Instructor: **Dr. Juan C. Noveron**
Class Location and time: CCSB 2.0502, Monday at 5:00 – 7:30 PM
Instructor’s Office: CCSB 2.0420
Office Hours: M, 3- 5 PM, and by appointment
Tel: 747 – 7572
E-mail: jcnoveron@utep.edu

1. **Curriculum:** Chemistry 5301 Modern General Chemistry will focus this semester in laboratory practices of general chemistry as it relates to teaching about experiential learning in pre-college chemistry courses. We will develop a sufficient theoretical and practical background that allows us to carry out experimental procedures from the chemical education and scholarship of teaching and learning literature.

2. **Recommended Textbooks:**
The following textbook is recommended for this class, as well as the articles from the literature that will be provided by the instructor.


3. **Grades:** Letter grades will be assigned on the basis of your total score earned for the semester. This score is the sum of these assessments:
   (a) *Attendance* (100 pts)
   (b) *Lab Reports* (100 pts)
   (c) *Oral Presentations.* (100 pts) Class presentations of 20 min. that discuss the experimental results in the context of literature.
   (c) *Creative Activity.* (100 pts) Students will be guided towards producing a creative set of experiments, inspired by the literature, and allow them to develop new knowledge.

3. **Laboratory Practices:**
   1. Experimental determination of an equilibrium constant
   2. Experimental determination of bond strength
   3. Experimental determination of light absorbidity constant
   4. Experimental determination of chemical purity
   5. Crystal growth and design
   6. Metal alloys and pennies
   7. Water splitting using visible light and nanocomposites