Important note about Chapter 10:

- We are skipping chapter 10. Much of the way the material in chapter 10 is presented is ***very outdated*** (at best), or even outright wrong. For example: total ionic equations are **totally incorrect** (see what we did there?). Instead, we will **only** discuss net ionic equations in this course.
- While this book is just the right level for CH101/102 and does most things great, chapter 10 is not good. Please **do not use the text of chapter 10** to guide your work.
- We will cover ***select topics*** (not all of them!!) related to chapter 10 as we work through chapters 11 and 12. Please ***use the pre-lecture videos*** for that material (videos 10.1 – 10.5) as well as the material we will present in class.
- We will make use of a *few* of the reference tables from Chapter 10, a few in-text examples, and some of the end-of-chapter homework problems.
- Note: our focus of chapter 10 will be on developing a microscopic understanding of the following types of reactions: dissolving solids, precipitation reactions, acid-base reactions, and reduction-oxidation reactions.
- Below are the details of the order we will cover chapters 10-12, including which homework problems go with each topic that we will cover.

Our path through Chapter 10 through 12 in McQuarrie:

1. Chapter 11: moles and chemical calculations (all sections of McQuarrie Chapter 11; pre-lecture videos 11.1-11.3)
   End-of-chapter homework (chapter 11): 1, 2, 4, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 42, 44, 46, 50, 52, 53, 59, 60, 62, 68, 70, 72, 77, 78, 80, 86, 88, 90, 94

2. Dissolving and naming ionic compounds (pre-lecture videos 10.1 and 10.2; know Tables 10.1, 10.2, 10.3, and 10.4)
   In-text Examples 10-1, 10-2, and 10-3
   End-of-chapter homework problems (chapter 10): 2, 4, 6, 8, 10, 12, 14, 22, 24, 26, 28, 91

3. Solution concentration (pre-lecture video 12.1; McQuarrie sections 12-1, 12-2, and 12-3)
   End-of-chapter homework problems (chapter 12): 4, 6, 8, 10, 12, 43, 45, 46, 52

4. Solubility of ionic compounds and precipitation reactions (pre-lecture video 10.3; know Table 10.9)
   In-text Examples 10-13 and 10-15
   End-of-chapter homework problems (chapter 10): 42, 44, 46, 48, 50, 52, 58 (note: only write NET IONIC equations!)

5. Hydrates (section 10-5)
   In-text Examples 10-8
   End-of-chapter homework problems (chapter 10): 30, 32

6. Limiting reagents with concentrations (McQuarrie sections 12-4, 12-5)
   End-of-chapter homework problems (chapter 12): 18, 24, 28, 68, 69, 70, 71

7. Molecular solutes don't break up when dissolving (review pre-lecture video 10.2 again)
   End-of-chapter homework problems (chapter 12): 14, 16, 39

8. Acids and bases (pre-lecture video 10.5)

9. Reduction and oxidation (pre-lecture video 10.4)
   In-text Examples 10-18, 10-19
   End-of-chapter homework problems (chapter 10): 62, 64

10. Titrations (McQuarrie sections 12-6, 12-7)
    End-of-chapter homework problems (chapter 12): 29, 32, 36, 38, 72

11. Additional chapter 12 end-of-chapter homework problems: 54, 55, 60, 62, 64, 66, 80, 82, 85