

CHEM1430: Physical Chemistry Laboratory I
SPRING 2019 Thaw 400

DIRECTOR: Dr. Eugene Wagner
OFFICE: Thaw 400
OFFICE HOURS: at lab or by email.
E-MAIL: ewagner@pitt.edu
CLASS WEBSITE: <http://chemicaleducation.org>
LAB PHONE: 412-624-2124

INSTRUCTORS:
Bo Ryoo, bor3@pitt.edu
Bruce Thompson, BAT61@pitt.edu

SUPPORT MATERIALS:

- 1) *Physical Chemistry Laboratory I Manual* – Available online at <http://chemicaleducation.org>
- 2) Goggles/Safety Glasses
- 3) Electronic Lab notebook – Use Google Docs or cloud based Word
- 4) USB drive to store your data or cloud drive to upload data.
- 5) All computers in the lab are connected to the Internet. Feel free to use this resource but do not import or download any executable files.

OBJECTIVES OF COURSE: The primary purpose of this course is to **increase your ability to critically think and analyze data and information** to solve problems. The secondary purpose is to become familiar with instrumentation and lab techniques related to physical chemistry. The most important attributes that you must bring to this course are an enthusiasm for learning, an open mind, and ambition.

ATTENDANCE POLICY: Attendance at all lab meetings is required and very important. You must be present and actively engaged at all lab meeting. Any exceptions must be communicated to the TA or Dr. Wagner before the absence or as soon as possible. See grading scheme for more information.

DISABILITY SERVICES: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact me and the Office of Disability Resources and Services, 216 William Pitt Union, (412) 648-7890/(412) 383-7355 (TTY) as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

ACADEMIC HONESTY: Students are responsible for knowing and observing the University of Pittsburgh's Code of Student Academic Integrity, which forbids cheating, fabrication or falsification of information, multiple submissions of academic work, *plagiarism*, abuse of academic materials, and complicity in academic dishonesty. Academic evaluation in this course includes a judgment that the student's work is free from dishonesty. Students who are suspected of violating this code will be required to participate in the legal procedural process as outlined in the University Guidelines on Academic Integrity.

POLICY FOR EYE PROTECTION CHEMISTRY TEACHING LABORATORY:

Anyone in the physical chemistry laboratory is required by the University and Department of Chemistry to wear approved safety eye ware at all times. There are no exceptions. SPLASH PROOF SAFETY GOOGLES are mandatory for the prep room area and when using a vacuum line. In addition a face shield must be used when dispensing liquid nitrogen. Any student not in compliance with these rules will first receive a verbal warning from the laboratory instructor. After a second offense, the lab instructor will deduct 5 points from course points (see below). Any student receiving a third warning during the same lab period will be dismissed from that lab and have an additional 15 points deducted from course points. Gross negligence for safe and professional lab work will result in additional points lost, beyond that outlined above. Any student dismissed from two lab periods during the semester for violation of the eye safety policy will meet with Dr. Wagner to determine if additional action, such as dismissal from the course, or a grade of F for the course is appropriate. Any additional violations of this policy or other safety procedures will result in a grade of F for the course.

CODE OF CONDUCT AND PROFESSIONALISM: *You will be required to always conduct yourself in a professional and courteous manner* toward the instructors and all students in the class. Failure to do so will result in dismissal from the class period and points deducted from your class score.

GRADING SCHEME:

Professionalism (7 experiments)	-70 points	- Coming to lab on time, properly prepared, good lab technique, safety, knowledge, participation in experimental work, & <u><i>clean up</i></u>
Pre-lab assignments (variable pts x 7 reports)	100 points	- see website for details
Lab Notebook (5 pts x 7 reports)	35 points	- see website for details.
Written reports (100 pts x 7 reports)	700 points	- see website for details.
Writing workshop/meeting with Joe Z	10 points	
Second writing workshop/meeting with Joe Z	5 <u><i>bonus</i></u> points	
Poster rough draft	10 points	
Poster report at poster session	100 points	- see website for details
Poster presenting	30 points	- see website for details
Peer grading of two posters	15 points	- see website for details
Total	1000 points	

- Conduct yourself in a professional manner as if this is your actual “real world” job. Interacting appropriately with others is extremely important, especially with your lab partner. You are expected to effectively communicate with your partner, especially since course performance is dependent on each other. The instructor reserves the right to deduct points for any behavior deemed uncooperative and unprofessional.
- Prelab assignments are due no later than 24 hours before the start of your lab period. Each prelab is different based on the experiment. Everyone submits his/her own prelab, regardless of whether you are writing reports with a partner. All Prelabs are submitted through Box. See the website for details.
- Notebooks for each experiment are due *before you leave* the lab session. You should be keeping one notebook per group, per experiment, regardless of whether you are writing reports together. In doing so, your group will be much more efficient in the lab. All Notebooks are submitted through Box. See the website for details.
- Lab reports are due two weeks after completion of the experiment. The course is designed so that everyone should write their own. However, these reports can be written with your lab partner and turned in as one report. Working with a partner is a “bonus” not a rule or requirement. *The instructors accepts no responsibility for how well partners work with each other and will not be involved in disputes or issues between partners. It is solely the responsibility of each student to effectively communicate and work with his/her partner.* All reports are submitted through Box. See the website for details.
- The poster reports are individual efforts and cannot be on the same experiment as your lab partner. No experiment is presented more than once (if seven or less students are in the class.).
- **The Undergraduate Poster Session is scheduled for the last Friday of the semester (before finals week) from 4-6pm.** It is a combined undergraduate poster symposium sponsored by Covestro and PPG. Please note that this is not at our regularly schedule lab meeting. Participation and presentation of you poster at this session is mandatory. Therefore, arrange you schedule accordingly now.

A-,A,A+	90% ↑	(above 899 points)
B-,B,B+	78 – 89%	(780 – 899 points)
C-,C,C+	65 – 77%	(650 – 779 points)
D-,D,D+	55 – 64%	(550 – 649 points)
F	55% ↓	(below 550 points)

Exact “+” & “-” letter grade assignments will be determined by Dr. Wagner