

- CHEM 161 (recommended, but not required) – Because CHEM 201 is the place where we will put in practice the knowledge in quantum chemistry, CHEM 161 is recommended to have been completed prior to CHEM 201. However, the basic knowledge required from CHEM 161 will be repeated in CHEM 201 lectures, such that with some additional reading, a student can complete CHEM 201 without completing CHEM 161 first.
- CHEM 142 or 144 – means you have finished the 1st 2-years of chemistry. Note: it is possible to take CHEM 201 concurrently with CHEM 144, but it is not advised.
- CHEM 221 or concurrent enrollment – CHEM 221 is not really a prerequisite for CHEM 201, but what a waste of your time to play with instruments in CHEM 201 and not know how they work! You will learn all about that instrumentation in CHEM 221 and get to play with these instruments in CHEM 201. What a combo: CHEM 221 + 201.

Lecture:

Mon., Wed., & Fri., 1:55-2:45 pm, Angell B203

The foci of Advanced Chem Lab are the la

Course Instructor:

Dwight E. Matthews 656-8114 Cook A205

Graduate Teaching Assistants:

Daniel DePuccio 656-4394 Cook A135 – Expts 3, 4, & 5

Rebecca Harvey

this material down. It needs to be collected in a separate folder or 3-ring binder when it gets printed. You may want to do a "reducing" photocopy of critical pieces of information that need to go in your notebook and use a glue stick to affix them into your notebook. You may also glue typed-procedures into the notebook in place of rewriting procedures, and you may make references to specific instrument operating instructions etc. in a specific manual or hand-out instead of recording this information directly into your notebook.

- It's helpful if you bring a "thumb-drive" or USB memory stick to lab to download data into a format that can be transferred to Excel for further processing and plotting for lab reports.
- Although much of the data you collect will come from a computer controlling an instrument, you still need to record all of the operating parameters of an instrument at the time you are using it.
- You should organize for every experiment in advance, prior to starting it, and try to arrange space in your notebook for that day's experiment accordingly.
- You need your notebook with you at in the laboratory always.

Lab reports:

Get info

Lab oral presentation:

Each student chooses one of the six laboratory experiments to present orally to the class, rather than as a written lab report. The basic format will be the same as the written lab reports. Communication skills are critical to success in a career in science. Everyone has to present their work.

1 lab day.

- Lecture time is **1:55 - 2:45 pm** Mon, Wed, Fri on the dates shown above.
- Lecture location is **Angell B203**
- Class will be held only on the days where an event is listed. Dates shown with a green background are UVM holidays or when Prof. Matthews is out of town.
- Dates when *students give an oral presentation of a laboratory experiment* are shown in **color** in the last several class periods.
- There is the possibility that a class may be rescheduled due to an exceptional powder day. If so Prof. Matthews will send out an e-mail informing you of the opportunity to partake in a special seminar at Mad River Glen with Prof. Matthews.

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CHEM 201: Advanced Chemistry Laboratory

Chem 201 Laboratory Dates & Activities - Spring 2015

Week	Date	Student											
		1	2	3	4	5	6	7	8	9	10	11	12
3	1/15/15												
4	1/22/15												
5	1/29/15	molec spec		molec spec	NMR			NMR					molec spec
6	2/5/15	NMR			molec spec	molec spec	NMR		IR	NMR		IR	IR
7	2/12/15		IR	NMR		IR		molec spec			NMR		molec spec
8	2/19/15	molec12C/MCID2(P.3(e)92.f.5.C/MCID2(P./)6.1(1.2525 TD .0054 Tc 94 0 0 5.94 87.12 620.28 Tm 0 11.0404 .6263 TD .0051 Tc [(NM)9.8(R)]TJ 3 >>BDC 4)70..94 85.0 >> -.0015 Tc (28 -1.25											