

# Chemistry 265 Introductory Analysis Laboratory

CH 265 and CH 265L must be taken concurrently. If you DROP/WITHDRAW FROM EITHER THE LECTURE OR THE LABORATORY, you must also drop/withdraw from the co-requisite course. One course cannot be completed without the other.

**Objective:** To familiarize the student with basic data analysis skills and laboratory techniques commonly used in the quantitative analysis of chemical samples.

## Text and Supplies:

1. *Quantitative Analysis Laboratory Manual Chemistry 265*, ed. R. E. Sykora & J. Coym
2. Laboratory notebook with duplicate pages
3. Approved safety goggles
4. Scientific calculator

**Testing and Grading:** This laboratory class consists of eight experiments that will account for 80 % of the laboratory grade and a lab final exam that will account for 20 % of the laboratory grade. Most of the experiments (7 out of 8) will deal with the quantitative determination of an analyte. *Your grade will be based on your accuracy in determining the amount of analyte.* The grade for each individual experiment will be based 70 % on the accuracy of your analysis and 30 % on your laboratory notebook. The absolute error will be used as an indication of accuracy. In order to receive full credit for an analysis, the absolute error must meet or be less than the following values.

| Experiment # | Analyte Reported                  | Absolute Error |
|--------------|-----------------------------------|----------------|
| 2            | % Cl                              | 0.10 %         |
| 3            | % Na <sub>2</sub> CO <sub>3</sub> | 0.20 %         |
| 4            | MW of acid                        | 2.0 g/mol      |
| 5            | % Cu                              | 0.10 %         |
| 6            | Mg concentration                  | 2.0 ppm        |
| 7            | % Mn                              | 0.01 %         |
| 8            | % 2-propanol                      | 1.0 %          |

Your course grade will be determined from your average numerical grade as follows: 90% or above = A; 80 – 89 % = B; 70 – 79 % = C; 60 – 69 % = D; below 60 % = F.

**Notebook Grade:** Your laboratory notebook must have duplicate pages so that the carbon copy pages can be turned in to your instructor for grading. See the lab manual for the outline of your notebook reports. All entries in your laboratory notebook must be in ink. Although you should strive for neatness, don't worry if you make a mistake when writing in your notebook; draw a line through your mistake and continue writing.

**Lab Reports:** Lab reports are not “group activities” and should be completed independently by each student. Copying of lab reports is cheating. Lab reports are due at the beginning of the period on the next scheduled lab meeting following completion of an experiment. Lab reports handed in after lab starts will be considered late and ten

points will be deducted from the lab report grade. Ten points will be deducted from the lab report for each additional day that it is late. One late report will be accepted without a deduction of points; the late report must be turned in within one week of the due date or it will not be accepted. If all reports are turned in on time, the lowest lab report grade will be dropped when calculating the final grade for the lab.

**Attendance:** Attendance at all laboratory sessions is mandatory. Students arriving after lab has already started may not be permitted to complete the lab. There will not be any make-up labs. It is the student's responsibility to complete all laboratory experiments and submit lab reports by the due date stated in the attached laboratory schedule. If a student does miss a laboratory session, written documentation from the Dean of Students office will be required to make up the lab grade. In this event, the student will be given a written assignment dealing with the material covered in lab.

**Academic Disruption Policy:** The University of South Alabama's policy regarding Academic Disruption is published annually in *The Lowdown*, the student handbook. Students are expected to follow this policy; students are expected to be cordial, courteous, and respectful of faculty members and fellow students.

**Student Academic Conduct Policy:** All students are expected to follow the academic conduct policies of the University of South Alabama as published annually in *The Lowdown*. Violation of these policies could result in the loss of credit for an assignment, up to the entire amount for the given assignment.

**Check-Out Policy:** In keeping with departmental policy, if a student fails to check-out their drawer on the assigned date (see attached laboratory schedule) the drawer will be checked out by the instructor and a \$50.00 fee will be charged to the student.

**Students with Disabilities:** In accordance with the Americans with Disabilities Act, students with bona fide disabilities will be afforded reasonable accommodation. The Office of Special Student Services will certify a disability and advise faculty members of reasonable accommodations. If you have a specific disability that qualifies you for academic accommodations, please notify your instructor and provide certification from Disability Services (Office of Special Student Services). The Office of Special Student Services is located in the Student Center, Room 270, Phone 460-7212.