

**Instructor:** Anna Johnston, Ph.D. email: ajohnst3@ucsc.edu office hours: TBD

**Teaching Team:** 

Beatriz (Bea) Ehlke Santi Grott email: beehlkes@ucsc.edu office hours: TBD Section: 01A email: ialopez@ucsc.edu office hours: TBD Section: 01B Isai Lopez

Lori Etow email: letow@ucsc.edu **Stockroom Support** (she makes the labs possible!)

Your TA is your primary contact for this course! You are highly encouraged to attend office hours, which will be announced in your lab section. You can attend both Bea, and Isai's office hours regardless of which is your TA.

#### Welcome!

In this course you will get hands-on lab experience that will deepen your understanding of how our world operates at the chemical level. Laboratory experience is crucial to building the skills to think analytically and critically about chemical concepts. In lab, we will encourage you to push past the fear of not knowing the answer, and to use experimentation and logic to find it. Isai, Bea, and I invite you to ask questions early and often to get the most out of this experience.

\*This syllabus contains important information on lab requirements, policies, grading, and scheduling. As different courses can present different needs, the content of this syllabus is subject to change.\*

# See you in the lab!

### **Required Materials**

- Purchase access to online lab materials and assignments through http://webassign.net (ISBN 978-1-92-855080-8 General Chemistry Labs CHEM 1M and 1N). Please make sure you are registered with your legal name and correct student ID number (######) before the second section meets. You should be able to access WebAssign through our canvas page (~\$25-\$37).
- Lab notebook (no spiral bound)
- scientific calculator
- safety goggles, lab coat (these are **provided in the lab**, but you are welcome to purchase your own!)

#### **Course Policies**

Summer 1N is offered at an accelerated pace. Use the 'Schedule' in this syllabus to stay on track  $\Theta$ 



- Lab Attendance
  - o If you do not attend the first lab section on time in the correct room, you may be dropped from the course. Please email Anna and your TA ahead of time if a legitimate reason comes up that requires you to miss lab.
  - Lab attendance is required. However, if you must be absent, you must notify the instructor and your TA in advance of an absence. Full credit is possible if the reason for the absence is approved. Approved reasons for absence are emergency, illness, or injury requiring immediate medical attention, some UCSCsanctioned trips, and immediate family funerals. A makeup experiment cannot be offered, but you may get data from your lab partner. Make sure you have their contact info!
  - For an unapproved absence, you must complete the assignments for a maximum of 50% credit. Missing two or more experiments will result in a non-passing course grade. If you do not contact Anna and your TA in a timely manner, you will not be able to complete the assignments and you may fail the course.

## Assignments

- o To pass this course, you must perform all experiments, turn in all Notebook Pages, complete all In-lab Assignments, and both Abstracts.
- o Make sure to finish all assignments! You have 10 submissions in WebAssign, no deductions.
- o Always keep track of due dates and times. There is a 25%-per-day penalty for late work.
- o We know life happens; we've got you back. You're allowed one extension on an assignment, but we need you to communicate with us ahead of time. Email Anna and your TA for an extra day if you're falling behind.
- You must submit original work; plagiarism/cheating will result in a failing grade in the course and possible disciplinary action. See 'Academic Integrity' below for guidance if you're unsure.

# **Lab Safety** \*\*Failure to follow any of these safety rules will result in **deduction of your scholarship points** \*\*

The complete SAFETY RULES are posted on Canvas and will be reviewed on the first day of lab:) Highlights...

- Your safety is our NUMBER 1 PRIORITY!
- No food or drink is allowed in the lab, wear proper attire, and arrive on time.
- Wearing goggles that fit snugly to the face is a must (safety glasses are not acceptable). Goggles will be provided to you in the lab, but you're welcome to purchase your own.
- Closed-toed shoes that cover the entire foot are required. No crocks, Birkenstocks, or slides
- Clothing must cover skin from the shoulders through the toes. No tank-tops, halter-tops, shorts, sandals, etc., are allowed. *No leggings, yoga pants, or stretchy synthetic workout pants*. These materials do not do a good job of protecting your skin from chemical spills!
- No cell phones or electronic devices are allowed at the lab bench.

# **Academic Integrity, WHAT TO AVOID:**

- Avoid searching for answers to In-lab questions online. This knowledge is provided in the experiment PDFs and TA lectures. Online sources can be problematic and often wrong!
- Reading and posting Inlabs or any other course materials on sites like CHEGG and Course Hero *violates UCSC academic integrity policy*. The same applies to using paper or electronic copies of **old In-labs**. *If someone offers you their old work, don't accept it or give it back!* The questions and criteria change each term, making these instances relatively easy to catch.
- Reading another student's work then rewording it is considered cheating, as this is not reflecting your own ideas or understanding.
- Do not copy/paste from other unauthorized sources, then alter it to make it look different.

## **How to Stay on Track**

#### Before each lab section

- READ through the lab procedure pdf available on Canvas and WATCH the Lab Video
- PREP your **Notebook Pages** for the upcoming experiment. Create a procedural outline or flowchart of the experiment in your lab notebook, along with your best attempt at data tables. A list of steps or an exact rewrite of the procedure is not acceptable. Pasting in the procedure printed from the manual will result in a zero.

## **During/After each lab section**

- UPLOAD pictures of your completed Notebook Pages to Canvas.
- Complete the online In-lab assignment by the specified due date/time. This assignment includes data, data analysis, results, and brief concept assessment questions. It is an <u>EXCELLENT IDEA</u> to start these assignments in the lab with your TA once you have finished your experiment.
  - o Remember, **significant figures matter!** Your TA will grade the free-response discussion questions at the end of the assignment after it is submitted.
- Complete an abstract for experiments 5 and 11 ONLY.
  - o An abstract is a concise overview of the experiment discussing purpose, methods, results/error analysis, and conclusion. Your TA will provide details on the format and content.

#### **Course Schedule**

Date	Exp. #	Title	Assignments/Due Dates
Tu 6/27		First Meeting!: Syllabus, locker check-	Intro Assignments and Safety Quiz
		in, safety, WebAssign intro and tutorials	
			beginning of each lab starting on Th 6/29*
Th 6/29	3	Thermodynamics/Hess's law	<b>In-lab:</b> Due Mon 7/3 @11:59pm
Tu 7/4		No Class- July 4 <sup>th</sup> Holiday	
Th 7/6	5	Unknown Acid Analysis – abstract	<b>In-lab:</b> Due Mon 7/10 @11:59pm
			<b>Abstract:</b> Due Tu 7/11 @ 11:59pm
Tu 7/11	8	Acids, Bases, and Buffers	<b>In-lab:</b> Due Sat 7/15 @ 11:59pm
Th 7/13	10	K <sub>sp</sub> Determination for Ca(OH) <sub>2</sub>	<b>In-lab:</b> Due Mon 7/19 @11:59pm
Tu 7/18	11	Spectroscopic Determination of K <sub>eq</sub> –	<b>In-lab:</b> Due Sat 7/22 @11:59pm
		abstract	Abstract: Due Sat 7/22 @11:59pm
Th 7/20	13	Electrochemistry	<b>In-lab:</b> Due Mon 7/24 @11:59pm
Tu 7/25	7	Freezing Point Depression; Check-out	<b>In-lab:</b> Due Fri 7/28 @11:59pm
Th 7/27	-	No Class	

		Grade %
<b>Grading:</b>	Notebook Pages	15%
	Online in-lab assignments (7)	60%
	Formal abstracts (2)	10%
	Scholarship Points	10%
	WebAssign Tutorials, Safety Quiz, & Videos	5%

#### **Strict Grade Distribution**

A+ 98.00 – 100%	A 93.00 – 97.99%		A- 90.00 – 92.99%
B+ 88.00 - 89.99%	B 83.00 – 87.99%		B- 80.00 – 82.99%
C+ 78.00 – 79.99%	6	C 70.00 – 77.99%	
D 55.0 – 69.99%		F < 55.0%	

# **Disability Accommodation**

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to your TA privately during office hours, before or after section, or by appointment, preferably within the first two weeks of the quarter. We can also discuss ways to ensure your full participation in the course. We encourage all students who may benefit from learning more about DRC services to contact DRC by phone at 831-459-2089 or by email at drc@ucsc.edu.

#### Title IX

Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced sexual harassment or sexual violence, you can receive confidential support and advocacy at the Campus Advocacy Resources & Education (CARE) Office by calling (831) 502-2273. In addition, Counseling & Psychological Services (CAPS) can provide confidential, counseling support, (831) 459-2628. You can also report gender discrimination directly to the University's Title IX Office, (831) 459-2462. Reports to law enforcement can be made to UCPD, (831) 459-2231 ext. 1. For emergencies call 911.

Faculty and Teaching Assistants are required under the UC Policy on Sexual Violence and Sexual Harassment to inform the Title IX Office should they become aware that you or any other student has experienced sexual violence or sexual harassment.

#### Land Acknowledgement

"The land on which we gather is the unceded territory of the Awaswas-speaking Uypi Tribe. The Amah Mutsun Tribal Band, comprised of the descendants of indigenous people taken to missions Santa Cruz and San Juan Bautista during Spanish colonization of the Central Coast, is today working hard to restore traditional stewardship practices on these lands and heal from historical trauma."