

CHEM 1000: Introduction to Chemistry

Semester: Summer 2013

Course Number: CHEM 1000

Credit Hours: 5.0 **Lecture:** 4.0 **Lab:** 3.0

Class Time and Location: This is an online course. No campus attendance is required.

Instructor: Amy Graff

Office: Off campus

Office Hours: Online, scheduled as needed

Emergency Contact: [REDACTED]

Communicating with the Instructor

There are two ways that you may contact me:

- ▶ **Text messaging:** You are welcome to text message me with any questions or if you need immediate assistance.
- ▶ **Sheridan Email:** When I have an important message for the entire class, I will send it both as a class message and via Sheridan email. You will need to obtain a Gmail account for this course, so I will correspond with you through Gmail if you choose. However, I will not send email to external email accounts, such as Yahoo, or Hotmail. My email address is agraff@sheridan.edu. If you send me email, sign your message with your full name and put CHEM 1000 in the subject line.

To access your email from any computer, go to the Sheridan main page (www.sheridan.edu), and then click, **MyCollege**. Log in with the same user name and password you use to log in to Blackboard, and then click the **WebMail** tab.

Course Information

Difference between online and face-to-face courses: The following will help you when studying and completing an online course. Many of the subtleties that we have in a face-to-face course are lost online. This link will help to see the difference in [online learning and face-to-face learning](#): The next link shows a great breakdown of [current face-to-face practices and how they compare with what we will be doing online](#). If you have questions, remember to always ask.

Purpose: CHEM 1000 Introduction to Chemistry is a required course for several majors and can be used as a laboratory science elective. The course is also taken as a prerequisite for CHEM 1025, Chemistry I, and CHEM 2300, Introductory Organic Chemistry.

Catalog Description: This one-semester course is intended primarily for those who have not had high school chemistry or who feel they need a review. Chemical concepts introduced include atomic theory, chemical bonding, gas laws, stoichiometry, types of chemical reactions, chemical equilibrium, as well as a brief introduction to nuclear chemistry and organic chemistry.

Prerequisites: MATH 0930 Intermediate Algebra or MATH 1000 Problem Solving with a grade of "C" or better, or placement into a higher level mathematics course.

Co-requisites: None

Required Materials:

Tro, Introductory Chemistry. 4th Ed. ISBN: 9780321741493

electronic version available ISBN: 9780321730046

Sacks, O. Uncle Tungsten. New York, NY: Alfred A. Knopf, 2001. ISBN: 978-0-375-70404-8

ALEKS – <http://www.aleks.com>

Scientific calculator (non-programmable, non-graphing)



Course Objectives:

Upon completion of CHEM 1000 Introductory Chemistry, the student will:

1. Identify the terms, basic principles, and concepts used to describe the nature of chemistry as a discipline of science, including an understanding of the processes of science inquiry, especially the goal of developing models to accurately predict natural phenomena.
2. Demonstrate chemical laboratory skills including the use of appropriate technologies to obtain, record, and analyze chemical information.
3. Integrate some chemical principles and concepts, as well as incorporate them into explanations and solutions to chemically related problems occurring in science and daily life. This will involve exploring the characteristics of matter and energy; analyzing the relationships between elements, atoms, and compounds; exploring concepts of atomic structure, bonding, inorganic compounds, periodic trends, the mole, chemical reactions, stoichiometry, equilibrium, gas laws; and considering topics in nuclear and organic chemistry.
4. Perform the necessary mathematical calculations needed to solve basic chemistry problems. This will include a working understand and use of the metric (SI) system, dimensional analysis (unit conversions), precision, accuracy, significant figures, scientific notation, and multivariable relationships.
5. Communicate basic chemical concepts to peers in written and oral forms.

Course Outline

Please see Syllabus link for complete course outline.

Methods:

The following are the possible methods used in this course:

- Exams
- comprehensive final exam
- lab report for each laboratory investigation
- discussion board
- group work
- wikis
- blogs
- ALEKS homework

Course Requirements:

- Unit exams
- Comprehensive final exam
- Projects
- Weekly laboratory experiments and reports
- Activities
- Blogs
- Discussion Boards

Testing Procedures

Students will be required to have a proctored final exam. It will be the student's responsibility to make proctor arrangements as posted on the course Announcements.

Course Content**Discussion Board**

- You are responsible for making an initial posting each week.
- Your initial posting needs to include information you have learned from your readings as well as information from your own experiences.
- Remember that these are your own responses so you should be responding in first person – that means you are giving an opinion.
- Once you have made your initial posting, you will need to respond to a minimum of **two** others on two different days.
- You are not required to read all of the postings in the discussion board. Choose a few (3-5) each week to focus on.

When responding to other students, remember that you should be using examples from the book, articles you have found or your own experiences.

- When responding to other students, remember that their opinion is as equally important as yours.
- Please refrain from derogatory comments and/or try not to destroy the platform the student you are responding to has created.
- Discussion board postings will be worth 10 points each.

When making a posting, please do not just give an "I agree" posting.

- This includes "I agree" with another sentence behind it.
- There is no substance to the post and other students have no idea what you are really saying.

When responding to other students, please remember that you need to be promoting critical thinking. This can occur in two ways:

- You may ask a question about the posting you are replying to
- You may expand on the subject in which the poster originally spoke of

NOTE: Spelling, grammar, and punctuation are all very important. Your postings need to use proper English as well as proper spelling, grammar and punctuation. If you have trouble with any of these, you may want to type your post in Word first and then copy and paste it into the discussion board.

There is one discussion board that is for questions (Q & A Forum) and there is also a discussion board that is just for you to chat and get to know one another in (Sci Fi Lounge).

Etiquette

Etiquette for the discussion boards is very important. Please click on the link to understand what is meant by [online etiquette](#).

[The Core Rules of Netiquette](#) also offers a more in depth outlook at the rules for communicating online.

Blog Criteria

Students will keep a blog of their experience in this course. There are many free blog sites available. Many students like <http://www.blogger.com>. Others enjoy <http://www.pbworks.com> Which ever site you choose is your choice. If you already have a blog and wish to add to it for the course then that will work. Students **may not** use online communities that they are a member of – i.e. MySpace, Facebook.

Blogs will be used to help you organize thoughts about the course as well as major points about what you have learned in the course, how you can apply the knowledge to yourself and your field. Other assignments may also be included within your blog throughout the term. Blog will be due each Sunday at 11:59 pm.

How to submit:

1. Click on the indicate assignment in the Learning Module link.
2. Include the web address in the comments box. Remember to give your blog a title the easily identifies it for this course if you are using the blog for personal use as well. If you think I might have a hard time finding it, and then please include the title as well.

Project may include:

- Elemental Brochure
- Reading Assignment - Uncle Tungsten
- Reading Assignment – “Carbon”
- Carbon Footprint
- What’s That Stuff Paper

Grading

Assignment	Percentage
Discussion Board, quizzes, projects	20%
Unit Exams	30%
Blog	5%
Homework	10%
Laboratory Reports & Google Requirements	20%
Laboratory Oral Presentations	5%
Final Exam (Cumulative)	10%

A = 100-90

B = 89.99 - 80

C = 79.99 - 70

D = 69.99 - 60

F < 60

Technology Requirements

Expectations of participants in this course include a general knowledge of computers, file management, word processing, and the Internet.

All students who are new to using Blackboard or are taking their first online class from NWCCD are expected to complete an [Orientation to Online Learning](#) prior to beginning this class. Students need to meet the [minimum computer literacy expectations](#) as well as the [minimum technology requirements](#).

Go to the Distance Learning website for more information (www.sheridan.edu/distance/).

Access to ALEKS and the World Wide Web are required.

Please refer to NWCCDs [minimum technical requirements for online courses](#) Web page for additional information.

Course content will be delivered in multiple formats, including but not limited to: document, video, and audio media formats.

Hardware Requirements

- A live Internet connection (preferably a cable modem or DSL)
- A monitor capable of displaying 800x600, but Blackboard is best viewed at 1024x768

Software Requirements

- Windows or Mac
- Office 2010/07
- Quick Time
- Adobe Acrobat Viewer

Downloads

- [QuickTime](#) – free
- [Adobe Acrobat Reader](#) – free
- [Java](#) – free
- [Adobe Flash Player](#) – free
- [Adobe Shockwave Player](#) – free
- [Windows Media Player](#) – free

All students should perform the required downloads that are necessary for the computer hardware and software owned. Please read the download information carefully when choosing what version to download.

General Information

Deadlines

Assignment deadlines are **11:59 PM Mountain Time on the day specified**. Assignments submitted after the week in which they are assigned will not be accepted. ***NO EXCEPTIONS!*** Please do not submit assignments as email attachments unless instructed to do so.

You may work ahead on assignments when available except for group projects and discussions. Those must be complete during the week in which they are assigned. No credit will be given for either early or late postings.

Instructor Availability

I will do my best to respond to you within 24 hours (weekends may occasionally be an exception).

Distance Learning

Students who have questions with Blackboard should first ask in our Q & A Forum or email the instructor. Browse the Online Student Resources Web page for Blackboard FAQs, How-to-videos, and other resources.

Technical difficulty questions with Blackboard, Outlook Web Access, or MyCollege should be directed to ITS technical support staff at:

- Sheridan: 307-674-6446, ext. 2600
- Gillette: 307-686-0254, ext. 2600
- Others: 800-913-9139, ext. 2600

Help Desk hours

- Fall & Spring: 8am-9pm Monday-Thursday and 8:00am-5:00pm on Friday
- Summer: 7:30am-5:30pm Monday-Thursday

Student Information Network – <http://www.sheridan.edu/site/student-information-network>.

Student and Faculty are geared up to help you with questions on Blackboard, Email, WebAdvisor, Printing, downloading files, MAP Works, wireless and any other aspect of your college experience.

Student Info Net Hours

- Mon & Wed – 8:00am-5:00pm
- Tues & Thurs – 8:00am-7:00pm
- Fri – 9:00am-5:00pm

For issues occurring after help desk hours, students and instructors can submit a [Helpdesk Request](#) ticket. After hours tickets will likely not be addressed until normal business hours unless it involves major system functionality.

If you are having difficulty with a hardware item on your PC, please contact the appropriate technical support telephone number for the vendor or manufacturer.

Software installed on your PC at the factory may be covered by their technical support staff. Third-party software (either off-the-shelf or downloaded) will require that you contact the software developer directly.

Attendance Policy

Students must complete weekly assignments in Blackboard and meet participation requirements described for the discussions, exams, laboratory reports, blogs and projects.

Standard of Conduct

Part of preparing for the teaching environment is learning to conduct yourself in a professional, business-like manner. Professional conduct includes doing assigned work, meeting deadlines,

participating in online discussions, and completing all the required elements of the course. Part of the value of a college education is the freedom to explore different viewpoints and perspectives, and this freedom carries with it an obligation to respect everyone in our online classroom and the variety of ideas and opinions that might be expressed. Specifically, this means that we will not discriminate against, intimidate, or ridicule others. We will maintain an environment of mutual respect and courtesy. If at any point during the semester, you feel that our online classroom environment is inappropriate or uncomfortable, please contact the instructor with your concerns.

Academic Honesty Statement

Students are expected to maintain the highest standards of academic honesty and integrity. Academic honesty means performing all academic work without lying, cheating, deceit, plagiarism, misrepresentation, or unfairly gaining advantage over any other student. Violations of academic honesty are in violation of District standards for student conduct and shall result in disciplinary action. **The work you submit for this online course must be your own.** Dishonesty, cheating, plagiarism, or knowingly furnishing false information to the college are regarded as particularly serious offenses. Cases of dishonesty will result in a grade of "zero" for the assignment, and may result in an "F" for the course. It is your responsibility to read and fully understand Sheridan College's *Student Conduct and Discipline* found in the [Series 5075 \(Student Conduct and Discipline\)](#) of the NWCCD Policies and Procedures manual. Please ask me if you have any questions about collaborative work, plagiarism, or other issues related to academic honesty.

Dropping a Class

It is your responsibility to understand the college's procedure for dropping a class. If you stop attending this class but do not follow proper procedure for dropping the class, you will receive a failing grade. The last day to drop a class is *July 23*.

Americans with Disabilities Act (ADA)

NWCCD provides confidential assistance to students with a documented disability in its effort to comply with the regulations of Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 and the ADA Amendments Act of 2008. NWCCD Strives to ensure effective access and services for students with disabilities in order to maximize independence and encourage their integration into diverse learning environments that are usable, equitable and sustainable. Students with disabilities who seek support services and accommodations should contact the Student Success Center (located across from the library in the Griffith Memorial Building, x2701) to set up the initial interview.

Students with disabilities who believe they may need accommodations in this class must contact the disabilities services coordinator on their campus as soon as possible to ensure such accommodations may be implemented.

Intellectual Property/Copyright

There is a great website at the University of Texas that gives a [crash course in copyright](#). Please take a moment to learn about what copyright is and what you may and may not use.

Plagiarism

Plagiarism is defined above, but The University of North Carolina – Chapel Hill has created a [great resource for information about plagiarism](#). If you are unsure or just need a refresher, then please take a few moments to read the information.

Academic Support Resources

[Sheridan College](#) and [Gillette College](#) each have a Student Success Center and Writing Center that provides tutoring and writing center assistance to enrolled students. We have partnered with [Smarthinking](#) to provide an additional layer of tutoring and writing center assistance for students. NWCCD has also partnered with [Turnitin.com](#) to assist students and faculty with plagiarism prevention.

Each college has an [on-campus library](#) (Sheridan and Gillette) as well as online access to the library catalog and databases. Most online material may be accessed from any computer with internet access.

Student Support Resources

NWCCD has a series of Student Checklist Web pages where you can find [Admissions](#), [Financial Aid](#), [Advising and Assessment](#), [Registration](#), [Business Office](#), [Bookstore](#), and [Housing](#) information.

[Click here](#) to view Blackboard's accessibility standards statement.

Copyright Statement

This online course may contain copyrighted materials that are used in compliance with U.S. Copyright Law. Under that law, materials may not be saved to your computer, revised, copied, or distributed without permission. They are to be used in support of instructional activity as part of this course only and shall be limited to the duration of the course, unless otherwise specified by the instructor or owner of the material. You may only download or print materials at the direction of your instructor who knows which materials are copyrighted and which are not.

Please refer to [Series 3013 \(NWCCD Copyright Policy\)](#) for institutional copyright information.

Syllabus Addendum

I reserve the right to adjust this syllabus at any time during the semester. I will let you know if changes are made.