

Laboratory Schedule for CHEM 272L, Summer 2021

Please refer to the next page for details as to which part of the experiments will be conducted.

Week	Dates		M		T		W		R	
			A	B	A	B	A	B	A	B
1	24-May	27-May	Safety and Policies (online asynchronous)				MP/Cryst	No lab	MP/Cryst	No lab
2	31-May	3-June	*HOLIDAY		No lab	MP/Cryst	No lab	MP/Cryst	Distillation	No lab
3	7-June	10-June	Distillation	No lab	No lab	Distillation	No lab	Distillation	Chrom/TLC	No Lab
4	14-June	17-June	Chrom/TLC	No lab	No lab	Chrom/TLC	No lab	Chrom/TLC	Extraction	No Lab
5	21-June	24-June	Extraction	No lab	No Lab	Extraction	No lab	Extraction	Oxidation	No Lab
6	28-June	1-July	Oxidation	No Lab	No Lab	Oxidation	No Lab	Oxidation	No Lab	No Lab

****All students must watch a video on lab safety and lab polices that will be posted to Laulima prior to the start of the first in-person lab.**

That video will be posted during the first day of classes when labs do not meet.

* = Non-instructional Days

Note: Order of labs in this schedule does not necessarily match the order in which the labs are printed in the manual.

The Safety Lecture will be an on-line video, supplemented with in-person instruction during the first in-person experiment. Reading: **i-xxiii** in lab manual

MP/Cryst lab: Students will:

- Read laboratories **1** and **3**, watch the experimental videos posted online.
- *Perform from experiment 1* the “**MELTING POINTS OF PURE UREA**” (but not pure cinnamic acid) and the “**MELTING POINTS OF MIXTURES OF UREA AND CINNAMIC ACID**”,
- *Perform from experiment 3* the “**SMALL-SCALE RECRYSTALLIZATIONS OF p-METHOXYBENZOIC ACID**” (but not ANTHRACENE) and the fluorenone/sulanilamide mixture “**PURIFICATION BY RECRYSTALLIZATION OF A SLIGHTLY CONTAMINATED SAMPLE**” in that order.
- *Skip* the melting point of pure cinnamic acid (start bottom of pg 5), the melting point of the unknown (bottom of pg 6), and” **RECRYSTALLIZATION OF ANTHRACENE**” (pg 32) and the “purification and identification of an unknown solid.” Read experiments **1** and **3**.
- Submit a single lab report per student describing the combined experiments.

Distillation lab: Students will:

- Read laboratory **2**, watch the experimental videos posted online.
- *Perform from experiment 2* the “**SIMPLE DISTILLATION**” and the “**FRACTIONAL DISTILLATION**”
- *Skip* the “**UNKNOWN DISTILLATION**” (PG 22).
- *Submit a single lab report per student*

TLC/Chromatography lab: Students will:

- Read laboratories **4** and **7**, watch the experimental videos posted online.
- *Perform from experiment 4* all of the “**EXPERIMENT 1: ANALGESICS**” including the “**UNKNOWN ANALGESIC IDENTIFICATION**”
- *Skip from experiment 4* all of “**EXPERIMENT 2: PLANT PIGMENTS**” (pg 48-50)
- *Perform all of experiment 7* to separate ferrocene from acetylferrocene. (we will not provide fluorene/fluorenone)
- *Collect IR and melting points of the separated compounds.*
- *Submit a single lab report per student describing the combined experiment.*

Extractions: Students will:

- Read laboratories **6**, and watch the experimental videos posted online.
- *Perform from experiment 6* “**PART 1: SEPARATION OF TWO ORGANIC COMPOUNDS**”
- *Skip from experiment 6* “**PART 2: EXTRACTION OF CAFFEINE FROM COLA SYRUP**” (pg 78-79)
- *Submit a single lab report per student*

Oxidations: Students will perform these experiments as written. Read laboratory **9**.

Skip: We will not perform the Laboratory 8 (SN2), 10 (Addition & E2), or 11 (hydrogenation)