

## CHM130: Fundamental Chemistry, Section 56775

**SYLLABUS**

INSTRUCTOR: Steve Borick, Ph.D.

**OFFICE LOCATION:** Natural Sciences Building, Room NS127

**OFFICE HOURS:** MTWThF 10:30 a – 11:30 a or anytime I'm around (if my door is open, I'm around – please knock)

**OFFICE PHONE:** (480) 423-6372

**EMAIL ADDRESS:** [steve.borick@sccmail.maricopa.edu](mailto:steve.borick@sccmail.maricopa.edu)

**INSTRUCTOR WEBPAGE:** [www.scottsdalecc.edu/chemistry/steve\\_borick.html](http://www.scottsdalecc.edu/chemistry/steve_borick.html)

**COURSE MEETING TIME:** Tuesday and Thursday 9:00 a – 10:15 a in Room LS117S

**MATH SCIENCE CENTER:** 8 a-7:30 p M-R; 8 a -2 p F; 10 a -2 p Sat CM441A (480) 423-6145 phone

**COURSE DESCRIPTION:** Elements of general chemistry for all students. Serves to prepare the student for CHM151 or CHM230. Prerequisites: Grade of "C" or better in CHM090, or MAT091, or MAT092, or MAT102, or satisfactory score on math placement exam.

**WEEKLY SCHEDULE (TENTATIVE):**

WEEK	DATE	TOPIC	CHAPTER
1	8/25	Introduction; Scientific Method; Measurements and Significant Figures	1, 2
2	9/1	Measurements and Significant Figures; Matter and Energy	2, 3
3	9/8	Atoms and Elements; Molecules and Compounds (Nomenclature!)	4, 5
4	9/15	<b>Exam I (Chapters 1-4) – 9/17;</b> Nomenclature	5
5	9/22	Chemical Composition: Moles, Percent Composition; Empirical Formula	6
6	9/29	Chemical Composition; Chemical Reactions	6,7
<b>10/2 LAST DAY TO WITHDRAW WITHOUT INSTRUCTOR SIGNATURE</b>			
7	10/6	Chemical Reactions; Chemical Reaction Stoichiometry	7,8
8	10/13	<b>Exam II (Chapters 5-8) – 10/15</b>	8
9	10/20	Electronic Structure	9
10	10/27	Chemical Bonding	10
11	11/3	Gases	11
12	11/10	<b>Exam III (Chapters 8-11) – 11/12;</b> Liquids, Solids, Intermolecular Forces	12
13	11/17	Solutions	13
14	11/24	Acids and Bases, Kinetics, Equilibrium, Oxidation and Reduction	14, 15, 16
<b>11/26 THANKSGIVING DAY – NO CLASSES</b>			
<b>11/30 LAST DAY FOR STUDENT INITIATED WITHDRAWAL</b>			
15	12/1	Acids and Bases, Kinetics, Equilibrium, Oxidation and Reduction	14, 15, 16
16	12/8	Nuclear Chemistry	17
	5/14	<b>Comprehensive Final Exam – Thursday, 12/17, 7:30 a – 9:20 a in LS117S</b>	

**TEXTBOOK AND REQUIRED TOOLS OR SUPPLIES:**

1. Textbook (Required): *Introductory Chemistry*, Nivaldo J. Tro. \*\*\* Either the 2<sup>nd</sup> or 3<sup>rd</sup> edition is fine \*\*\*

The SCC bookstore carries the 3<sup>rd</sup> edition. You can save money by purchasing the 2<sup>nd</sup> edition. The easiest and best place to find this edition is online. Please email me or stop by my office for some links to inexpensive copies of the 2<sup>nd</sup> edition.

2. Scientific Calculator

A scientific calculator is one which allows you to enter and display numbers in scientific notation. If you need to purchase one, you can find a good one for less than \$15. Ask me for advice if you need it.

**GRADING PLAN:**

Examination dates are not set in stone. Each exam is worth 100 points, and the final is worth 200 points. In addition, daily homework or quizzes or both will account for 100 points. Late homework is not accepted. I will grade on a straight scale, with no curve, though I may curve individual exams. Tentative letter designations are as follows:

Letter Grade	Range
A	88.0 – 100%
B	78.0 – 87.9%
C	60.0 – 77.9%
D	50.0 – 59.9%
F	Less than 50%

One more thing: you must pass a nomenclature test with at least 16 out of 20 to receive a **letter grade** for the course. If you do not pass the test **before** the end of the semester, you will not pass the class.

And another thing: occasionally I will offer extra credit assignments, which I suggest that you attempt and try to do correctly. At the end of the semester, you will be sorry if you're 5 points away from the grade you want and you haven't done the assigned extra credit.

**SPECIAL NEEDS:**

If you have special needs or disabilities, contact Disability Resources and Services in the Student Center at (480) 423-6517.

**ATTENDANCE:**

Regular attendance is required to pass this class. It is in your best interest to attend all classes. If you miss more than 3 class periods with no valid excuse, I have the option to withdraw you (with grade of W or Y, depending). If you miss an exam and I don't hear from you with a valid excuse within 3 days, you get 0% for that exam and I may withdraw you (with grade of W or Y, depending). I am not inclined to give make-ups on quizzes or exams, unless you have a valid excuse with written documentation or you have spoken with me beforehand. **There are 2 ways to avoid receiving an F or a Y in this class: you can score higher than 50% on all the classwork, or you can drop the class by completing the necessary paperwork and obtaining signatures, if needed, by the dates listed in the paragraph below. Whichever way you choose, the RESPONSIBILITY IS ALL YOURS.**

One more thing: if I see you sending text messages in class, I may ask you to leave.

**WITHDRAWAL:**

College withdrawal policy states:

- On or before **October 2**, withdrawal grade is "W" and no signature is required
- After October 2 but on or **before November 30**, withdrawal grade is "W" if you're passing or "Y" if you're failing (the "Y" option will take effect on October 30, after the 2<sup>nd</sup> exam has been graded and returned)
- **After November 30**, withdrawal with a "W" is discretionary and highly unlikely

**LABORATORY:**

Laboratory and lecture are separate courses. Withdrawal from both requires separate forms. You may not drop the lecture and retain the lab unless you have completed at least  $\frac{3}{4}$  of the lecture course. Completion of the lecture means regular attendance (no more than 3 unexcused absences) and completion of all classwork.

**SCC STATEMENT OF CLASSROOM ETIQUETTE AND EXPECTATIONS:**

To establish a positive learning environment for this class: as an instructor, I am expected to be professional, courteous, respectful, and empathetic to students, and to

1. Begin and end class on time
2. Be prepared for each class session
3. Provide academic feedback and grade assignments in a timely manner
4. Be available for individual consultation
5. Clarify assignments and inform students of any changes in course requirements or policies

As a student, you are expected to be reflective, courteous, respectful, and empathetic to classmates, instructor, and other College staff assisting you in your learning, and to

1. Be in class and be on time
2. Be prepared for class sessions
3. Participate in class activities
4. Follow instructions and complete assignments
5. Keep up with and turn in assignments by the due dates
6. Put forth your best effort
7. Ask questions when you don't understand
8. Maintain knowledge of your grade status
9. Contact instructor right away about concerns or situations that interfere with your success in the class
10. Comply with policies found in College catalog and student handbook

11.

**SCC TWITTER ADDRESS:**

Keep up with all the important SCC news at <http://twitter.com/sccnewsdesk>

**FINAL THOUGHTS:**

Chemistry is an amazing subject. Like many good things, it will take some effort on your part to understand and appreciate it. I urge you to work on book problems and class exercises. Some of the material may be quite challenging to you, but don't give up! You have the ability to master chemistry, and from there you can do just about anything! I'll do everything I can to help to make the course interesting, enjoyable, and truly educational.