

Dr. Jeff Altig

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Hours: By Appointment

Laboratory Manual & Schedule

www.nmt.edu/~jaltig/Laboratory.html

A good book for tips on maintaining lab notes is:

“Writing the Laboratory Notebook”; Howard M. Kane; American Chemical Society; 1985.

Grading

10%	Pre-Lab Quiz At the beginning of each lab, a short quiz covering the procedural details for the experiment will be given. Please do not be late for lab. You will not be given extra time to complete the quiz if you arrive late
10%	Pre-Lab Exercises Due at the Beginning of the Laboratory. You will not be allowed start the laboratory until you have completed this assignment. Further, this assignment will be a record of your lab attendance. Each problem must be worked out fully, with all steps needed to complete the problem shown. (Turn-in as a separate assignment.)
60%	Laboratory Notebook Details are provided in a separate handout. These will be collected and graded within one week of completion of the laboratory work for each lab exercise. You lab notes must be initialed by your TA before you leave the lab.
5%	Post Lab Conclusions Details are provided in a separate handout. These will be included in your lab notebook.
10%	Final Quiz Maybe administered in an oral or written format. Will cover details of the techniques and syntheses discussed during the semester.
5%	Lab Safety, Proper Disposal of Chemicals and Tidiness All safety rules (separate handout) must be followed, all chemicals must be disposed of properly, and your laboratory workstation must be kept tidy and left clean. At the end of each laboratory session, your laboratory instructor will issue a grade according to how well you are following the appropriate guidelines in this regard.

Notes:

- 1) Missing more than two laboratory exercises will result in a failing grade for the course.
- 2) The “late papers” policy will be set by your laboratory teaching assistant. However, no work will be accepted more than two weeks after the due date. And, no work will be accepted after the last laboratory session of the semester.

Topics to be Covered

Distillation

Fractional and Steam

Chromatography

TLC, GC, and Column

Extraction

Sublimation, Recrystallization & Melting Points

UV Spectroscopy

Synthesis

Derivatization

Suzuki Coupling Rxns

Stereochemical Rxns

Grignard Rxn.