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Lab Mgrs:	Donna Turner & Candace Biggerstaff (see below):	LEI 136-138
Contact Lab Mgrs at:	CHEM-2046L-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 2046L. **YOU ARE RESPONSIBLE FOR KNOWLEDGE OF THIS INFORMATION! IGNORANCE IS NOT AN EXCUSE!**

General Education Credit for CHM 2046L: 2046L is available for Gen Ed Credit. See 2046L Addenda on pg. 4.

Students With Disabilities: Students needing special accommodations in CHM 2046L must register with the Disability Resource Center (Reid Hall room 001) to get documentation for Dr. Horvath to obtain the accommodations.

Corequisite: CHM 2046L is to be taken with CHM 2046 or CHM 2051 (Honors).

Prerequisite: Before enrolling in CHM 2046L (& CHM 2046) both CHM 2045 & CHM 2045L must have been passed.

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 2046L!**

Beginning the Term (Read Carefully!): CHM 2046L begins M: 8/29/16 - F: 9/2/16. On these days all sects check in and get going with Assignment 1 in the CHM 2046L Lab Manual. **TO START PROPERLY, ANSWER Q 1.1 ON pg 1-13 IN ASSIGNMENT 1 (A1) BEFORE YOU ARRIVE FOR CHECK IN.**

ATTEND YOUR FIRST SCHEDULED LAB SESSION (LS). YOUR 46L SPACE CAN BE **LOST** BY NON-ATTENDANCE.

During the Term (Read Carefully): There are no regular LSs: M: 9/5/16 (Labor Day); F: 10/14/16 (Homecoming); F: 11/11/16 (Veteran's Day); and regular CHM 2046L classes for Fall, 2016, will end on T: 11/22/16. So note:

M Sects Labor Day Makeup (MU): M sects Labor Day MU is on M: 11/21/16 _____

F Sects Homecoming MU: F 2-4 (sect 6121) on F: 10/21/16 pers 11-E2. F 5-7 (sect 6124) on F: 10/28/16 pers 11-E2. F 8-10 (sect 2H68) on F: 11/4/16 pers 11-E2.

F Sects Vets Day MU:* F students attend Lab during regular Lab time on T:11/22/16.*

*If you are a Friday (F) student with a schedule that prevents you from meeting with the MU schedule for Vets Day, see the Stockroom Personnel by Sep. 30 to schedule an individual MU. Also see **Makeup (MU) Lab** on pg. 3.

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 2046L Lab Manual. "Chemistry for Laboratory II" by Horvath, 4TH Ed. Get at UF or other local bookstore. New manual required if you are repeating this course.
2. Chem. Dept. approved eye protection. UVEX S2500-S2530 plastic safety glasses (available at UF or other local Bookstore) or full safety goggles must be used as these can cover prescription glasses. **NO EXCEPTIONS.** Also, avoid the use of contact lenses in Lab.
3. Towel and sponge (for clean up).
4. Ball 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. 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. EYE PROTECTION must be worn on entering, working in, & 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** another Lab Area.
9. **CLEAN UP ANY MESS YOU MAKE.** Discard waste materials appropriately - consult instructor if you have questions. **CLEAN YOUR WORK AREA AT CONCLUSION OF EACH LS. 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 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: **THE STUDENT IS TO BE ON TIME FOR EACH SCHEDULED LS AND WORK THE ENTIRE LS UNTIL ALL WORK FOR THE TERM IS COMPLETED.** LSs provide ample time for all required as well as extra credit work plus some repeat work (excluding unknown analysis – unknown analysis may be repeated only by approval of Dr. Horvath).

Work in Lab is permitted ONLY during the scheduled LS for which student is enrolled. (Authorized makeup is the only exception -- see pg. 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 before each Assignment (A) is required. This means pre-read entire A with stress on understanding Discussion in Lab Manual since most all 46L work is done in Lab excepting "Problems" (Ps) and preparation of Unknown Analysis Schemes. Ps and Unknown Schemes are homework. Solutions to all Ps except: P1.1, 1.2, Unknown Schemes, and Ps for A's 10 and 11, are posted – thus, you can check Ps on your own. P solutions are posted on the 46L bulletin boards (outside east wall of CLB C130 & next to LEI 224).

Approx no. of LSs to Complete an A: A1-1 A2-2.5 Unk 2A/B -0.5 A3-1 A4-1 Unk 5A/B -0.67 A6-1.5 A7-1 A8-1.5 Unk 9A/B -0.67. Thus, by preparing, ample time is available for all required work as well as extra credit work.

BUT, IF YOU FALL BEHIND, YOU MUST PICK UP YOUR PACE.

Deadlines: Experiment (Exp) work for A1 (see *) should be completed during LS 1 after check in. Thereafter, with A2, etc., all work is "self pace" **EXCEPT FOR UNKNOWN ANALYSIS!** * A1 EXP may be done in teams of two since many solutions are necessary for A1 work. **But, after A1, teamwork in 46L is NO LONGER permitted. NO EXCEPTIONS!**

Exp and Ps for an A are due at the start of the LS after completing Exp for corresponding A. For instance, since the Exp for A2 should be completed within three LSs, the Exp & P for A2 should be turned in for formal grading at the start of LS4. Similarly, if A3 Exp is completed at some time during LS 5, the A3 Exp & A3 Ps are due at start of LS 6.

To turn in work carefully remove Exp & P pages at perforation in Lab Manual. Staple Exp & P pgs together in sequence and give to your TA. When graded work is returned (in following LS), repaginate in Lab Manual kept in a 3-ring binder. **ALL work is to be turned in directly to your TA.** But, if you are unable to contact your TA, work may be turned in at the Lab Stockwindow (but **NEVER** during the last LS). And, **IF YOU MISS LAB, WORK MUST STILL BE TURNED IN "ON TIME"!** **NEVER TURN IN WORK VIA CHEM. DEPT. MAIL!** See your TA for instructions on turning in work out of Lab.

Late work is devalued 10% per day late up to one week late. NO credit for work later than one week.

In general, do each A in sequence contained in Lab Manual. (See "* EXCEPTION" below.) Required work is A's 1-9 and associated Unknown Analysis (UA). Successful work done in A10 (thru sect. 6 & UA) earns extra credit (XC).

* **EXCEPTION:** UA may **NOT** proceed beyond the LS in which the UA was begun. **Each UA MUST be completed and the UNKNOWN REPORT turned in AT STOCKWINDOW during the LS in which the UA was begun.** Thus, on occasion, it is wise to delay UA until the next LS. This will insure having full time for the UA. In any "delay" case, the student is to proceed to next A.

NOTE - PENALTIES CAN APPLY for UA DELAY - specifically: STARTING WORK in A6 PRIOR to 2A/B UA COSTS 25 pts to get 2A/B UNKNOWNNS. STARTING WORK in A8 PRIOR to 5A/B UA COSTS 25 pts to get 5A/B UNKNOWNNS. NO EXCEPTIONS - INCLUDING MAKEUPS. Stockroom Personnel will check Lab Manuals to ensure that students comply. Keep pace! Be careful in opting to delay unknown analysis!

FINALLY: YOU ARE STRICTLY "ON YOUR OWN" FOR UNKNOWN ANALYSIS. No one including your TA may offer help for UA work. Stockroom personnel *exclusively* write start/stop times on the **UNKNOWN REPORT.**

Grading (subject to change!). Values indicated are maximum earnable points:

Assign(A).	Exp.	Probs.	Scheme*	Unknown (A/B)	TIME LIMIT
One	25	10	--	--	--
Two	50	5	25 (P 2.9)	110/110	90 min. for the pair
Three	30	5	--	--	--
Four	25	5	--	--	--
Five	--	5	25(P 5.11)	110**/110	120 min. for the pair
Six	30	5	--	--	--
Seven	25	5	--	--	--
Eight	20	5	--	--	--
Nine	--	5	25(P 9.6)	110**/110	120 min. for the pair
Ten***	25(XC)	5(XC)****	15(XC)(P 10.5)	50(XC)*****	45 min.
Totals:	230	55	90	710	Note: 2-pt. penalty applies per minute late!

* TA-approved, "non-xeroxed" **Scheme of Analysis** must be presented at Stockwindow to obtain unknowns 2A/B, 5A/B, & 9A/B. **Obtaining a 2A/B, 5A/B, and/or 9A/B sample without approved Scheme costs 25 pts!**

"Unknown A" is in the sample package with the numerical label.

** **Unknown samples 5A & 9A are guaranteed pure salts** (i.e., samples 5A & 9A are not mixtures). But, remember the possibility of "alums". Also beware of "oxides" (for 5A & 9A) and "sulfides" for 9A.

*** Acceptable work done in A10 thru sect. 6 (p. 10-8) will earn extra credit (XC). **A10 work stops w. A10 Unknown.**

**** Probs for A10 terminate with P 10.5 - the Scheme for A10.

***** For A10 Unknown report **ONLY** cations (sample contains 3). **Grading for A10 Unknown:**

1 error = 1/2-credit (25 pts); 2 errors = zero credit; 3 (or more) errors = -25 pts. **DON'T GUESS!**

UNKNOWN GRADING: EACH ERROR (**omission** - a sample ion is not reported; or, **commission** - a reported ion is not in the sample) **COUNTS AGAINST YOU.** Also, regardless of no. of corrections, 6 or more errors = ZERO.

• To be successful YOU **MUST** DO THE LAB WORK REQUIRED BY CHM 2046L. So, note the OK checkpoints in the Lab Manual. No work may proceed past an "OK" without TA approval. **Thus, you must present your Lab Manual to your TA for inspection at the beginning and end of each LS. Noncompliance results in zero credit for non-"OK'd" work.** Also, actual experiment results must be shown to your TA for OKs as OKs will not be issued without proof that you did the work.

• **FORGING TA OK or DRY LABBING is CHEATING! PENALTY IS GRADE OF E.**

• **SEVERE PENALTIES APPLIED for COPYING WORK from OTHER STUDENTS. ALL PARTIES INVOLVED are PENALIZED.** 1st violation: **ZERO CREDIT for COPIED WORK & 100-POINT ADDITIONAL PENALTY.** 2nd violation: **GRADE of E.**

• **POSSESSING LAB WORK from other students results in GRADE of E for ALL students involved INCLUDING those who already took 46L as grade penalties can be applied retroactively! NO EXCEPTIONS.** Bookbags, notebooks, backpacks, etc., will be inspected regarding such. Calculators **NOT** permitted in after A1 as they are no longer necessary.

• **LAB SUPPLIES and EQUIPMENT MAY NOT BE REMOVED FROM THE LAB FOR ANY REASON** (other than to submit unknown samples to Dr. Horvath for regrade). **NO EXCEPTIONS. MINIMUM PENALTY IS GRADE OF E.**

• **SUBMITTING CONTAMINATED or SPIKED UNKNOWN SAMPLE for REGRADE is an ACT of ACADEMIC DISHONOR. MINIMUM PENALTY IS GRADE OF E.**

Subjective Grade (SG) by Lab Instructor: The **SG** is a 50-pt max grade resting mainly on factors such as preparedness, neatness, improvement, and demonstrated interest in learning. 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 2046L student – but no more – your demonstration of character is average, *hardly good enough to get you hired*, and your **SG** will be ~30-35 pts. ***SIMPLY PUT – YOU MUST EXCEL TO BE EXCELLENT!***

2046L Course/TA Evaluation: This eval will be conducted *AT THE START* of LS 10. All students are to participate.

Checkout & Last LS: Students may work during the first 90 minutes (absolute maximum) of LS 12. ***NOTE THAT IF YOU ARE DOING UNKNOWN ANALYSIS IN LS 12, SAMPLES WILL NOT BE ISSUED AFTER THE FIRST 30 MINUTES OF THE LS. NO EXCEPTIONS.*** At the 90-minute mark work ceases and students clean up and check out.

Also: All students checked into a 46L Lab locker must check out. So note, if you leave 46L before the end of the term, drop, withdrawal, or "I" grade, you must still check out. ***Students completing 46L must check out on (or before) LS 15.***

Final Exam: The Final is a 100-minute exam given T: 12/13/16, 10 am - Noon at a location to be announced. If you are taking the Final but have a conflict with the schedule see Dr. Horvath *in person during the last week of class* in LEI 132 to arrange a makeup. Final Qs & Ps relate to understanding work done in **A's 1- 9**. The Final is worth at least 140 pts. **A SOLUTION KEY TO A PAST 2046L FINAL EXAM IS AVAILABLE ON CANVAS.**

Course Grade: The CHM 2046L grade is based on Total Pts Earned, **NOT** %'s, plus earned extra credit (**XC**).

Note: Including earnable **XC** for certain **A's**, **PT TOTALS are:** 990 (Exps, Probs, Schemes, Unks for **A's** 1-9) + 95 for Exps., Probs. Scheme, & Unk for **A10** + 50 (max **SG**) + 140 (Final) = 1275.

The following grade scale then **RIGIDLY** applies:

A: 900 or up	B+: 850-874	B-: 800-824	C: 700-749	D+: 650-674	D-: 550-599
A-: 875-899	B: 825-849	C+: 750-799	C-: 675-699	D: 600-649	E: below 550

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

- (i) At least 50% of the course work (this means thru 5 A/B unknown analysis) has been successfully completed.
- (ii) Student is passing (grade \geq D-) at time of request.
- (iii) Student has legitimate reason for not completing course (e.g., serious illness, accident, etc.).

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

Makeup (MU) Lab: A student missing an LS for legitimate cause (excusable absence) may request a MU Lab. Student initiates the process by obtaining a Lab MU Form at Lab Stockwindow and following instructions on MU Form. **Note:**

- A MU LAB MUST BE SCHEDULED IMMEDIATELY ON RETURN TO 2046L AFTER AN EXCUSED ABSENCE. ***FAILURE TO DO THIS WITHIN A WEEK AFTER RETURNING TO 2046L RESULTS IN NO MU BEING GRANTED.***
- MUs are scheduled solely at the discretion of Donna Turner or Candace Biggerstaff (Lab Managers.). TAs may **NOT** schedule MUs. MU **MUST** be done at date, period, and work space designated on MU Form. ***NONCOMPLIANCE WITH THIS POLICY RESULTS IN ZERO CREDIT AS A MINIMUM PENALTY FOR WORK MADE UP.***
- For questions on MU scheduling see Donna Turner or Candace Biggerstaff . **Do NOT contact Dr. Horvath about MU unless absolutely necessary – and, only in person!**
- One MU max can be scheduled per week. NO EXCEPTIONS unless approved by Lab Mgrs or Dr. Horvath.
- For each MU a MU Form must be approved by your regular Lab TA's signature. On completion of MU, MU Form and made-up work must be submitted to your regular TA. MU work submitted for grading without signed MU Form will **NOT** be accepted. MU work **NOT** OK'd by MU TA will be treated as cheating. ***Penalty is "E" grade!***
- MUs are issued only to replace LSs missed for excusable absence. Each 2046L student is entitled to a maximum of 12 working LSs for Fall, 2016 Term **INCLUDING** MU.

UNKNOWN ANALYSIS & MU: *Doing unknown analysis during a MU Lab requires printing the name of your regular Lab TA on UNKNOWN REPORT after "Instructor Initial".* Thus, your TA (& you) can get the graded Unknown Report. _____

Assembly Exam (AE) & MU: Students with eve. Lab (pers 11-E2) may take **AEs** beginning at 8:20 pm. ***Each such student is to request an AE MU from the Exam giver.*** But, if request is not granted, the student ***must attend Lab on the AE day til 8:00 p.m.*** After two **AEs** the student gets a full MU. For one **AE**, the student gets a half MU (90 mins).

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

ATTENDANCE REMINDER & MU: 2046L MU space is at a premium. Thus, vacated Lab space will be used for MU. So note, if you miss 3 consecutive LSs but intend to remain in 2046L you ***must*** contact the Lab Mgrs to keep your space. ***Without this, after missing 3 consecutive LSs, your space will be considered vacated and used for MU.***

Out-of-Class Help: Out-of-class help for Gen Chem students is provided daily by Gen Chem TAs in the Chemistry Learning Center (CLC) which is in FLI 257. (***Do NOT eat, drink, or socialize in the CLC.***) Note your TA's office periods. But, if you can't contact your TA, you may request help from any 2046L TA 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 2046L TA absent from scheduled CLC duty to Dr Horvath.

COMPLAINTS/CONFLICTS/Qs ON GRADES, etc: If you have issues with CHM 2046L (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 2046L. 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. More is gained from a hard-earned "C" than from a soft, easy "A".

Also see 46L Syllabus Addenda which follows on page 4.

CHM 2046L Syllabus Addenda.

CHM 2046L - 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 CHM2046L.