

## Advanced Placement Chemistry

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### Overview of our year

You have taken a giant step into your future; the first of many along your career path. Universities in Oregon and across the country will award you 12-15 hours of credit for earning a 4 or 5 on the AP Chemistry exam in May. At the very least, your hard work will prepare you well for college chemistry. As this course covers the same content and skills as in a first-year college chemistry course for science majors, you will need to commit at least 6-8 hours outside of class to your work.

The AP Chemistry exam is given early in May. We have 72 class days to complete 16 labs and 18 of the 25 chapters in the textbook. The first 3 chapters of the text are a review of first year chemistry. We will spend 2-3 days with the first 4 chapters of the text.

### NEW: Dual Credit Option

You may choose to receive 10 quarter hours of chemistry major-level credit for Chemistry 221 and 222 from Oregon Tech (Oregon Institute of Technology). This credit generally covers most general science requirements for non-majors, nursing, allied health professions. It will be all the chemistry needed for most engineering and science majors, and is the first level of general chemistry required of chemistry majors. It is the chemistry course required for medical and dental school, veterinary medicine, physical therapy, and pharmacy. You are encouraged to check with colleges you are considering for exact transfer credit. The cost is \$25 per credit hour. Scholarships are available to those who are on the lunch program. Registration will take place during the second and third weeks of class.

**Textbook:** *Chemistry*, 11<sup>th</sup> Edition, Chang and Goldsby, ©2013

**Check out a copy before you leave for the summer! It will likely live at your house and not be carried to class. Also, create an account for the online textbook and resources as soon as you receive a code.**

### Assignment #1

Email me ASAP with the information listed below. Use an email address that you check frequently, but that is a professional-looking name.

- Why are taking this course? Please relate to a career goal.
- Hobbies and interests. clubs, sports, music, activities in which you are involved.
- Do you wear contact lenses, or have allergies or any other health condition that might endanger you in lab? I don't need details, but need enough information to help you protect yourself during labs.
- Describe your computer and Internet access at home. Cell phone, or other device?
- When are good times for you to attend review/help sessions? (Before/after school, lunch, evenings, Saturdays)
- What is your plan for making up the learning you will miss if you must miss class?

*Once I receive your email, I will reply with login information for your textbook's online resources. Please access the website and register ASAP. Put your login information in a safe place, and remember where you put it. I have no way to access it.*

**Assignment #2 Online Lab Safety Test:** So we don't have to waste class time later. **The link will be sent after you complete Assignment #1.**

**Assignment #3 Ions:** Review ions from last year. A list is included in this intro packet.

#### Assignment #4:

Please set up your notebook according to the attached handout and bring your supplies on the first day. File materials you found helpful from 1<sup>st</sup> year chemistry in the logical place in your AP Chemistry binder. You will bring the binder to each class.

**Materials** (let me know if obtaining any of these materials will be a challenge)

- 3-inch 3 ring binder, with 4 dividers (Class notes, Lab, Assignments, Tests, Reference)
- lab notebook (bound theme book, your choice of styles. You can use last year's if you like)
- Scientific calculator
- pens, pencils, eraser, hi-lighters, notebook paper
- Spiral notebook, for only your AP Chem notes, if you prefer this to notebook paper.
- ion flash cards (you'll be making a few more)

#### Assignment #5 Chemistry Review Material (Chapters 1-3)

- Read the review materials and review outline handout, attached. Answer the questions from memory. Then, use the review materials and your textbook to check your work. I will post answers the week before school starts and notify you when they are up. The chapter numbers on the handouts correspond with your textbook chapters, if you need more information. I won't be grading this work (this is college, remember?).
- Give yourself up to 6 hours to complete this work, depending on how much you remember.

#### Assignment #6 Reading and Problem-solving

- Skim through chapters 1-3 in the textbook and review 5 types of chemical reactions.
- Work the problems on the Unit 1 outline.
- Note any new concepts, and read those sections of your test more carefully. Come ready to ask questions.
- Skim through chapter 4 in the textbook and prepare a list of topics you know and one you don't know. Bring to class on Day 1 (with your binder).
- Place your work in the appropriate section of your binder.

**Assignment #7: Access electronic resources** Visit the class website: [www.chemistar.com](http://www.chemistar.com) to find links to the calendar (active in July), each unit of study, and various other resources. Visit the website and get very familiar with it. It's mobile-friendly. You will find, specifically:

- Please use my email address to contact me with questions.
- **Discussion Board** – you may post your questions and homework solutions and respond to other students' questions.
- **Textbook Access** – you will need an access code. I will forward this after you complete Assignment #1 and after the publisher sends me the updated codes for 2014-2015.
- **Sign up for Remind 101 to receive info and class reminders.** Send a text message to (614) 504-8864 with the message @apchem1 then SEND Messages are received by anyone who registers. I can see that you signed up, but will not see your phone number or your email address. Please also invite your parents to sign up. You will receive only 1-2 messages a week at most. Text message charges on your phone apply. If you prefer email reminders, send a blank email to [apchem1@mail.remind101.com](mailto:apchem1@mail.remind101.com)

**Assignment #8 Reading (optional, but fun. Choose 1 or both. Available at the library, or used, from Amazon, or in Kindle format.)**

- *Napoleon's Buttons: How 17 Molecules Changed History*, by Penny Le Couteur and Jay Burreson
- *The Disappearing Spoon: And Other True Tales of Madness, Love, and the History of the World from the Periodic Table of the Elements* by Sam Kean

**Have a delightful summer!**