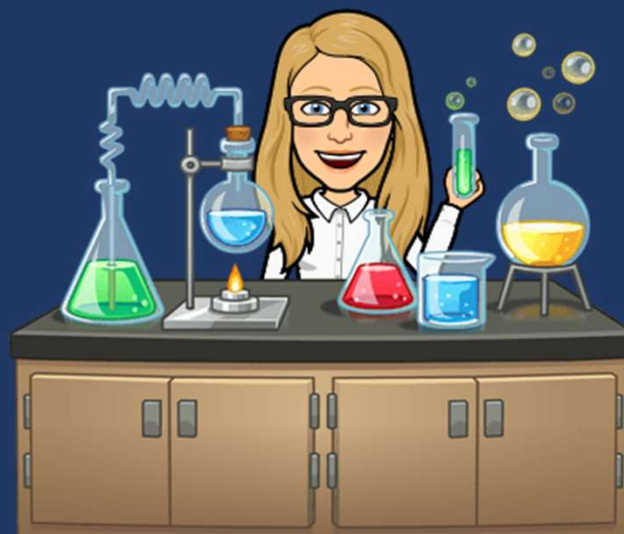


For voting, go to: <https://pollev.com/lauriestarke263>
or text LAURIESTARKE263 to 37607 to join poll



Dr. Laurie S. Starkey
Cal Poly Pomona

CHM 3140 Organic Chemistry I

Announcements 3/27/25

Today's Topic:

S_N1 Mechanism

(Chapter 7, Part 1 - Step 2)

Chapter 7

- ✓ Watch
- ✓ Read
- ✓ Practice

Daily To-Do

Flipped Lectures

Step 2

- Read Klein sections 7.1, 7.4, 7.8, 7.10
- Watch flipped lectures
- Work through SkillBuilders 6.2, 7.6, 7.8
- S_N1 vs. S_N2 Mechanisms homework (in Gradescope - can be submitted late with no penalty, up until date of Exam 3)
- Work on suggested Chapter 7-Part1 EOC problems on WileyPLUS (auto-graded) and/or on paper (self grade, using Solutions Manual).

- Part 2a (S_N1 and S_N2 vs S_N1)
42 minutes, skeleton notes pages 7-5 to 7-7
- Part 2b (Leaving Groups, Nucleophiles)
24 minutes, skeleton notes pages 7-7 to 7-10

Note: we will work on page 7-11 Solvent Effects together in class, at the end of Chapter 7

Flipped Lecture

SN1 Substitution Mechanism	41:52
Is This Substitution? Could This Be an SN2 Mechanism?	41:54
SN1 Mechanism	43:50
Two Key Steps: 1. Loss of LG	43:53
Two Key Steps: 2. Addition of nu	45:11
SN1 Kinetics	47:17
Kinetics of SN1	47:18
Rate of SN1 (By RX type)	48:44
SN1 E vs. POR Diagram	49:49
E vs. POR Diagram	49:51
First Transition Stage (TS-1)	51:48
Second Transition Stage (TS-2)	52:56
Stereochemistry of SN1	53:44
Racemization of SN1 and Achiral Carbocation Intermediate	53:46
Example	54:29
SN1 Summary	58:25
Summary of SN1	58:26
SN1 or SN2 Mechanisms?	60:40
Example 1: SN1 or SN2 Mechanisms	60:42
Example 2: SN1 or SN2 Mechanisms	63:00
Example 3: SN1 or SN2 Mechanisms	64:06
Example 4: SN1 or SN2 Mechanisms	66:17
SN1 Mechanism	69:12
Three Steps of SN1 Mechanism	69:13
SN1 Carbocation Rearrangements	74:50
Carbocation Rearrangements Example	74:51
SN1 Carbocation Rearrangements	80:46
Alkyl Groups Can Also Shift	80:48
Leaving Groups	84:26
Leaving Groups	84:27
Forward or Reverse Reaction Favored?	86:00
Leaving Groups	89:59
Making poor LG Better: Method 1	90:00
Leaving Groups	94:18
Making poor LG Better: Tosylate (Method 2)	94:19
Synthesis Problem	98:15
Example: Provide the Necessary Reagents	98:16
Nucleophilicity	101:10
What Makes a Good Nucleophile?	101:11
Nucleophilicity	104:45
Periodic Trends: Across Row	104:47
Periodic Trends: Down a Family	106:46

Sn1 Mechanism Leaving Groups & Nucleophiles

7/10/85



“C’m on, c’m on—it’s either one or the other.”

Registering for CHM 3150

Summer 2025

☺ no gap/memory loss

☺ start Biochem in Fall

💬 adapt to new professor

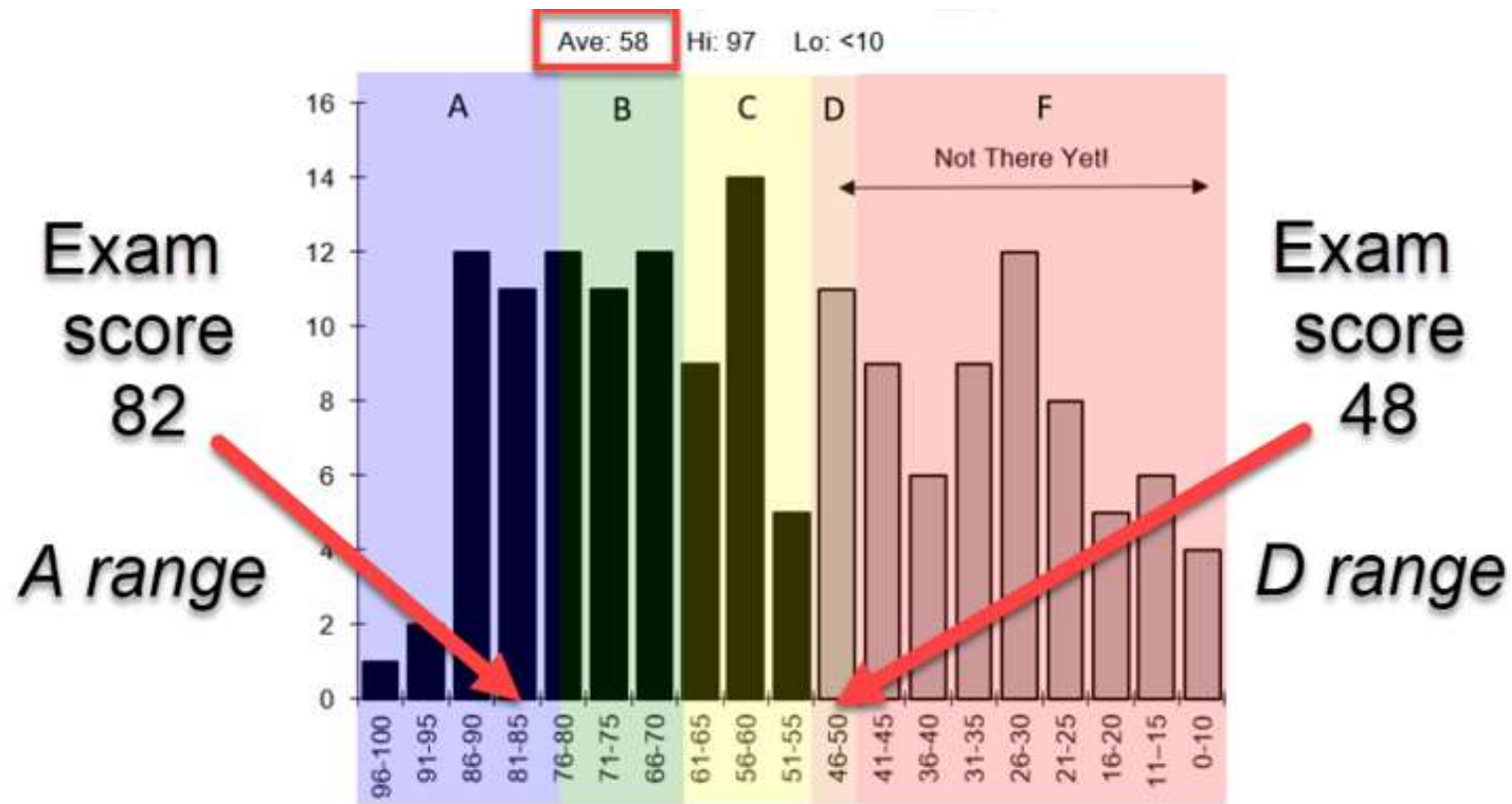
Fall 2025 (TuTh 1/4/5:30 pm)

☺ used to Dr. Starkey’s style

💬 spend summer reviewing
Chapters 7–11! **Reminder**

Gary Larson, The Far Side

Estimated CHM 3140 grade is based exam scores.
See histograms...Exam average below 50% will not earn C–



Possible repeat CHM 3140? Consider registering for 3150 *and* 3140...

Do you know what the Spring Break weekend is?!

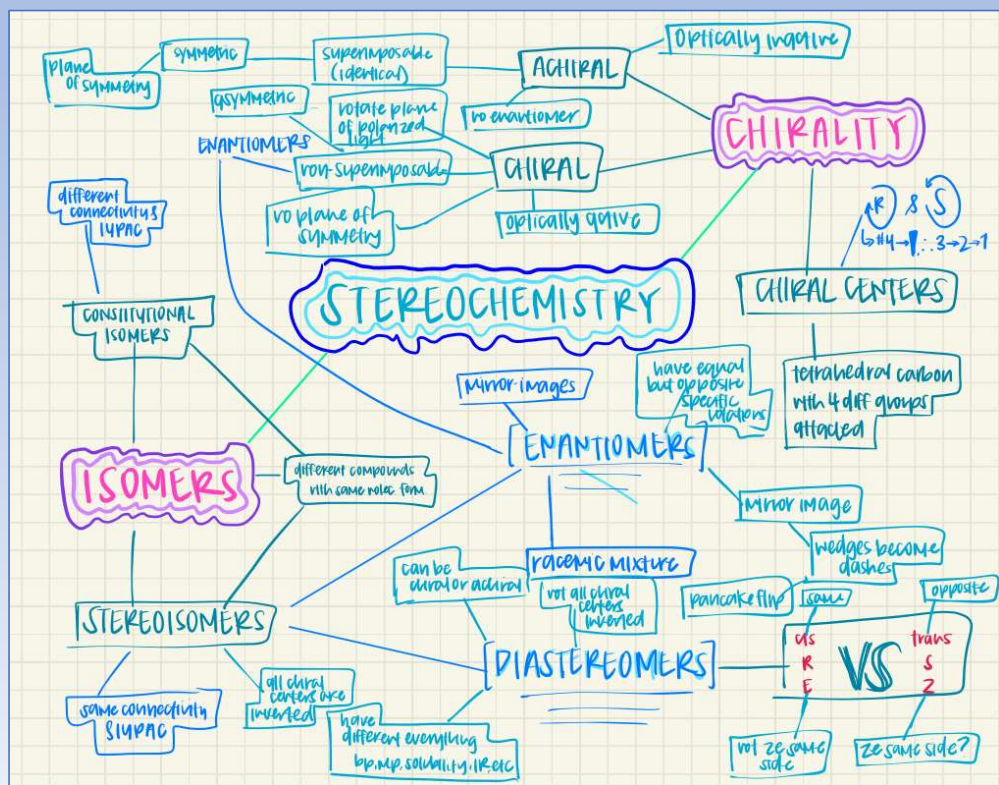
Week	Mon	Tues	Wed	Thurs	Fri
9	3/17	3/18 Ch.15 #2	3/19	3/20 Ch. 6 #1	3/21
10	3/24	3/25 Ch. 7 #1	3/26	3/27 Ch. 7 #2	3/28
S P R I N G B R E A K 3/31 – 4/4					
11	4/7	4/8 Ch. 7 #3	4/9	4/10 Ch. 7 #4	4/11
12	4/14	4/15 Exam Review	4/16	4/17 Exam III	4/18

Exam III – Thursday, 4/17 (10% NMR, 20% Chapter 6, 70% Chapter 7)

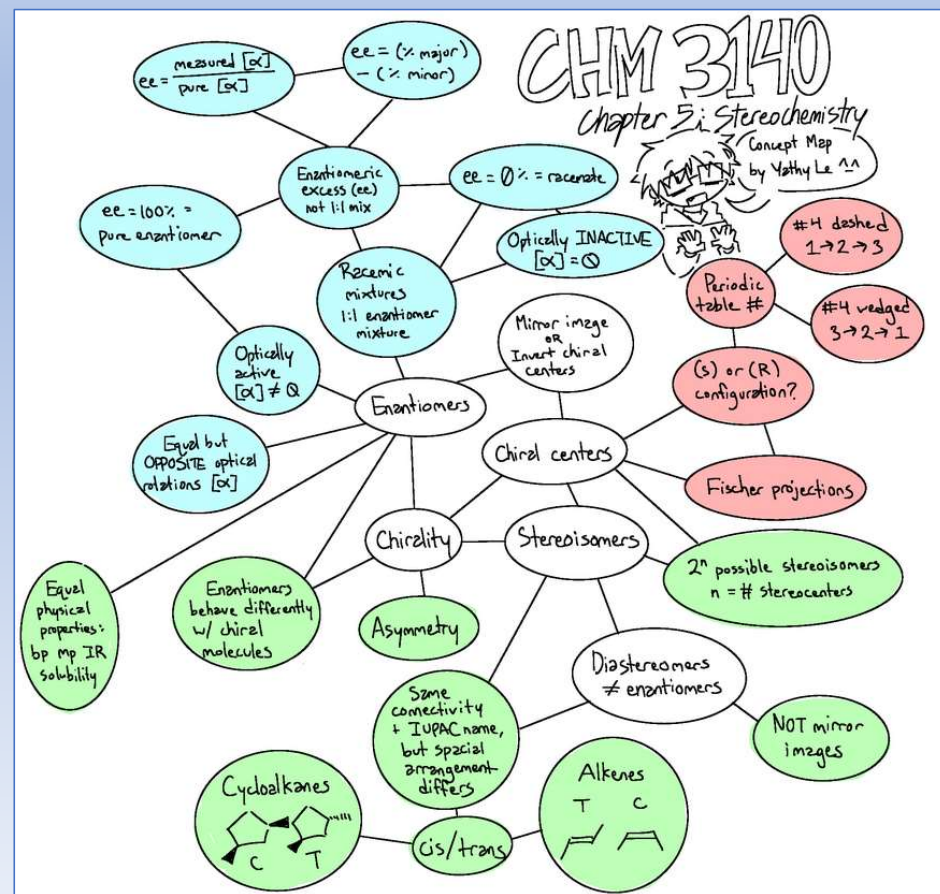


Make some
time for
self-care
during
Spring Break!

Concept Map \$10 Winners!



Danielle Galicia



Yathy Le

