Syllabus for *Discovering Design with Chemistry* Videos

You get the most benefit from the videos if you read the material, try the "comprehension check" problems, and perform the experiments that are covered in the video *before* you watch the video. To ensure that, here is a list of each video and what should be done before you watch it.

Video 1: Read the introduction to the book along with pages 1-13, stopping at "Scientific Notation." Complete Experiment 1.1.

Video 2: Read from "Scientific Notation" on page 13 to the end of Chapter 1. Complete Experiments 1.2 and 1.3.

Video 3: Read pages 37-48, stopping at Example 2.1. Complete Experiments 2.1-2.3.

Video 4: Read from Example 2.1 on page 48 to the end of Chapter 2.

Video 5: Read pages 67-80. Complete Experiment 3.1 in the process.

Video 6: Read from page 81 to the end of Chapter 3. Complete Experiment 3.2.

Video 7: Read pages 97-108, stopping at "What Good Are Electron Configurations?" Complete Experiment 4.1.

Video 8: Read from "What Good Are Electron Configurations?" on page 108 to the end of Chapter 4. Complete Experiment 4.2 and 4.3.

Video 9: Read pages 127-140, stopping after you have completed Experiment 5.1.

Video 10: Read from the end of Experiment 5.1 on page 140 to the end of Chapter 5. Complete Experiment 5.2.

Video 11: Read pages 161-175, stopping at the beginning of Example 6.2. Complete Experiments 6.1 and 6.2.

Video 12: Read from the beginning of Example 6.2 on page 175 to the end of Chapter 6. Complete Experiments 6.3 and 6.4.

Video 13: Read pages 197-208, stopping at the end of Experiment 7.2. Complete Experiments 7.1 and 7.2.

Video 14: Read from the end of Experiment 7.2 on page 208 to the end of Chapter 7. Complete Experiment 7.3.

Video 15: Read pages 227-237, stopping at "Determining Empirical Formulas with Combustion Analysis." Complete Experiment 8.1.

Video 16: Read from "Determining Empirical Formulas with Combustion Analysis" on page 237 to the end of Chapter 8.

Video 17: Read pages 257-269, stopping at "Molarity." Complete Experiments 9.1-9.3.

Video 18: Read from "Molarity" on page 269 to the end of Chapter 9. Complete experiment 9.4.

Video 19: Read pages 289-301, stopping at "This Law is Ideal!" Complete Experiments 10.1 and 10.2.

Video 20: Read from "This Law is Ideal!" on page 301 to the end of Chapter 10. Complete Experiments 10.3 and 10.4.

Video 21: Read pages 325-337, stopping at "The pH Scale." Complete Experiment 11.1.

Video 22: Read from "The pH Scale" on page 337 to the end of Chapter 11. Complete Experiments 11.2 and 11.3.

Video 23: Read pages 357-368, stopping at "The Basics of Batteries." Complete Experiment 12.1.

Video 24: Read from "The Basics of Batteries" on page 368 to the end of Chapter 12. Complete Experiments 12.2 and 12.3.

Video 25: Read pages 387-400, stopping at "More Detailed Calorimetry Experiments." Complete Experiments 13.1 and 13.2.

Video 26: Read from the "More Detailed Calorimetry Experiments" on page 400 to the end of Chapter 13. Complete Experiments 13.3 and 13.4.

Video 27: Read pages 417-430, stopping at "Thermodynamics." Complete Experiment 14.1.

Video 28: Read from "Thermodynamics" on page 430 to the end of Chapter 14. Complete Experiment 14.2.

Video 29: Read pages 453-464, stopping at the end of Example 15.2. Complete Experiment 15.1.

Video 30: Read from the end of Example 15.2 on page 464 to the end of Chapter 15. Complete Experiment 15.2.

Video 31: Read pages 483-495, stopping at "This is Disturbing." Complete Experiment 16.1.

Video 32: Read from "This is Disturbing" on page 495 to the end of Chapter 16. Complete Experiments 16.2 and 16.3.