

**Syllabus for CHM 2047L**  
**One Semester Chemistry Laboratory**  
**Fall 2014**

| <b>Week #<br/>Week of</b> | <b>Experiment</b>  | <b>Comments</b>  |
|---------------------------|--|--|
| 1<br>Aug. 25              | No labs meet first week. Download first lab handout from Canvas web site and read in preparation for the first lab | There is no text. Lab assignments are posted on the Canvas e-learning web site   |
| 2<br>Sept 1               | Lab 1: Basics of lab techniques and measurements   | <b>All labs meet in LEI 108 Lab</b><br>Come prepared with lab safety glasses, long pants, shoes covering your feet and a lab notebook.<br>Monday (1 <sup>st</sup> ) is Labor day, no lab |
| 3<br>Sept 8               | Lab 2: Conductometric determination of potassium   |  |
| 4<br>Sept 15              | Lab 3: Conductometric Titration:<br>Titration of NaOH with HCl   |  |
| 5<br>Sept.22              | Lab 4: Sugars and Refractive Index   |  |
| 6<br>Sept. 29             | Lab 5: Literature Exercise: Marston Science Library  | Take Home Quiz #1  |
| 7<br>Oct. 6               | Lab 6: Atomic Spectroscopy<br>The Emission Spectrum of Hydrogen  |  |
| 8<br>Oct. 13              | Lab 6: Monday lab only   | Friday (17 <sup>th</sup> ) is Homecoming, no lab   |
| 9<br>Oct. 20              | Lab 7: Atomic Spectroscopy in Flames<br>Trace element determinations using flame emission                          |  |
| 10<br>Oct. 27             | Lab 8: Molar Absorptivity of a dye   |  |
| 11<br>Nov. 3              | Lab 9: Fluorescence quenching of quinine   | Take Home Quiz #2  |
| 12<br>Nov. 10             | Lab 10: Kinetics of DTNB <sup>2-</sup> Hydrolysis  |  |
| 13<br>Nov. 17             | Lab 11: Laser Plasma Spectroscopy  |  |
| 14<br>Nov. 24             | Make up lab Nov 24   | Friday (28 <sup>th</sup> ) is a holiday, no lab  |
| 15<br>Dec. 1              | Final Quiz; location to be announced   |  |
|                           |  |  |

## Course Objectives

This laboratory treats chemistry as a quantitative science and seeks to develop a keen observational insight. The emphasis is upon sharp observation, lucid note taking and logical data analysis and interpretation.

## Meeting Times and Location

Leigh Hall 108

Mondays: periods 2-4 and 8-10

Fridays: periods 2-4 and 8-10

## Grading

Grades will be determined from a point distribution as follows:

|                                |             |
|--------------------------------|-------------|
| Eleven labs @ 50 pts each:     | 550         |
| Two quizzes @ 100 pts each:    | 200         |
| One conclusive exam @ 250 pts: | <u>250</u>  |
| Total                          | 1000 points |

The lab grades will be based upon the organization, completeness and accuracy of the work contained in the lab notebooks. Normally you will turn in your lab notes at the next lab meeting, as a Xerox copy. The grading scale will be as follows:

|                   |    |
|-------------------|----|
| 900 - 1000 points | A  |
| 880 – 899 points  | A- |
| 860 – 879 points  | B+ |
| 800 – 859 points  | B  |
| 780 – 799 points  | B- |
| 760 – 779 points  | C+ |
| 700 – 759 points  | C  |
| 680 – 699 points  | C- |
| 660 – 679 points  | D+ |
| 600 – 659 points  | D  |
| 0 – 599 points    | E  |

See: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for additional UF grades and grading policies.

**Late Penalty:** 5 points per day late, not accepted after one week.

**Instructor:** Dr. Ben Smith

Offices: 264 Flint Annex, generally available for questions 8:00 - 5:00 T-Th

Official Office Hours: T-Th 4<sup>th</sup> period

Phone: 392-0256

bwsmith@ufl.edu (e-mail is a great way to ask a question)

## **Graduate Teaching Assistants:**

Mr. Willis Jones  
Office: to be announced  
E-mail: wbjones@ufl.edu

Ms. Emily Gill  
Office: to be announced  
Email:emilygill2014@ufl.edu

## **Undergraduate Teaching Assistants:**

Ms. Madeleine Morin (section 1944)  
Ms. Lauren von Zabern (section 1944)  
Mr. Andrew Turner (section 4303)  
Ms. Carly Misztal (section 4303)

### **Attendance and Make-up labs**

Because of the instrumental nature of the experiments, it is difficult to schedule make up labs outside of the week in which the lab is taught. If you must miss a lab for good cause, you must inform Dr. Smith in advance (if possible) and arrange to attend another section of the laboratory in which the same experiment is being taught. With justification, there will be limited opportunity for make up labs on Monday, November 24.

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

Visit the Lab Canvas e-learning website prior to your first class and download a copy of the first lab. Be sure to show up with *lab notebook, lab safety glasses, long pants and shoes covering your feet.*

## **Students with Special Needs**

---

If you have any physical or learning disabilities, or if you have any other special classroom needs, please make an appointment to see me so we can discuss how to best assist you.

## **Academic Honesty**

---

When you completed the registration form at the University of Florida, you signed the following statement:

"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

Furthermore, on work submitted for credit, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

If you are aware of a climate that promotes academic dishonesty, please notify the instructor or contact the Student Honor Court (392-1631) or the Cheating Hotline (392-6999).