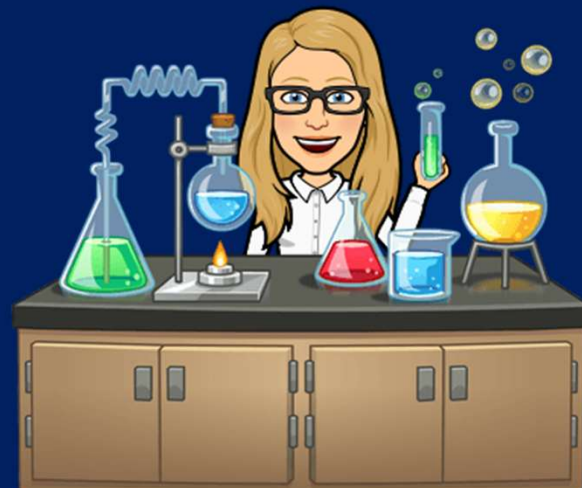


For voting, go to: <https://pollev.com/lauriestarke263>
or text LAURIESTARKE263 to 37607 to join poll



Dr. Laurie S. Starkey

Cal Poly Pomona

CHM 3140 Organic Chemistry I
Announcements 2/11/25

Today's Topic: Exam I Review

- Bonding, Physical Properties (Ch. 1)
- Resonance & Drawing Structures (Ch. 2)
- Proton-Transfer Rxns (Ch. 3)

Weeks
1-4

Chapter 1
Bonding/Structure
Hybridization

Chapter 2
Lewis Structures
& Resonance

Chapter 3
Acid-Base
Reactions

Exam I

Exam I Thursday, 2/13 (Chapters 1, 2, 3)

75-minute written exam

- no multiple-choice, no Scantron, no lecture after

No notes, calculators, model kits allowed

- Bring pencil(s), eraser

See sample exams on course homepage

- See typical length, format

You must come to your registered section

- 10 am, 3 pm, or 5 pm

Extra office hour/review session (Zoom)

- Tuesday 2/11, 9-10 pm

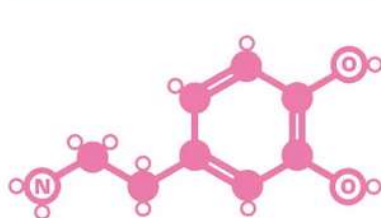
Sample Exams

(Why are there no answer keys? What is the b

[Exam I samples](#) | [Exam II samples](#)

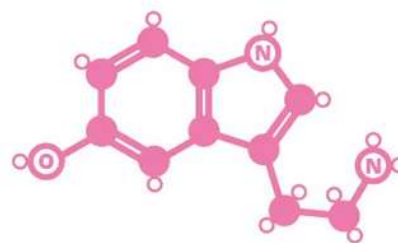


HAPPY VALENTINE'S DAY!



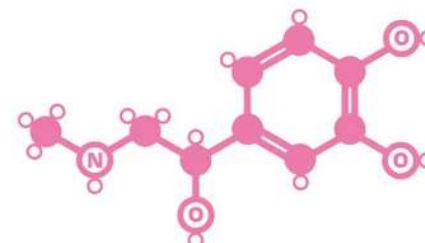
DOPAMINE

Levels of dopamine in the brain increase when you're in love, giving feelings of pleasure. People repeat behaviours that lead to dopamine release.



SEROTONIN

Studies have shown serotonin levels to be lower in people who are in love. They suggest these lower levels can lead to anxiety and obsession.

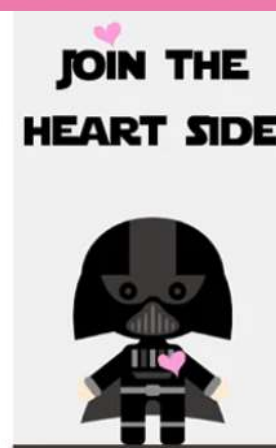


ADRENALINE

Adrenaline, along with noradrenaline, is produced in stressful or exciting situations. It increases heart rate, and contributes to the thrill of being in love.



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3 Assignments & Ch. 1/2/3 EOC due on Th. 2/13

Don't wait until Thursday night!
Set a reminder!

California State Polytechnic University, Pomona
Organic Chemistry I, CHM 3140, Dr. Laurie S. Starkey
Lewis Structure and 3-D Sketch Homework

Name: _____ Section: _____ (day/time)

For each of the following compounds, draw a 3-dimensional sketch, using dashes and wedges. **Position the molecule such that the maximum number of atoms are located in the plane of the page.** Be

sure to show all atoms
include the orientation

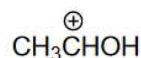
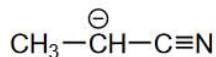


Organic Chemistry I, CHM 3140, Dr. Laurie S. Starkey, Cal Poly Pomona
Lewis Structures & Resonance

Name: _____

For each of the following compounds
structures. Use curved arrows to show
minor contributors, or whether the

**NOTE: if a structure is charged the
spreading a charge among multiple**



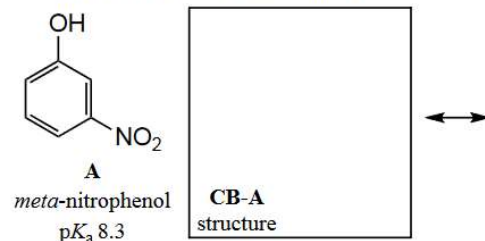
Organic Chemistry I, CHM 3140, Dr. Laurie S. Starkey, Cal Poly Pomona
Compare Acid Strength Homework

Name: _____ Section (day/time): _____

The nitro group (NO_2) is an electron-withdrawing group (EWG). The pK_a for meta-nitrophenol and the pK_a for para-nitrophenol (**B**) is 7.1. Use this data to explain the effects of the nitro acidity of phenol. **Resonance effects should be considered.** Use complete drawings to support your answer (i.e., draw out the nitro group and ALL relevant resonance forms of the conjugate base).

Consider the following guiding questions as you prepare your explanation:

- 1) What is the relationship between pK_a and acidity? Which is the stronger acid, A or B?
- 2) What do the conjugate bases of these phenols look like? (please refer to them as CB-A and CB-B)
- 3) Are the nitro groups involved in the resonance of CB-A and/or CB-B?
- 4) Which conjugate base is more stable? Why?



Gradescope

FridayFive 2/5  3.0

OLC Report Week 3  1.0

3D Sketch 3.0

Resonance Homework 3.0

Acid Strength Homework 3.0

Chapter 1 EOC 5.0

Chapter 2 EOC 5.0

Chapter 3 EOC 5.0