

# CH141, Fall 2017

## Welcome to General Chemistry, CH141, Fall 2017

### Course Assignments

#### Section A

- Lectures meet: M-W-F, 9 AM, Keyes 105
- Instructor: Kevin Rice
  - Keyes 313; x5763; [kevin.rice@colby.edu](mailto:kevin.rice@colby.edu)
  - Office hours: open or by appointment

#### Section B

- Lectures meet: M-W-F, 10 AM, Keyes 105
- Instructor: Karena McKinney
  - Keyes 211; x5767; [karena.mckinney@colby.edu](mailto:karena.mckinney@colby.edu)
  - Office hours: M,Th 11-12 or by appointment

### Download Syllabus

### CH141 Laboratory Page

### MasteringChemistry - (setup instructions)

### Chemistry Resources

### Prof. Rice's Calendar / Prof. McKinney's Calendar

### CH141 Message Board

### Examinations

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### Approximate Lecture Schedule

| Week of:     | Textbook Chapter | Lecture Topic                        |
|--------------|------------------|--------------------------------------|
| September 6  | 1                | Introduction: Matter and Measurement |
| September 11 | 2                | Atoms, Molecules, and Ions           |
| September 18 | 3                | Chemical Equations and Stoichiometry |
| September 25 | 4                | Aqueous Chemistry                    |
| October 2    | 10               | Gas Laws                             |
| October 9    | 5                | Thermochemistry                      |
| October 16   | 5                | Enthalpy and Calorimetry             |

|             |    |                                     |
|-------------|----|-------------------------------------|
| October 23  | 6  | Electronic Structure of Atoms       |
| October 30  | 7  | Periodic Properties of the Elements |
| November 6  | 8  | Basic Concepts of Chemical Bonding  |
| November 13 | 9  | Molecular/Electronic Geometry       |
| November 20 | 10 | Kinetic Molecular Theory            |
| November 27 | 11 | Intermolecular Forces               |
| December 4  | 13 | Properties of Solutions             |

*Knowledge of chemistry is central to understanding and addressing many complex issues that we face as a society, from energy and food production, to global epidemics and climate change. We invite you to join us in an exploration of the fundamental chemical principles and scientific methods underlying current research and future breakthroughs in chemistry. We aim not only to challenge you and to encourage your appreciation for the complex and fascinating ideas at the heart of chemistry, but also to provide you with the tools you will need to succeed in this course, in future science courses, and beyond. In order to do so, we strive to create an open and collaborative classroom environment, to stimulate your interest and curiosity, and to actively involve you in the learning process. We urge you, the student, to take full advantage of these opportunities and engage deeply with the material and with us in order to maximize your understanding and appreciation of chemistry.*

**Course objectives and learning goals for CH141 students:**

1. To gain a broad understanding of chemistry that leaves students prepared for organic chemistry and other chemistry courses, as well as courses in other scientific disciplines.
  - a. To learn to communicate using the nomenclature used by chemists.
  - b. To understand the basic structure of the atom and its subatomic particles.
  - c. To learn the basic principles of mass balance.
  - d. To understand the nature of the chemical bond.
2. To sharpen their quantitative skills in a scientific context.
3. To improve skills in solving problems that involve the integration and synthesis of new knowledge and to master the interface between narrative and mathematical problem solving.