CHEM 108-005 Spring 2024

Instructor: Mrs. Kristen Kull

Lab Meeting Time: Thursday 2:00-4:50 pm Sims 103

Prelab: Thursday 2:00 Sims 105

Recitation: Monday 5:00 – 5:50 pm Zoom (reference Blackboard for updates)

Course Credit Hours: 2

E-mail: kullk@winthrop.edu

Office: Sims 107B

Office Hours: Virtual BB Mon 6:00-7:00 pm, Tues 11:00-1:30, Thurs 5:00-6:00 pm

Physical Sims 103/107B Thurs 5:00-6:00 pm Times are subject to change to align with student preferences

OR

By appointment; send request via BB email with phone number and 3 dates/times available to meet; messages

sent via WU email are not guaranteed a response

Date	Schedule*	Assignments Due
1/11	Introduction/Safety*Lab Check-In	read lab safety files on BB, Complete graphing dual data assignment
1/18	No Lab (Sims 103)	
1/25	Cooperative Project I	Read Project I notes, watch density, sig. fig. and conversions videos, Pre-lab notebook prep, turn in Blackboard quiz. Notebook pages and weekly data summary at end of lab.
2/1	Cooperative Project II	Project I report due; Read Project II notes; Prelab notebook prep, turn in Blackboard quiz. Notebook pages and weekly data summary at end of lab.
2/8	Cooperative Project III	Read Project III notes - Making CaCO ₃ ; Prelab data notebook prep, turn in Blackboard quiz;. Notebook pages and weekly data summary at end of lab.
2/15	Cooperative Project III	Read Project III notes –Making Calcium supplement; Prelab data notebook prep, turn in Blackboard quiz. Notebook pages and weekly data summary at end of lab.
2/22	Cooperative Project IV	Project III report due; Read Project IV notes –Making a Calorimeter and determining C _{cal} ; Prelab data notebook prep, turn in Blackboard quiz; Notebook pages and weekly data summary at end of lab.
2/22	Interim Grading Due	
2/29	Cooperative Project IV	Read Project IV notes –Determining the Heat of Reaction; Prelab data notebook prep, turn in Blackboard quiz; Notebook pages and weekly data summary at end of lab.
3/4	Recitation Exam 1	
3/7	Cooperative Project IV	Project IV report, Notebook pages and weekly data summary at end of lab.
3/14	No Lab	Spring Break
3/19	Last day to withdraw with an N	
3/21	Cooperative Project V	Read Project V notes –Identifying an unknown Organic compound; Prelab data notebook prep, turn in Blackboard quiz; Notebook pages and weekly data summary at end of lab.
3./28	Cooperative Project V	Read Project V notes –Focus on Instrumental Analysis techniques; Prelab prep, turn in Blackboard quiz; Notebook pages and weekly data summary at end of lab. Oral Powerpoint presentation on 4/18

4/24	Final Skills Exam	Wednesday at 8:00 am, Sims 103; notebook questions (CPI-CPVI) and skills; Lab notebook maybe used
4/22	Recitation Exam 2	
4/18	Cooperative Project V- Oral Presentations Lab Check-Out Skills Exam Practice	 Chem 105 – CPV Oral Presentation (group and individually assigned molecule), be prepared to load from your device or from a submission made to Blackboard Chem 103 – Lab bench checkout; Skills Exam Practice -Identification of Lab glassware and equipment, density measures and graphing, pH determination, melting point, spectrometer use for λ_{max} and Beers Law; generate plot with eq. of line, concentration determination; Student directed problem review for Final written exam
4/4	Cooperative Project VI	(lambda max) of PO ₄ ³⁻ ; Prelab data notebook prep, turn in Blackboard quiz; Notebook pages and weekly data summary at end of lab. Read Project VI notes –Creating a Beer's law plot, determining the original PO ₄ ³⁻ concentration of soda; Prelab data notebook prep, turn in Blackboard quiz; Notebook pages and weekly data summary at end of lab.
4/4	Cooperative Project VI	Read Project VI notes – Making standard solutions, determining λ_{max}

Cooperative Project I: Density

Cooperative Project II: Identification, Properties and Synthesis of an Unknown Ionic Compound

Cooperative Project III Designing a Calcium Supplement/Calcium Carbonate Synthesis

Cooperative Project IV Thermochemistry

Cooperative Project V: Identification, Properties and Synthesis of an Unknown Organic Compound

Cooperative Project VI: Analysis of Phosphate in Colas

^{*}This is a tentative lab schedule and is subject to change. See Blackboard for updates and COMPLETE recitation schedule.