

for further investigation. [Details](#)

How the course grade is determined:

| | Points | |
|---|------------|-------------|
| Written lab reports (3 x50 points each) | 150 | 54.5% |
| Oral report (1 x50) | 50 | 18.2% |
| Glassblowing exercise | 25 | 9.1% |
| Lab performance and lab notebook | 25 | 9.1% |
| Participation during oral presentations | <u>25</u> | <u>9.1%</u> |
| Total: | 275 | 100% |

Failure to submit a lab report: any missing lab report will be assigned a grade of **-50** points.

Update the literature used for the various labs. Bring me (DEM) a good article from the literature or chapter from a book reviewing or discussing a key aspect of any of the labs *that is newer and better than the existing references already cited for the lab*, and I will give you 5 points up to a maximum of 30 points.

More Information

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- Once you have your topic approved, send me an e-mail (**DEM**) providing the full literature citation of your review article(s) and intended article(s) you want to discuss in your presentation. At this point, you can then select a presentation date that will be approved by me (DEM).

General lab format:

- At the start of each lab, your TA will get together with you to discuss the experiment to be done. This is your best chance to ask questions. Preliminary reading assignments, the general plan for the experiment, etc. will have been given to you at least a week in advance of the experiment.
- Key to success in the course is a positive mental attitude when you arrive to start a lab. We will have done the best we can in preparing an experiment, but Murphy's law will sometimes strike, causing delays or slowing completion of experiments. Should extraordinary difficulties occur, your TA will work with you to extend working hours or to complete the experiment at another time.
- We have planned each laboratory so that all necessary data can be obtained within the scheduled laboratory time. Although you should plan on being present for the full-scheduled time, we hope to complete the experimental part of each lab in much less than the 6 hours of allotted time.

Brief Synopsis of the Laboratory Experiments:

Lab #1: Vacuum Chemistry

2 week lab. You will learn how to manipulate, move, sample and measure gases using a vacuum line. Two gases, BF_3 and $(\text{CH}_3)_3\text{N}$ will be combined to form a solid-state product. In the 2nd