



Course Syllabus

PreChemistry

Class Information

The live class is held once per week with a total of 15 class sessions. Each session is 90 minutes long. The day and time of the live class depends on the section you are enrolled in.

Section 1: Monday at 1:00 pm ET

Class Description

Prerequisites: None.

Class Description: Everything you hear, see, smell, taste, and touch involves chemistry and chemicals. And hearing, seeing, tasting, and touching all involve intricate series of chemical reactions and interactions in your body. With such an enormous range of topics, it is essential to know about chemistry at some level to understand the world around us. This course will focus on introducing students to the basic structure of elements and how elements combine to form compounds. Upon completion of the course students will be familiar with the Period Table, the structure of an atom and the mechanism involved in ionization and compound formulation. Students will complete a minimum of six experiments as chosen by the teacher. An emphasis will be placed on students understanding scientific inquiry, the scientific method, and the resulting science lab reports.

Teacher Information

Teacher: Chris Leingang

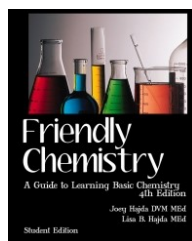
Email: cleingang@myfunscience.com

Phone: (360) 358-3268 (When calling, please keep in mind that I am in the Pacific Time zone.)

Office Hour: By appointment (Can be scheduled here: <https://doodle.com/mrleingang>)

Required Course Materials

Textbooks:



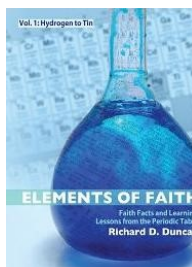
Friendly Chemistry, 4th edition

By Joey Hajda and Lisa Hajda

©1996, 1998, 2008, 2010 Hideaway Ventures

ISBN 978-1-4565-1136-4

(Other editions would work fine for this course).



Elements of Faith, Vol 1: Hydrogen to Tin

by Richard D. Duncan

©2008 Master Books Inc

ISBN 978-0-89051-547-1

Lab kit:

Lab materials and supplies are provided by the family. A list of needed supplies is made available to families upon enrollment through the class page. As this is an introductory, 1 semester course, an emphasis has been placed on using supplies that are easy to find and cheap to purchase.

Class Schedule and Topical Agenda

Class 1	Introduction to Pre-Chem, Ch 1; Unknown Powders Lab
Class 2	Inside an Element, Ch 2; Electrolysis Lab
Class 3	Electron Orbits, Ch 3; Quantum Mechanics, Ch 4; Slime Polymers Lab
Class 4	Orbital Notation, Ch 5; Test 1 (covers chapters 1-4)
Class 5	Electronic Configuration Notation, Ch 6; Electron Dot Notation, Ch 7; Hollow Penny Lab
Class 6	Trends of the Periodic Table: Reactivity, Ch 8; Test 2 (covers chapter 1-7)
Class 7	Trends of the Periodic Table: Ionization Energy, Ch 9; Graphing Lab 1
Class 8	Trends of the Periodic Table: Atom Size, Ch 10; Graphing Lab 2
Class 9	Ion Formation, Ch 11; Generation of Chlorine Gas Lab
Class 10	Determining Charges, Ch 12; Fluoride Protection Lab
Class 11	Forming Compounds, Ch 13 & 14; Test 3 (covers chapters 1-12)
Class 12	Polyatomic Ions, Ch 15; Electroplating Lab
Class 13	Balancing Equations, Ch 21; Generation of CO ₂ Lab
Class 14	Gas Laws, Ch 30 & 31; Animated Gas Lab
Class 15	Review for Final Test (comprehensive and required)

Grade Scale and Grading Policy

Assignment Submission:

All assignments are specified in the class pages and on the class calendar, and are to be submitted through the class page **before midnight ET** on the date they are due. Student work is not to be submitted via email. Some assignments will be submitted using a "Drop Box" while others will be submitted using a "Practice Link."

Assignments are returned to students, with feedback and grades within 7 days after the due date (unless work is submitted late). Specific assignment instructions will be discussed at the time of the assignment and will appear on the weekly class page.

Make-up/Late Assignment Policy:

Please take deadlines seriously. Assignments are late if they are submitted after the due date for any reason. Assignments extensions are rare and are at the sole discretion of the instructor. Instead of offering extensions, the instructor will drop 1 grade from each category (assignments, labs, tests) before a final grade is issued in the course. Please be aware that the final test is not be eligible to be dropped.

Late work is never advisable, but because there may be times when it is unavoidable, I will allow you to submit late work with the following deductions:

1-2 days late = -10%

3-4 days late = -20%

5-6 days late = -30%

7-8 days late = -40%

9-10 days late = -50%

Work submitted more than 10 days late will not be accepted except under extreme circumstances and only with instructor approval.

Grading Scale (in percent):

A 100-90

B 89-80

C 79-70

D 69-60

F 59 and Below

Attendance Policy

Presence: Students are strongly encouraged to attend live classes but are not required to attend live classes. However, students who do miss a class, for whatever reason, will be responsible for viewing the class recording and completing assignments. Recordings of each class are usually available within 2 hours of the class meeting and may then be accessed 24/7 from the course class pages. Students may also review recorded classes at any time.

Participation: Active participation is essential for maintaining the best learning environment. It is also a fun part of learning. Students are not required to attend classes live, but students who do are expected to engage with the teacher and with each other. Outside of live sessions, students are expected to log on and visit the class pages to see and contribute to new content, activities, or assignments. There, students may review class material, keep up-to-date on announcements and assignments, and verify that there have not been any changes to the class calendar and/or agenda.

The Internet may be used in the class to supplement course content and may be accessed by the teacher during live class lectures or by the student outside of live class meetings for general research or for additional information from such government, organizational, individual, or commercial sites that may be beneficial to learning, so parental supervision and participation in the learning process is strongly encouraged.

Class Conduct

Students should conduct themselves in a worthy and appropriate manner, which includes behaving respectfully and politely to each other and the teacher. In both live and asynchronous class activities, students should strive to stay on task and on topic, to use appropriate language, and to be gracious in speech and conduct toward others. Generally, the same guidelines for civil in-person behavior are appropriate for this online class.

Students should strive for proper grammar and spelling in discussion boards and assignments, but the speedy and spontaneous nature of live class chat demands that these conventions may be loosened to facilitate more relaxed, informal communication.

Students who are unable to adhere to this type of conduct may be separated from the class, removed from the session if it continues to occur during a live class session, and will eventually result in parent notification if the behavior is disrupting the class.

Tips for Student Success

Students who are **fully present, work diligently, actively participate (either via live class attendance or watching recordings promptly and attentively), and consistently communicate** will be the most successful.

Communication: Students who are unable to find something, are unable to remember instructions, are having trouble understanding, or are otherwise having difficulty engaging in the class should take every opportunity to communicate with the teacher. It is important to ask questions and keep an open line of communication about all class related activities for the best learning experience.

Academic Honor and Integrity

Colleges and universities, and indeed every professional and educational environment, take issues of academic honesty very seriously. Research shows that plagiarism, what most people automatically think of when hearing the phrase “academic honesty,” is most often committed when students are pressed for time, care very little about the assignment, or are unaware of what plagiarism is. These may be addressed by planning, attitude adjustment, and careful instruction, and these areas of concern may be visited as needed in this class. However, academic honesty is also much more. It is a matter of integrity. **Being a student or professional of integrity includes submitting your own work, working in a timely manner, and demonstrating effort and diligence.**

Philippians 4:8

Finally, brethren, whatever is true, whatever is honorable, whatever is right, whatever is pure, whatever is lovely, whatever is of good repute, if there is any excellence and if anything worthy of praise, dwell on these things.

Colossians 3:23-24

Whatever you do, work at it with all your heart, as working for the Lord, not for human masters, since you know that you will receive an inheritance from the Lord as a reward. It is the Lord Christ you are serving.