

CHEM1430: Physical Chemistry Laboratory I  
FALL 2017 Thaw 400

DIRECTOR: Dr. Eugene Wagner  
OFFICE: Thaw 400 & Chevron 107  
OFFICE HOURS: by appt.  
PHONE: 624-2861  
E-MAIL: [ewagner@pitt.edu](mailto:ewagner@pitt.edu)  
CLASS WEBSITE: <http://chemicaleducation.org>  
LAB PHONE: 624-2124

LAB INSTRUCTORS:  
Clinton Johnson, [CAJ52@pitt.edu](mailto:CAJ52@pitt.edu)  
Ed Beall, [EJB65@pitt.edu](mailto:EJB65@pitt.edu)

SUPPORT MATERIALS:

- 1) *Physical Chemistry Laboratory I Manual* – Available online at <http://chemicaleducation.org>
- 2) Goggles/Safety Glasses
- 3) Lab notebook
- 4) USB drive to store your data.
- 5) There are many textbooks on permanent reserve in the chemistry library. These books are listed in the lab manual (the update list is on the website) and are important resources. We have some books in the classroom for your use. **Do not remove these books from the laboratory.** Finally, all computers 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.

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.

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 10 points from the Lab Performance grade (see below). Any student receiving a third warning during the same lab period will be dismissed from that lab and receive a grade of zero for the Lab Performance and the written Laboratory Report. 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.

#### GRADING SCHEME & SCALE:

Performance (5 pts x 7 experiments)	35 points	- Coming to lab on time and properly prepared, lab technique, safety, knowledge, participation in experimental work, & clean up
Pre-lab assignments (5-8 pts each x 7 reports)	45 points	- see website for details
Short written reports (50pts x 7 reports)	350 points	- see website for details
Initial poster submission review	20 points	- see website for details
Poster report at poster session	100 points	- see website for details
Poster presenting	30 points	- see website for details
Peer grading of two posters	20 points	- see website for details
<hr/>		
Total	600 points	

- Prelab assignments are due no later than two hours before the start of your lab period. Each prelab is different based on the experiment. See the website for details. All prelabs are submitted online through the website.
- 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 accept 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 lab reports are submitted online through the website.
- The poster reports are an individual effort 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 Friday, December 8<sup>th</sup> from 4-6pm** and it is a combined undergraduate poster symposium with analytical and instrumental chemistry lab students and is sponsored by Bayer and PPG. Please note that this is not at our regularly scheduled lab meeting and takes the place of your last week’s regularly scheduled lab session. Participation and presentation of your poster at this session is mandatory. Therefore, arrange your schedule accordingly now. It is expected that you will use the Departmental Printing services to print your poster at no cost to you.
- The first submission of your poster is **due at the start of class the week of November 28<sup>th</sup>**. Your TAs will review and give comments back to you in lab while you further revise your poster.
- You will be required to grade at least three other posters/presentations at the poster session.

A-,A,A+	90% ↑	(above 539 points)	Exact “+” & “-” letter grade assignments will be determined by Dr. Wagner
B-,B,B+	78 – 89%	(468 – 539 points)	
C-,C,C+	65 – 77%	(390 – 466 points)	
D-,D,D+	55 – 64%	(330 – 389 points)	
F	55% ↓	(below 330 points)	