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I will be attending the ACS  
meeting in San Diego next week,  
returning in time for office hours  
and afternoon classes on Tuesday

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# CHM 3140 Organic Chemistry I Announcements 3/20/25



ACS meeting NOLA

I will be attending the ACS meeting in San Diego next week, returning in time for *office hours and afternoon classes* on Tuesday, so...

**10 am class on 3/25 is cancelled**

10 am students can join 3pm or 5pm sections (in person or via Zoom), or watch recording

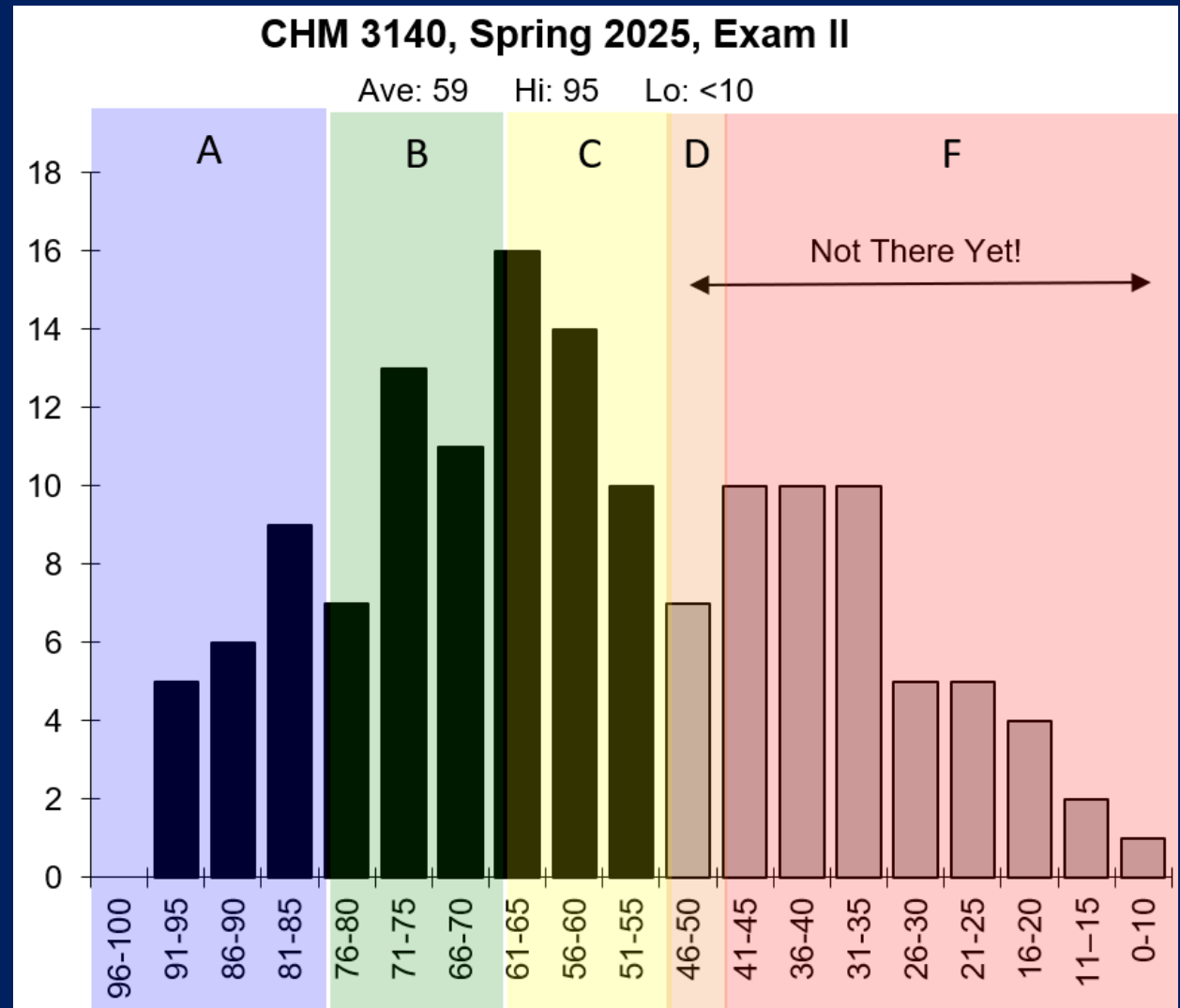


ACS meeting NOLA

# Exam II Results

A/B/C... ranges  
estimate projected  
CHM 3140 grade  
based only on this  
exam score (scaled) +  
full homework credit.

*Note: lowest midterm  
score will be dropped!*



# Exam Wrapper Survey & Corrections

due Sun.  
3/30

**CHM 3140 Exam Wrapper - Post-Test Survey** (Due 3/28/21) Name: \_\_\_\_\_

**Metacognition** By taking a step back and thinking about the way you learn, you can improve your learning! The following survey will guide you through an exercise in self-reflection, with the goal of improving your performance on the next exam. You will earn 3 points credit if you complete this survey, and 3 points for corrections (\*include written reflection, if score <55). It analyzes the following three areas

1. How did you prepare for this exam?
2. What kinds of mistakes did you make?
3. How will you prepare differently next time?

*\* If exam score is below 55, you must submit a written reflection with your exam corrections (what will you do differently for the rest of the semester?)*

What was your score\* on the exam?

What was your grade in CHM 123/1220?

Are you repeating CHM 3140? Y / N

1. Leading up to the exam, approximately how many hours per week outside of class (on average) did you spend studying Organic Chemistry?

2. Given the approximate # of textbook problems in each chapter (#), about how many did you work on?

Ch. 4 (# problems) (Alkanes, Conformers)		Ch. 5 (# problems) (Stereochemistry)		Ch. 15 (# problems) (NMR)	
12 SkillBuilders (33)		6 SkillBuilders (28)		8 SkillBuilders (28)	
End-of-Chapter (EOC) (81)		EOC (106)		EOC (47)	

3. Approximately how much of your studying was spent doing each of the following activities?

5                      4                      3                      2                      1  
major contributor   moderate amount   some time spent   minimal amount   not done at all

\_\_\_ Reading textbook section(s) for the first time

\_\_\_ Writing key concept or chapter summaries

\_\_\_ Rereading textbook section(s)

\_\_\_ Reviewing sample exams

# Today's Topic: Studying Chemical Reactions (Chapter 6)

## Chapter 6

- ✓ Watch
- ✓ ~~Read~~ Skim
- ✓ Practice

### Daily To-Do

### Flipped Lectures

#### Step 1

- Skim through Klein Chapter 6.
- Watch flipped lecture
- Work through **SkillBuilders 6.1, 6.3, 6.4, 6.5, 6.6**  
*Moved to Chapter 7 (skip for now): Section 6.7  
Nucleophiles & Electrophiles (SkillBuilder 6.2)*
- Work on suggested **Chapter 6 EOC problems** on WileyPLUS (auto-graded) and/or on paper (self grade, using Solutions Manual).

#### Chemical Reactions

**45 minutes**, all pages of skeleton notes

\*Note: when you encounter something in the skeleton notes that is not in the lecture, just leave it blank. We will work on that during class!

#### Exam III assignments\*

SkillBuilder/EOC Ch.6	5
SkillBuilder/EOC Ch.7-1	6
SkillBuilder/EOC Ch.7-2	10

"Free red ink" homework

NMR Spectra x3	3
Sn1 v Sn2	3
Alcohol Dehydrate	3
	<b>30</b>

# Flipped Lecture

Chemical Reactions ▾		5
Intro		0:00
Chemical Reactions		0:06
Reactants and Products		0:07
Thermodynamics		0:50
Equilibrium Constant		1:06
Equation		2:35
Organic Reaction		3:05
Energy vs. Progress of Rxn Diagrams		3:48
Exothermic Reaction		4:02
Endothermic Reaction		6:54
Estimating $\Delta H_{\text{rxn}}$		9:15
Bond Breaking		10:03
Bond Formation		10:25
Bond Strength		11:35
Homolytic Cleavage		11:59
Bond Dissociation Energy (BDE) Table		12:29
BDE for Multiple Bonds		14:32
Examples		17:35
Kinetics		20:35
Kinetics		20:36
Examples		21:49
Reaction Rate Variables		23:15
Reaction Rate Variables		23:16
Increasing Temperature, Increasing Rate		24:08
Increasing Concentration, Increasing Rate		25:39
Decreasing Energy of Activation, Increasing Rate		27:49
Two-Step Mechanisms		30:06
E vs. POR Diagram (2-step Mechanism)		30:07
Reactive Intermediates		33:03
Reactive Intermediates		33:04
Example: A Carbocation		35:20
Carbocation Stability		37:24
Relative Stability of Carbocation		37:25
Alkyl groups and Hyperconjugation		38:45
Carbocation Stability		41:57
Carbocation Stabilized by Resonance: Allylic		41:58
Carbocation Stabilized by Resonance: Benzylic		42:59
Overall Carbocation Stability		44:05

**Studying Chemical  
Reactions &  
Exploring Carbocations**





First Sign  
of Spring

# Getting Ready for Chapter 7...

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 <b>Ch. 7</b>	3/25 Ch. 7 #1	3/26 <b>Part 1</b>	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 <b>Ch. 7</b>	4/8 Ch. 7 #3	4/9 <b>Part 2</b>	4/10 Ch. 7 #4	4/11
12	4/14	4/15 Exam Review	4/16	4/17 <b>Exam III</b>	4/18

Weeks  
9-12

Chapter 15  
NMR, Part 2

Chapter 6  
Chemical  
Reactions

Ch. 7, Part 1  
Alkyl Halides:  
Substitution Reactions

Ch. 7, Part 2  
Alkyl Halides:  
Elimination  
Reactions

*Exam III*



# Concept Map \$10 Winners!



1<sup>st</sup> Place

\$20 Amazon Gift Card

