPECIALLY!**), and "Experiment" (see Lab Manual). This practice will help form a strong understanding of any A before tackling it 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".)

"OK" Checkpoints: *For your benefit*, your TA will examine EXPERIMENTAL work at each "OK" Checkpoint. This gives the opportunity to repair/redo inadequate or unacceptable work before continuing and wasting valuable time.

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 color designation for each Member of your Team.**

Team Work: Except for Quizzes & Final Exam, students work as a Team for the term. Thus, each Team Member gets the same grade for each Experiment *provided that each Member contributes FAIR WORK SHARE to Team progress for an Experiment. Non-contributing Team Members are subject to grade penalty (severe if non-contribution is blatant) by SG and possibly by CG (course grade). You can't learn if you don't contribute!*

Thus, if your TA observes you to be a non-contributing Team Member, you'll get ZERO as the minimum penalty for the Assignment regardless of the grade earned by other Team Members. You can't learn without doing work!

STUDENT RESPONSIBILITY: Following from the above, *each student is responsible for all 45L work as if he/she was individually enrolled. Thus, report the name to your TA of a Team Member not contributing his/her fair work share!*

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 A7 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 EXP Section (*this is the Lab Report*) at perforation in Lab Manual, staple in sequence, and give to your TA. After grading, the Lab Report will be returned to you for repagination in your Lab Manual 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: As noted above, per Assignment, the entire completed EXP Section, *including* acceptable responses to each Q, is 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 Team-Member color (see above at **Lab Teams**). This practice will be explained by your TA during LS 1.

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

Lab Quizzes (Qzs): Qzs (3) are issued online *as individual activities* (*each* student takes). Dates/times are in Schedule (p. 3) and announced/issued on Canvas. Qzs will be challenging and based on all graded Assignments (A's) & Probs.

Coverage: **Qz 1:** A1-3 → 40 pts. **Qz 2:** A1-6 → 50 pts (*emphasis on A 4-6*). **Qz 3:** A1-7 → 60 pts (*emphasis on A 6-7*). **Any Qz you can't access is YOUR problem to resolve since all UF students are expected to be COMPUTER SAVVY.**

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

Total Points Earnable/Assignment (A) = EXP + Any possible Extra Credit (XC).

A1 → 75 A2 → 75 A3 → 125 A4 → 125 A5 Part 1 → 75 A5 Part 2 → 75 A6 Part 1 → 75 + 25(XC) A6 Part 2 → 75 + 15(XC) A7 Part 1 → 50 A7 Part 2 → 50 + 15(XC) + 45(Req'd Challenge) ∑ = 900 for all A's & XC

NOW NOTE:

- Your team **must** do the Lab work required by CHM 2045L to be successful. With this, note the OK checkpoints in the Lab Manual. **No** work may proceed past an OK without 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 OK or dry-labbing is cheating. **Penalty is automatic grade of "E".**
- Possession of Lab work from non-Team Members is cheating and results in "E" grade. **No exceptions!**
- LAB MATERIALS/ EQUIPMENT MAY **NOT** BE REMOVED FROM THE LAB. **VIOLATION RESULTS IN "E" GRADE.**
- ALTERED LAB-REPORT ENTRIES **MUST** BE LINED OUT AND REWRITTEN. **ERASURES/OBLITERATIONS ARE NOT ALLOWED. ALL ENTRIES MUST BE WRITTEN IN INDELIBLE INK. EACH VIOLATION → 10 pt LOSS FROM ASSIGNMENT GRADE.**

Subjective Grade (SG) by TA: 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. **SIMPLY PUT – YOU MUST EXCEL TO BE EXCELLENT!**

CHM 2045L Course/TA Evaluation: The Eval will be conducted **AT THE START** of LS 10. All students are to participate.

Last (12th) Working LS: As permitted, students may makeup missed work from A2 - A7 in LS 11 or LS 12. Other than that, students will clean up and check out at end of LS 12.

Also: All students checked into 45L **must** check out. If you leave 45L before the end of the term by drop, with drawal, or "I" grade, you must still check out. **Students completing 2045L for Fall, 2016, check out in LS 12.**

Final Exam: The 45L Final is a 100-minute exam given T: 12/13/16, 10 a.m. - Noon (Exam Grp 13B) 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. The Final will be worth at least 140 pts. **A SOLUTION KEY TO A PAST 2045L FINAL EXAM IS AVAILABLE ON CANVAS.**

CHM 2045L Schedule -- Fall, 2016 (subject to change – any changes will be announced on Canvas).

Week of:	Assignment (A):	Week of:	Assignment (A):
Aug 29	Check in. A1- Measurement	Oct 17**	A6 - Structure, etc. (Part 2)
Sep 5*	A2 - Density	Oct 24**	A7 - Solns (Part 1)
Sep 12	A3 - Stoichiometry	Oct 31	Evals. A7 - Solns (Pt 2). <u>Qz 2 issued on Canvas.</u>
Sep 19	A4 - Soln Cond, etc.	Nov 7***	Makeup Days (See "Makeups" below.)
Sep 26	A5 - Rxns (Part 1) -- Before Lab, View Video 000 on A5 Pt 1 @jchorvath.wikispaces.com <u>Qz 1 issued on Canvas.</u>	Nov 14	Additional Makeup Days. Check Out.
Oct 3	A5 - Rxns (Part 2). Prior to Lab View Video 0000 @jchorvath.wikispaces.com	Nov 21, etc.	No further 2045L Labs for Fall, 2016.
Oct 10**	A6 - Structure, etc. (Part 1) (F Sects do A6 Pt 1 on 10/21/16 & Pt 2 on 10/28/16.)	Nov 28	<u>Qz 3 issued on Canvas.</u>
		T. Dec 13	45L Final Exam (10:00 am - Noon. Loc TBA). (See info on Final at bottom of pg. 2.)

*Since Sep 5 is Labor Day, M students do A2 on M: Nov. 7.

** F: Oct 14 is Homecoming. So F students makeup A6 Pt 1 on 10/21/16, A6 Pt 2 on 10/28/16, and A7 Pt 1 on 11/4/16.

*** F: Nov 11 is Vets Day. So F students makeup A7 Pt 2 via individual scheduling during T:11/8/16 - R:11/10/16.

Course Grade: The CHM 2045L grade is based on Total Pts Earned, NOT %'s including earned extra credit (XC).

Note: Including earnable XC work from certain Assignments, **EARNABLE PT TOTALS** are:

900 (for A's 1-7) + 150 (3 Qzs) + 25 (max SG) + up to 140 (Final) = 1215 The following grade scale then **RIGIDLY** applies:

A: 950 or up	B+: 850-899	B-: 750-799	C: 650-699	D+: 550-599	D-: 450-499
A-: 900-949	B: 800-849	C+: 700-749	C-: 600-649	D: 500-549	E: below 450

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

- 50% or more of course work (at least thru A5) has been successfully completed (i.e. student is in passing mode).
- 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 take place during the weeks of Nov 7 & Nov 14 as indicated in Schedule above.

M Sects makeup A2 on M: 11/7/16 at regular Lab time. Now note:

• If possible, MU will be scheduled when your TA is on duty*. For 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.

*If you need additional makeups, ask your TA when he/she teaches 45L for sections other than yours.

• If makeup is done when your TA is not on duty, get a Makeup Form (MF) at the StockWindow, have your TA sign and date the MF, and, on the MF, indicate the Assignment to be made up. And, after doing the work the MF must be signed by the makeup TA to verify that the makeup was done and then submitted to your regular TA. Noncompliance with this policy results in zero credit for makeup.

• Makeups are issued only to replace LSs missed for excusable cause. Each student is entitled to no more than 12 LSs for the Term INCLUDING makeup.

• For questions on MUs and MU scheduling, see Donna Turner or Candace Biggerstaff (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 a MU for the Exam 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. Thereafter, as necessary, a student will be granted MU time during the MU Weeks 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 in 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 Canvas 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.

DO NOT WAIT TIL THE END OF THE TERM TO RESOLVE AN ONGOING PROBLEM!

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".

Also see 45L Syllabus Addenda which follows on page 4.

CHM 2045L Syllabus Addenda.

CHM 2045L - GENERAL EDUCATION

This course satisfies the General Education requirement in the Physical Sciences.

PHYSICAL SCIENCE GENERAL EDUCATION PROGRAM OBJECTIVES:

Physical science courses provide instruction in the basic concepts, theories and terms of the scientific method within the context of the physical sciences. Generally, courses focus on major scientific developments and their impacts on society, the environment, and the relevant processes that govern physical systems. Students formulate empirically-testable hypotheses derived from the study of physical processes, apply reasoning founded in scientific criticism and argument, and employ critical thinking and techniques of discovery to conduct experiments and evaluate their outcome.

Above-stated objectives are accomplished through participation in course lecture, discussion, and laboratory, and individual work done in accord with homework and laboratory assignments and assessments.

GENERAL EDUCATION STUDENT LEARNING OUTCOMES:

<u>Area</u>	<u>Institutional Definition</u>	<u>Institutional SLO</u>
CONTENT	Content is knowledge of concepts, principles, terms, theories, and methods used within the discipline.	Students demonstrate competence in use of concepts, principles, terms, theories, and methods of the discipline.
COMMUNICATION	Communication is developing and expressing ideas in oral and written fashion.	Students clearly and effectively communicate knowledge, ideas, and reasoning appropriate to the discipline in oral and written fashion.
CRITICAL THINKING	Critical thinking entails the comprehensive analysis of arguments, ideas, and evidence germane to a problem, prior to formulating opinions or drawing conclusions for the problem.	Students analyze information carefully and logically from various perspectives using discipline-specific methods in developing reasoned solutions to problems.

Each Learning Outcome category will be assessed by graded assignments conducted in CHM2045L.