Chemistry 116 - Fall 2021
Dr. Audrey Dell Hammerich
13 - Week of November 14
Buffers

NOTE: Quiz will cover the acid/base properties of salt solutions and buffers.

LAB ASSIGNMENT: *Online* LM_9: Stabilization of pH with Buffers

LECTURE ASSIGNMENT: Online OWL assigned homework due on Monday, November 22 at noon (day of exam) except "W" problems are due Friday, November 19 at noon.

Monday, November 15

Reading Assignment: H Ch 9-5 (Z 8.1-8.2) [**common ion effect**, how is the equilibrium affected by the presence of significant amounts of a weak acid and its conjugate base or a weak base and its conjugate acid; what is a **buffer solution** and how does it control pH; **Henderson-Hasselbalch equation**]

Wednesday, November 17

Reading Assignment: H Ch 9-5 (Z 8.2-8.4) [be able to do buffer calculations and design a buffer using the **Henderson-Hasselbalch equation**; **buffer capacity** - what is the optimal ratio of base to acid, what is the working range; can you set up the equations to do a systematic approach (exact solution) for a buffered system?]

Friday, November 19

Reading Assignment: H Ch 11-1−11-2 (Z 8.5) [**acid-base titrations**: (1) strong acid/ strong base, (2) weak acid/strong base; **equivalence point**, **half-equivalence point**]