CHM 2046L - SYLLABUS Course Administrator:

Laboratory Manager: Asst. Lab Manager:

UNIVERSITY OF FLORIDA

Dr. James C. Horvath (<u>horvath@chem.ufl.edu</u>)	LEI 132
Ms. Donna Turner (<u>donnat@chem.ufl.edu)</u>	LEI 136
Ms. Candace Schwartz (<u>ccschwartz@chem.ufl.edu)</u>	LEI 136

<u>To the student:</u> READ AND RETAIN THIS SYLLABUS! It contains details pertinent to CHM 2046L. YOU ARE RESPONSIBLE FOR THIS INFORMATION! READ IT CAREFULLY! Ignorance is <u>NOT</u> an excuse!

<u>Students With Disabilities</u>: 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 (and CHM 2046) both CHM 2045 and CHM 2045L must have been passed.

<u>E Learning (EL on Sakai)</u>: EL (Sakai) is used for grade maintenance, announcement-posting, etc. Login to EL using your GatorLink ID and password at: <u>Lss.at.ufl.edu</u> *IT IS YOUR RESPONSIBILITY TO CHECK EL REGULARLY FOR INFORMATION & MESSAGES REGARDING CHM 2046L*.

<u>Beginning the Term (Read Carefully!):</u> CHM 2046L begins M: 1/12/15 - F: 1/16/15. On these days all sections check in and get going with Assignment 1 in the CHM 2046L Lab Manual. <u>TO GET STARTED PROPERLY ANSWER Q 1.1 ON</u> PAGE 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.

<u>During the Term (Read Carefully!)</u>: There are no LS's on M: 1/19/15 which is a holiday in honor of Dr. Martin Luther King's Birthday (MLK Day). The missed LS's for MLK Day will eventually be made up on M: 4/20/15. Also note:

There are no LS's M: 3/2/15 - F: 3/6/15 (Spring Break). The last (13th) LS for 46L is during T: 4/14/15 - M: 4/20/15. This schedule gives each 2046L section its full allotment of 13 LS's for the term.

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

- 1. CHM 2046L Lab Manual. "Chem istry for Laboratory II" by Horvath, <u>4TH</u> Ed. Get at UF or other local bookstore. New manual required if you are repeating this course.
- Chem. Dept. approved eye protection. UVEX S2500-S2530 plastic safety glasses (available at UF or Florida Bookstore) or full safety goggles <u>must</u> be used as these can cover prescription glasses. <u>NO</u> EXCEPTIONS. Also, avoid the use of contact lenses in the 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.

<u>Safety & Clean-Up:</u> See GENERAL CHEMISTRY LABORATORY REGULATIONS (GCLR). Students may <u>not</u> 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. <u>NEVER</u> return unused portions to original container. Use supplies <u>ONLY</u> from your Lab Area. As necessary get additional supplies at Stockwindow <u>NOT</u> another Lab Area.
- 9. <u>CLEAN UP ANY MESS YOU MAKE</u>. Discard waste materials appropriately consult instructor if you have questions. <u>CLEAN YOUR WORK AREA AT CONCLUSION OF EACH LS</u>. PENALTIES <u>WILL</u> 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 <u>NO</u> unauthorized experiments!

<u>Cell Phone Use:</u> Turn <u>OFF</u> cell phones in Lab! Cell phone use in Lab costs 10 pts fromSG 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. <u>Attendance:</u> <u>THE STUDENT IS TO BE ON TIME FOR EACH SCHEDULED LS AND WORK THE ENTIRE LS UNTIL ALL</u> <u>WORK FOR THE TERM IS COMPLETED</u>. 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 <u>only</u> by approval of Dr. Horvath). <u>Work in Lab is permitted ONLY during the scheduled LS for which student is enrolled</u>. (Authorized makeup is the only exception -- see p. 3 at "<u>Makeups</u>".) 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.)

<u>Preparation</u>: 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. <u>Ps and Unknown Schemes are homework.</u> Solutions to all Ps <u>except</u>: P1.1, 1.2, Unknown Schemes, and Ps for A's 10 and 11, are posted – thus, you can check Ps on your own. <u>P solutions are posted on the 46L</u> <u>bulletin boards (outside east wall of CLB C130 & next to LEI 224).</u>

<u>NOTE:</u> <u>REGARDLESS of UF SCHEDULE, pers 11-E2 LSs END at 9:15 pm.</u> <u>Thus, ALL 46L SECTS HAVE LSs of 3 hours.</u> <u>Deadlines:</u> Experiment (Exp) work for A1 (see ★ below) should be completed during LS 1 following check in. Thereafter, with A2, etc., all work is "self pace" <u>EXCEPT FOR UNKNOWN ANALYSIS!</u>.

<u>Approx no. of LSs to Complete an A</u>: <u>A1-1</u> <u>A2-2.5</u> <u>Unk 2A/B-0.5</u> <u>A3-1</u> <u>A4-1</u> <u>Unk 5A/B-0.67 A6-1.5</u> <u>A7-1 A8-1.5</u> <u>Unk 9A/B-0.67</u>. Thus, by preparing, ample time is available for all required work as well as extra credit work. BUT, IF YOU FALL BEHIND, <u>YOU MUST PICK UP YOUR PACE</u>.

★ The Exp for A1 may be done in teams of two since many solutions are required for A1 work. <u>But, after A1, team work in</u> <u>46L is NO LONGER permitted. *NO EXCEPTIONS!*</u>

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 LS 4. Similarly, if Exp for A3 is completed at some time during LS 5, the Exp & P for A3 are due at start of LS 6. Late work is devalued "10% per day late" up to one week late. Zero credit for any work later than one week. To turn in work carefully remove Exp & P pages at the perforation in the Lab Manual. Staple Exp & P pages together <u>in</u> <u>sequence</u> and give to your TA. When graded work is returned, repaginate it in your Lab Manual kept in a 3-ring binder. <u>ALL work is to be turned in directly to your TA</u>. However, if you are unable to contact your TA, work may be turned in at the Lab Stockwindow (but <u>NEVER</u> during the last LS). And, <u>IF YOU MISS LAB, WORK MUST STILL BE TURNED IN "ON</u> <u>TIME"!</u> <u>NEVER</u> TURN IN WORK VIA CHEM. DEPT. MAIL! See your TA for instructions on turning in work out of Lab.

<u>In general, do each A in the sequence contained in the Lab Manual. (See "★ EXCEPTION" below.)</u> Required work is A's 1-9 and corresponding Unknown Analysis. Successful work done for A10 & A11 will earn extra credit (XC).

★ <u>EXCEPTION</u>: Unknown analysis may <u>NOT</u> be carried beyond the LS in which the analysis was begun. <u>(An unknown analysis MUST be completed and the UNKNOWN REPORT turned in AT STOCKWINDOW during the LS in which the analysis was begun.</u>) Thus, on occasion, it is wise to delay unknown analysis until the next LS. This will insure having full time for the analysis. In such a case, at the time of delay the student proceeds to the next A.

<u>BUT NOTE:</u> PENALTIES APPLY TO UNKNOWN ANALYSIS DELAY - specifically: STARTING WORK IN A6 PRIOR TO 2A/B ANALYSIS COSTS 25 PTS TO GET 2A/B UNKNOWNS. STARTING WORK IN A8 PRIOR TO 5A/B ANALYSIS COSTS 25 PTS TO GET 5A/B UNKNOWNS. NO EXCEPTIONS – MAKEUPS INCLUDED. STOCKROOM PERSONNEL WILL CHECK LAB MANUALS TO ENSURE STUDENT COMPLIANCE. Keep pace! Be careful in opting to delay unknown analysis!

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

Grading (sub	ject to change	e!). Values indi	icated are maximum ea	<u>rnable points:</u>	
<u>Assign(A).</u>	Exp.	Probs.	<u>Scheme</u> *	Unknown (A/B)	
One	25	10			
Two	50	5	20 (P 2.9)	100/100	90 min . for the pair
Three	30	5			
Four	25	5			
Five		5	20(P 5.11)	100**/100	120 min. for the pair
Six	30	5			
Seven	25	5			
Eight	20	5			
Nine		5	20(P 9.6)	100**/100	120 min. for the pair
Ten ^{***}	25(XC)	5(XC)	10(XC)(P 10.5)	50(XC)****	45 min.
Eleven ^{***}		5(XC)	15(XC) (P 11.5)	60(XC)*****	90 min.
Totals:	230	60	85		2-pt. penalty per minute lat

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

<u>"Unk now n A" is in the sample package with the numerical label.</u>

★★ <u>Unknow n samples 5A and 9A are guaranteed pure salts</u> (i.e., samples 5A and 9A are not mixtures). But, don't forget the possibility of "alums". Also beware of "oxides" (for 5A, 9A, & 11A) and "sulfides" (for 9A & 11A).

*** Acceptable work done in A's 10 & 11 will earn extra credit (XC).

- ★★★★ For A10 Unknown report ONLY cations (sample contains 3). For A10 Unknown: 1 error = ½-credit (25 pts); 2 errors = zero credit; 3 (or more) errors = -25 pts. DON'T GUESS!
- ★★★★★ For A11 Unknown NOTE: Sample is a guaranteed mixture. And 4 (or more) errors = −25 pts. DON'T GUESS!

<u>ON UNKNOWN GRADING:</u> EACH ERROR ("omission" – an ion in the sample is not reported; or, "commission" – an ion reported is <u>not</u> in the sample) COUNTS AGAINST YOU. Also, regardless of no. of corrections, 6 or more errors = ZERO.

- YOU <u>MUST</u> DO THE LAB WORK REQUIRED BY CHM 2046L TO BE SUCCESSFUL. SO NOTE THE "OK" CHECKPOINTS IN THE LAB MANUAL. NO WORK MAY PROCEED PAST AN "OK" WITHOUT TA APPROVAL <u>THUS, YOU MUST PRESENT YOUR LAB MANUAL</u> <u>TO YOUR TA FOR INSPECTION AT THE BEGINNING AND END OF EACH LS. NONCOMPLIANCE WITH THIS POLICY RESULTS IN</u> <u>ZERO CREDIT FOR ALL NON-"OK'd" WORK.</u> AND, ACTUAL EXPERIMENT RESULTS MUST BE PRESENTED TO YOUR TA TO <u>OBTAIN OK APPROVAL.</u> OKS WILL NOT BE ISSUED WITHOUT PROOF THAT YOU DID THE WORK!
- FORGING TA's "OK" or "DRY-LABBING" is CHEATING! PENALTY IS AUTOMATIC GRADE OF "E".
- <u>SEVERE PENALTIES ARE APPLIED FOR COPYING WORK FROM OTHER STUDENTS. ALL PARTIES INVOLVED ARE PENALIZED.</u> 1st violation: <u>ZERO CREDIT FOR COPIED WORK & 100-POINT ADDITIONAL PENALTY.</u> 2nd violation: <u>GRADE OF "E".</u>
- <u>POSSESSION of LAB WORK from other STUDENTS RESULTS in AUTOMATIC GRADE of "E" for BOTH students INCLUDING those</u> who have already taken 46L since grade penalties can be applied retroactively! <u>NO EXCEPTIONS</u>. Bookbags, notebooks, back packs, etc., will be inspected regarding this issue. CALCULATORS are <u>NOT</u> permitted after A1 as they are no longer needed.
- •LAB SUPPLIES and EQUIPMENT MAY <u>NOT</u> BE REMOVED FROM THE LAB FOR ANY REASON (other than to submit unknown samples to Dr. Horvath for regrade). <u>NO EXCEPTIONS.</u> MINIMUM PENALTY IS GRADE OF "E".
- SUBMISSION of CONTAMINATED or "SPIKED" UNKNOWN SAMPLE for REGRADE IS AN ACT OF ACADEMIC DISHONESTY. <u>MINIMUM PENALTY IS GRADE OF "E".</u>

More 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.

<u>Subjective Grade (SG) by TA:</u> The SG is a 50-point max character-assessment grade which depends mainly on factors such as preparedness, diligence, improvement, neatness, and demonstrated interest in the work. The SG is separate from Assignment and Unknown grades. If you simply meet minimum requirements as a 2046L student – but no more – your demonstration of character is average and your SG will be ~30-35 pts. <u>YOU MUST EXCEL to be EXCELLENT!</u>

CHM 2046L Course/TA Evaluation: This eval will be conducted AT THE START of LS 12. All students are to participate.

<u>Checkout & Last LS:</u> Students may work during the first 90 minutes (absolute maximum) of LS 13. NOTE THAT IF YOU ARE DOING UNKNOWN ANALYSIS IN LS 13, SAMPLES WILL <u>NOT</u> BE ISSUED AFTER THE FIRST 30 MINUTES OF THE LS. <u>NO</u> EXCEPTIONS. At the 90-minute mark work ceases and students clean up and check out.

The following paragraph also applies to checkout. READ IT!

All students checked into a 46L Lab locker must check out. So note, if you leave 46L before the end of the term by drop, withd rawal, or "I" grade, you must still check out. <u>Students completing 46L must check out on (or before) LS 13.</u>

<u>Final Exam</u>: The Final is a mininimum 120-pt exam given T: 4/28/15, 10:00 am - Noon (Exam Group 29C), at a location to be announced. If you are taking the Final but have a conflict with the schedule see Dr. Horvath <u>in person during the last</u> <u>week of class</u> in LEI 132 to arrange a makeup. Final Qs & Ps relate to understanding work done in A's 1 - 9. Extra credit can also be earned on the Final. <u>A SOLUTION KEY TOA PAST 2046L FINAL EXAM IS AVAILABLE ON SAKAI.</u>

<u>Course Grade</u>: The CHM 2046L grade is based on total points earned (<u>not %'s</u> – <u>IGNORE "OUT OF" VALUES IN SAKAI</u>) including XC points (see below). <u>Note: Without</u> XC work in A's 10 & 11 the following totals can be earned: 915 (Exps., Probs. Schemes, Unknowns for Assignments 1-9) + 50 (max SG) + 120 (Final) = 1085.

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 <u>each</u> 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 ≥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. <u>"I" grades must be discussed with Dr. Horvath.</u> <u>NO</u> exceptions.

<u>Makeup (MU) Lab:</u> A student missing an LS for <u>legitimate</u> 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. <u>Note:</u> • 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 Schwartz (Lab Managers.). TAs may <u>NOT</u> schedule MUs. MU <u>MUST</u> be done at date, period, and work space designated on MU Form. <u>Noncompliance with this policy results in zero credit as a minimum penalty for work made up.</u>

 For questions on MU scheduling see Donna Turner or Candace Schwartz . Do <u>NOT</u> contact Dr. Horvath about MU _ <u>unless</u> absolutely necessary – and, <u>only in person!</u>

- One MU <u>max</u> will be scheduled per week. NO EXCEPTIONS unless approved by D Turner, C Schwartz, or Dr. Horvath.
- For <u>each</u> MU a MU Form must be approved by your regular Lab TA's signature. On completion of MU, MU Form <u>and</u> made-up work <u>must</u> be submitted to your regular TA. MU work submitted for grading <u>without</u> the appropriately signed MU Form will <u>NOT</u> be accepted. MU work <u>NOT</u> OK'd by MU TA will be treated as cheating. <u>Penalty is "E" grade!</u>
- MUs are issued only to replace LSs missed for excusable absence. Each 2046L student is entitled to a maximum of 13 working LSs for Spring Term *INCLUDING* MU.

<u>UNKNOWN ANALYSIS & MU:</u> <u>Doing unknown analysis during a MU Lab requires that you print the name of your regular</u> <u>Lab TA on the UNKNOWN REPORT right after "Instructor Initial".</u> This is necessary so that the graded Unknown Report can be given to your TA and then to you.

<u>Assembly Exam & MU</u>: Students with evening Lab (pers 11-E2) may have to take assembly exams which begin at 8:20 pm. <u>Each such student is to request an MU for the exam from the professor giving the exam</u> -- but, if this request is not granted, the student <u>must attend Lab on the day of the exam until 8:00 p.m.</u> After two assembly exams the student will be granted a full (3 hr) MU. For a single assembly exam the student will be granted a half MU (90 mins). <u>Questions regarding this policy are to be asked at the Stockwindow.</u>

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

<u>ATTENDANCE REMINDER & MAKEUP</u>: Makeup space in 2046L is at a premium. Because of this vacated Lab space will be used for makeup. So note that if you miss three consecutive LSs and still intend to return to 2046L it is your duty to contact the Lab Manager (Ms. Turner) via email at: <u>donnat@chem.ufl.edu</u> in order to keep your space. If you fail to do this after missing three consecutive LSs your space will be considered vacated and consequently used for makeup.

<u>Out-of-Class Help</u>: Out-of-class help for Gen Chem students will be provided on a regular daily basis in the Chem istry Learning Center (CLC) which is FLI 257. (<u>Do NOT eat. drink. or socialize in the CLC.</u>) 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 2046L 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 2046L TA absent from scheduled CLC duty to Dr Horvath.

<u>COMPLAINTS/CONFLICTS/Qs ON GRADES, etc</u>: If you experience issues with CHM 2046L (ex: Qs on grading) which you cannot resolve with your TA, <u>IN PERSON see</u> DR. HORVATH IN LEIGH 132.

<u>DR. HORVATH MUST BE SEEN IN PERSON TO RESOLVE ANY ISSUE REGARDING CHM 2046L.</u> <u>Email or telephone</u> <u>contact may be used ONLY to establish a meeting time if the student cannot attend Horvath's Ofc Periods</u>^{*}. <u>Beyond</u> <u>that, email and/or telephone messages WILL BE DELETED!</u> *****To see Horvath send him <u>your</u> schedule so that he can arrange a mutually convenient meeting time.

HAVE A GREAT SEMESTER

Those who never try are those who really fail! Much more comes from a hard-earned "C" than from a soft, easy "A"!