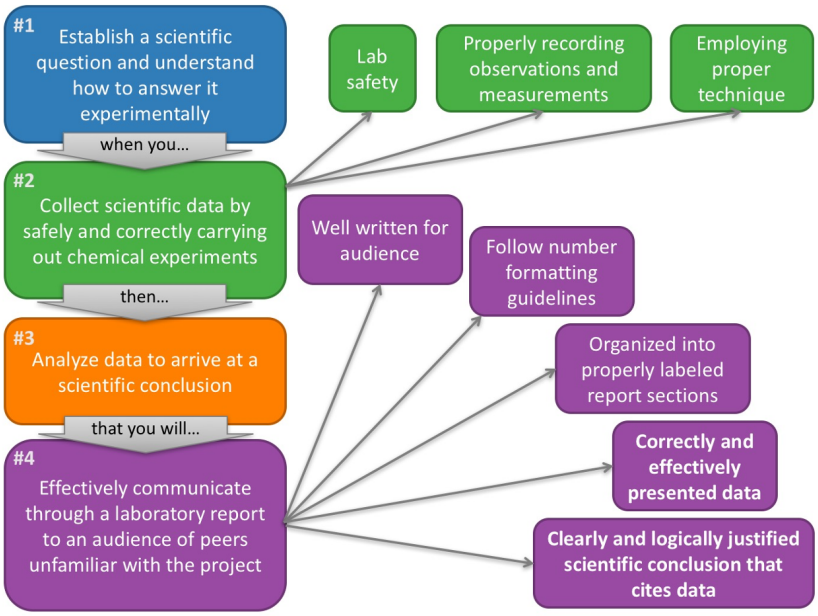
Spring 2023 - CHM 112 Lab w/ Prof. Plass

[Jump to Today]

Objectives



Laboratory experiments underlie crucial aspects of your life. Experiments like those you will do in this course ensure the purity and efficacy of pharmaceuticals, the creation and improvement of sustainable technologies like batteries and solar cells, and help us monitor and improve environmental quality. Each step in the experiment process is indispensable; we must learn to design, implement, analyze, and report our experiments.

Where can you get help?

Q&SC Quantitative Science Center	OFFICE HOURS
The Q&SC provides tutoring appointments and drop-in tutoring (7-10, M-Th). They can help with both lab and lecture content. **See more information here (https://fandm.instructure.com/courses/17727/pages/q-and-sc-is-for-everyone)**	Close faculty-student interaction is a defining feature of an F&M education and it is one of the things I love most about my job! I welcome you to contact me with any sort of question or concern or even just to chat. 1. I will be available right before and after lab on most days. 2. Send me an email at **kplass@fandm.edu. (mailto:kplass@fandm.edu)** 3. Sign-up with Plass's calendar to arrange a meeting (https://calendar.google.com/calendar/u/0/selfsched?sstoken=UURrLTduR2pxcjBOfGRlZmF1bHR8ZmU0YWMzNGY2NjAxNDlkNWJhMDllNWUyZGE5NWNjMmE)

Reminders - Can't remember what to bring to lab?

Bring the following to every lab meeting:

➞ Chemistry 111/112 Laboratory Manual, 2022-2023 ➞ Goggles ➞ Lab coat ➞ Lab notebook ➞ Laptop Wear lab appropriate attire: All skin below the waist should be covered and you should wear close-toed shoes

Safety - You are responsible for your own safety and the safety of those around you!

- Your work area, including the hood, must be cleaned before you leave.
- Be careful and follow safety guidelines! Safety is discussed in greater detail in your lab manual and in prelab. Here are some main points.
  - Whenever you are in the laboratory area, wear goggles, a lab coat, close-toed shoes, and ensure all skin below your waist is covered.
  - Treat gloves and lab benches as though they are toxic. Do not touch your face, hair, cell phone, etc with gloves or place them on the lab bench.
  - Dispose of waste properly in the appropriate solid or liquid waste container.
  - Do not touch hot things like lit Bunsen burners and tongs that were just used to handle hot objects.
  - Do not touch sharp things. Use a broom and dustpan to pick up broken glass, not your hands.
  - Avoid setting things on fire. This means not placing flammable chemicals close to hot plates or Bunsen burners and not allowing reactions containing flammable solvents to boil over or distill to dryness.

Policies and grading - Look here for boring but important stuff

Please communicate promptly with the professor if situations arise that make it difficult to attend lab or complete a lab report.

- **You must pass the laboratory portion of the course to pass the class. It is expected that students will complete all laboratory sessions.**
  - Make-up labs may be allowed at the discretion of the professor. Make-up labs for non-emergencies will be considered only if the absence is discussed with appropriate advanced notice (a week or more is preferred) and alternative arrangements are made.
  - Late lab reports are not accepted after 3 days except in extenuating circumstances, at the discretion of the professor.
- This laboratory makes up 20% of your class grade. Your lecture professor is responsible for your overall course grade.
- Laboratory report submission and feedback use turnitin.com through the Canvas course site. **How to access comments on lab reports (https://docs.google.com/document/d/1F2cWmt3Khbl1a4YgYLWymV4yFh2Fj70YKEfQmYqhlKs/edit?usp=sharing)** .
- Lab reports are graded on a 4.0 scale:

4.0 scale	Letter	Percentage
4.0-3.8	A	>93.5
3.8-3.5	A-	90.0-93.5
3.5-3.2	B+	87.5-90.0
3.2-2.8	B	83.5-87.5
2.8-2.5	B-	80.0-83.5
2.5-2.2	C+	77.5-80.0
2.2-1.8	C	73.5-77.5
1.8-1.2	C-	70.0-73.5

Note that the tentative schedule below and on the calendar could change.

Course Summary:

Date	Details	Due
Fri Jan 20, 2023	Lab meeting 1 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99651&include_contexts=course_19029)	12:40pm to 4:20pm
	Project 1 - Notebook (https://fandm.instructure.com/courses/19029/assignments/184664)	due by 5:59pm
	Project 1 - Calculations Week 1 (https://fandm.instructure.com/courses/19029/assignments/184662)	due by 11:59pm
Fri Jan 27, 2023	Lab meeting 2 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99653&include_contexts=course_19029)	12:40pm to 4:20pm
	Project 1 - Notebook Week 2 (https://fandm.instructure.com/courses/19029/assignments/189925)	due by 5:59pm
Fri Feb 3, 2023	Lab meeting 3 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99655&include_contexts=course_19029)	12:40pm to 4:20pm
	Project 1 - Week 2 calculations (https://fandm.instructure.com/courses/19029/assignments/189918)	due by 5pm
	Project 1 - Finding the context (https://fandm.instructure.com/courses/19029/assignments/184656)	due by 11:59pm
Tue Feb 7, 2023	Project 1 - Overview and lab report (https://fandm.instructure.com/courses/19029/assignments/184665)	due by 11:59pm
Fri Feb 10, 2023	Lab meeting 4 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99657&include_contexts=course_19029)	12:40pm to 4:20pm
Fri Feb 17, 2023	Lab meeting 5 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99659&include_contexts=course_19029)	12:40pm to 4:20pm
	Titration 1 - Q values	due by 6:59pm

Date	Details	Due
	(https://fandm.instructure.com/courses/19029/assignments/190889)	
Fri Feb 24, 2023	Lab meeting 6 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99661&include_contexts=course_19029)	12:40pm to 4:20pm
	Titration 2 - Q calculation (https://fandm.instructure.com/courses/19029/assignments/191193)	due by 6:59pm
	Titration 3 - Q calculation (https://fandm.instructure.com/courses/19029/assignments/191194)	due by 6:59pm
Sat Feb 25, 2023	Kinetics lab (https://fandm.instructure.com/courses/19029/assignments/184660)	due by 11:59pm
Fri Mar 3, 2023	Lab meeting 7 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99663&include_contexts=course_19029)	12:40pm to 4:20pm
	Titration 4 - Q calculation (https://fandm.instructure.com/courses/19029/assignments/191430)	due by 5:59pm
	How do we tell these compounds apart write-up (https://fandm.instructure.com/courses/19029/assignments/191178)	due by 6:59pm
	Scan of handout (https://fandm.instructure.com/courses/19029/assignments/191177)	due by 6:59pm
Fri Mar 10, 2023	CANCELLED - Lab meeting 8 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99665&include_contexts=course_19029)	12:40pm to 4:20pm
Sun Mar 12, 2023	Spring break (https://fandm.instructure.com/calendar?event_id=99219&include_contexts=course_19029)	12am
Fri Mar 24, 2023	Lab meeting 9 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99667&include_contexts=course_19029)	12:40pm to 4:20pm
Fri Mar 31, 2023	Lab meeting 10 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99669&include_contexts=course_19029)	12:40pm to 4:20pm
Fri Apr 7, 2023	Lab meeting 11 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99671&include_contexts=course_19029)	12:40pm to 4:20pm
Fri Apr 14, 2023	Lab meeting 12 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99673&include_contexts=course_19029)	12:40pm to 4:20pm
Fri Apr 21, 2023	Lab meeting 13 (CHM-112-C) (https://fandm.instructure.com/calendar?event_id=99675&include_contexts=course_19029)	12:40pm to 4:20pm
	Roll Call Attendance (https://fandm.instructure.com/courses/19029/assignments/189663)	