

CHEM 304 INORGANIC CHEMISTRY LABORATORY

Syllabus

Instructor: Mehtap Eanes, Asst. Prof.

Teaching Assistants: Leyla Eral Doğan, İbrahim Karaman, Betül Öztürk

Purpose and Objectives of Course:

- To develop the laboratory techniques necessary for making qualitative and quantitative measurements.
- To learn various synthesis methods of inorganic materials, to make the necessary calculations for the reaction yields refers the quality of the product.
- To master the technique of keeping a scientific notebook and writing a lab report.

Grading:

Grading in this course is on a total point basis. These points are acquired through quizzes, lab reports, lab notebook and comprehensive final exam. The comprehensive final exam includes all experiments covered during the semester and the date will be announced later. Lab reports must be turned in by the due date at the beginning of lab period. Any late lab report will be assessed a penalty of 10 points per day. After two days, the lab report will not be accepted and no credit will be given. Extensions will be granted only for excused absences in the case of student illness or family emergency. **The final grade is comprised of the following: 70% from what you did during the semester (40% from quizzes, 50% from lab notebook, 10% participation) and 30% from final exam.** The teaching assistants will view your participation based on the following criteria: efficient use of time, attitude, creativity, technique, and quality of contribution to the lab work. The overall grade for lab notebooks will come from following criteria: preparation prior to lab, proper use of the notebook during lab time, organization, completeness, and legibility.

The following scale will be used for overall grading*:

95 – 100	AA	4.0
90 – 94	BA	3.5
85 – 89	BB	3.0
80 – 84	CB	2.5
75 – 79	CC	2.0
70 – 74	DC	1.5
65 – 69	DD	1.0
60 – 64	FD	0.5
Below 60	FF	0.0

* slight adjustments may be made to this scale by the instructor depending upon the overall ability of the class.

Laboratory Notebook:

EACH STUDENT WILL KEEP AND PROPERLY MAINTAIN A SEPARATE LAB NOTEBOOK.

1. Before the experiment, read the handout and skim information about the experiment. In your lab notebook, write the following BEFORE THE EXPERIMENT: Every page of the lab notebook must be numbered. All entries must be made with ink. Pencils cannot be used. Two or three pages should be left blank at the beginning of the notebook so that a table of contents can be added later.
 - a. Title of the experiment
 - b. Purpose of the experiment and any necessary background with references (INTRODUCTION) from your textbook.
 - c. A brief summary of the experimental procedure. DO NOT WRITE THE PROCEDURE FROM THE HAND OUT.
 - d. Any problem you expect to have from the experiment.
 - e. Any information related to safety, dangerous chemicals, etc.
 - f. BEFORE THE LAB QUIZ, GIVE YOUR NOTEBOOKS TO TAS.
2. During the experiment, write the following in your lab notebook:
 - a. Information given to by the TAs at the beginning of the lab.

- b. Step by step, everything EXACTLY as you actually are doing the experiment. This includes all exact measurement. Someone should understand 100 years later EXACTLY what you did.
 - c. Record all raw data and the results as the data is taken. THIS DATA AND INFORMATION CAN NOT BE WRITTEN LATER, ALL BLANK SPACES MUST BE MARKED AND SIGNED PROPERLY.
 - d. All mistakes and all problems should be marked properly and signed.
3. Towards the end of the experiment, write the following in your lab notebook.
 - a. A brief summary of what was learned.
 - b. A brief interpretation of the results.
 4. After the experiment, write the following in your lab notebook.
 - a. Whole calculations of experiment. Show all your work.
 - b. Result and discussion of experiment.
 - c. Finally conclusion part of experiment.
 5. **GIVE YOUR NOTEBOOKS to TAs ON WEDNESDAY UNTIL 12:00.**

WRITE EVERYTHING WITH INK. OTHER WILL NOT BE ACCEPTED.

Attendance:

Attendance is required for all laboratory meetings. If you are sick and cannot come to the university, you must obtain a valid doctor's excuse from the university health center. Points may be deducted from the class participation grade for lateness at the discretion of the lab assistants. You must be on time to the lab meetings. Points can be deducted for tardiness.

Make-Ups:

Laboratory work may be performed only during your designated lab period. Make-up time will be allowed only for officially excused absences.