Principles of Chemistry II (CHGN122)
Relevance – Making Connections

BACKGROUND
The primary change to be implemented in the Chem 2 course is relevance through active learning.

Most students that take Chem 2 are fulfilling a major requirement. In other words, many of our students do not necessarily want to “be there” or feel the material is not important for their future academic courses or professional careers. While the material may not directly pertain to subsequent courses taken or their career possibilities, the problem-solving skills and topic exposure is critical to any science or engineering path.

WHAT IS CHANGING

Making CONNECTIONS!

1) Connecting the Chem 2 Course
   • Learning Outcomes
2) Connecting to Science and Engineering Courses and Careers
   • Expertise of CSM faculty within and across departments
   • Connecting Activities
     Design It!
     Find the Mistake
     Documented Problem Solving

Previous Format Example:
• Lecture: pH and related calculations
• Homework: Calculate the pH of the following aqueous solution.

Connections Format Example:
• Visiting Bio-Expert
• Pre-lecture assignment: Basics of pH
• Lecture: pH calculations
• In-Class Problem Based Activity: A new pharmaceutical drug must be tested for its efficacy at pH of 7.3. Using the following information, design an appropriate system in which the drug can be effectively tested.

INTENDED OUTCOMES
If students experience the relevance of general chemistry, the hope is that they will:

1) make connections to other science and engineering courses.
2) be motivated to learn rather than “get the grade.”
3) gain learning skills and strategies that can be applied throughout their academic, professional, and life endeavors (interests).

Mark Seger and Angie Sower, Department of Chemistry
Summer 2017 Cohort