

CHEM& 110 OBS
Chemical Concepts w/
Lab



Syllabus
Spring 2021

Instructor: Dr. Sonya Doucette
2264

Phone: 425-564-

Email address: sonya.doucette@bellevuecollege.edu
campus

Office: not on

Office hours: Please visit my office hours: M 10:30 am - 12:00 pm, T 11 am - 1 pm, F 1:30 - 3 pm; visit my Zoom office

here: <https://bellevuecollege.zoom.us/j/82557704421>

Course Description: CHEM&110 is a six credit online lab course intended for students looking for a fairly non-mathematical survey of chemistry with lab activities that can be performed at home. There will be an occasional use of basic arithmetic and ratios. Emphasis will be placed on the atomic and molecular level interpretation of matter and energy, and practical applications. This course will not require on-campus visits. This section of CHEM&110 incorporates a Chemistry of Cooking theme to learn science through cooking.

Work Involved: There is reading, doing, thinking, and responding in this course! You should plan to spend an average of 1-2 hours a day on this class to keep up with readings, assignments, and your project. Taking an online course often requires more work than a traditional course. You should be taking this course because you need the flexibility it offers, not because you expect it to be easy or less demanding than an on-campus course!

Online Access is Required!

Access to reliable internet service is expected. All students have access to internet in N250 open lab on campus, and in some public places (coffee shops, public library, etc.) This course will be very challenging for students who don't have consistent and reliable access to the internet. Please email/call me if you have any issues with internet access during the course of the quarter.

Required Materials:

- Cooking for Geeks: Real Science, Great Cooks, and Good Food (2nd edition) by Jeff Potter (available at the bookstore or can be purchased online - Amazon, Barnes and Noble, etc.) <http://www.cookingforgeeks.com/>

- A digital camera or camera phone or other device to take photos and insert them into documents.

- Household/food items, to be purchased at a grocery store, for lab assignments. [Contact me ASAP if you have difficulty obtaining any of these materials for financial reasons or otherwise. Contact me if you need suggestions for substitutes of lab materials to accommodate food allergies or other restrictions.]
- There will be readings provided in Canvas as resources for learning some of the material

Optional Materials:

- For those who want to learn more, On Food and Cooking: The Science and Lore of the Kitchen by Harold McGee is a great resource.

Assignments and Grading

Intro assignments: Class Bio (10 pts), Notifications (5pts)
 15 pts Information Literacy Assignments (Using internet, library) (10 pts x 2)
 20 pts
 8 Class Activities (10 pts each x 8)
 80pts 8 Quizzes (10 pts each x 8)
 80 pts 4 Discussion Prompts (10 pts each x 4)
 40 pts Project: Writing Assignment, Peer Evaluation (80 pts your paper; 30 pts reviews) 110 pts Canvas online course evaluation (@ 5 pts)
 5 pts -----

 Total = 350 pts

Grade Scale (%)

A 94-100% B+ 85-89% B- 78-80% C 70-74% D 60-65%

A- 90-93% B 81-84% C+ 75-77% C- 66-69% F 59% and below

Course Layout: The course is divided into weekly modules (you will access the modules for a list of assignments). Each module will include weekly readings, links to assignments (lab activities, quizzes, discussion postings), and resources (videos, text, etc).

Topics covered: The course will cover a wide range of chemistry concepts through a food chemistry theme. These include: scientific method, atomic

structure, chemical bonding, lab safety, measurement, foams, emulsions, gels, oils and fats (intermolecular forces), carbohydrates, proteins (electrolytes, osmosis), and chemical reactions (acid base chemistry, browning reactions).

TYPES OF ASSIGNMENTS:

(a) Intro activities: A biography assignment and a notifications assignment will be provided to ensure I can communicate with you using your preferred method of communication.

(b) Information Literacy: A couple of assignments will walk you through using internet resources, how to cite sources properly, avoid plagiarism, and use the library resources for finding information. These skills will be needed throughout the quarter but especially for your project (see below).

(c) Class Activities: There are weekly assignments mostly involving “labs” which students can do at home. Lab activities will be done with materials in your home and a list of the grocery items to procure for each lab is usually included in each lab.

(d) Quizzes: There will be short quizzes on your readings about once a week. Readings will be posted in the Modules. These quizzes will be in Canvas and will typically be due by Mondays 11:59pm (but not always).

(e) Discussion prompts: You will be required to post your own discussion about the readings in response to the week's discussion prompt and then reply to classmates. Your reply will be due by the following week.

General Requirements for discussion posts: Not all of the prompts are the same. Read carefully and follow the specific directions for each post or reply! Please be respectful to others in your responses. Use the prompt for each week to guide the topic of your discussion post. Type at least 250 words and remember to cite your sources. Include the citation from the text (including page numbers) and at least ONE other internet source.

(f) Project and Peer Evaluation: About half way through the course, we will have finished covering most of the concepts in this class and you will have a better grasp of the science behind preparing a dish. You will put this into practice by choosing a dish to prepare. It can be a favorite food of yours, something you've heard of but never made, or something that catches your eye in your Cooking for Geeks text or in an online recipe. You don't have to use a recipe – you can be ambitious and create a recipe if you like. Your project will be

individual, but you will be put into support groups. These team mates will help review your draft and give you ideas or comment on your progress.

Directions for your project:

- 1) Prepare it as stated by the recipe, if you are following a recipe. (Or create the recipe)
- 2) Make it a second time but with a change to see its effect on the dish. The change can be to add a creative flair, or make a desirable change to appearance, texture, or flavor, or make it Vegan or without common allergens (gluten, dairy, soy, nuts). You will describe what you are aiming for (including a scientific basis for this prediction) and then report how it turned out.
- 3) Examine the cooking procedure you followed. What are some of the scientific aspects of making your dish? What are the scientific concepts needed to explain how it works? You will need to back up this portion with at least three references, one of which must be a book (our textbook is fine).
- 4) You will do a first draft and then peer reviews for two other classmates. Details on how to provide peer feedback will be specified in my announcements.
- 5) Final drafts will be presented to your classmates on a discussion board as a write up with photos, or a video, and you will then view/respond to two other students' projects.

Grading criteria for the project (total 110 pts)

Week 5: Topic selection	10 pts
Week 6: Outline/Research	10 pts
Week 7: First draft	20 pts
Week 8: Two Peer reviews (10 pts x 2)	20 pts
Week 9: Final draft	40 pts

(g) Course evaluation and exit survey: The evaluation is the official college course evaluation form and any questions I may ask for feedback about the course.

Course Policies Deadlines: All activities/discussions/project-related assignments are due at 11:59PM on the date listed on the calendar. All deadlines will be on Mondays (easy to remember)!

Late Policy: I know everyone has busy lives, and sometimes hardships and challenges occur. As a result, you will start the quarter with 5 free late passes that can be used within 1 week of deadlines. You must indicate that you are using the late pass as a comment submitted on the assignment page before or on the assignment due date and time (you cannot tell me the day after an assignment is due, or a few days later, that you would like to use a late pass). No penalty and no questions asked! To keep track of your use of late passes, I will create an extra credit grade category in which you will start the quarter with 5 points. When you turn in a late assignment, I will deduct 1 point from this extra credit category and your assignment will be graded as if it was on time. Assignments turned in up to 1 week late with a late pass will earn full credit. Assignments turned in more than 1 week late with a late pass will receive zero points.

Every quarter a few students stop logging in and can't keep up with assignments. As soon as you notice this happening, send me an email ASAP and let me know what's going on! Don't delay!!! Don't wait until it's too late.

COMMUNICATION: Canvas Messages / Email / Phone

Due to the online course format, student interactions are encouraged through discussion boards. Please follow general "netiquette" guidelines – be polite, respectful and professional in your interactions with me and others. Feel free to contact me at any time to set up time for a phone call or meeting, but the best way to contact me at first is email or Canvas message (but if calling is easier for you, please don't hesitate – call and leave a message on my office phone because I check those too at least once per weekday).

Email expectations:

What you can expect from me: I will check email at least once a day Monday through Friday, excluding holidays. If you do not receive a reply within 24 hours, please check with me again! It is likely that I'm just busy and overlooked your message by accident.

What I expect of you: Set your notifications so that you receive my Canvas Announcements (enter your personal email account or phone number to receive texts if you prefer). Check your email once a day Monday through Friday. If you

want to message me, please use Canvas and compose your emails using your name and proper email etiquette (use grammar and full sentences). Please be professional!

Office hours: I will be on campus during my office hours (noted above). If you would like to meet on campus and that doesn't work for you, let me know and we can try to find a meeting time that works for both of us. I can also do Skype sessions! (Skype ID: srd8112)

Student Resources

- Docs and Dents Club: For those interested in pursuing careers in medical or dental fields, or for those not sure who want to learn more, contact Carole Berg (425-564-2321, E-mail: CBerg@bcc.ctc.edu)
- Chemistry Club: For those generally interested in doing cool things with chemistry or pursuing careers in chemistry-related fields, contact Carole Berg (425-564-2321, E-mail: CBerg@bcc.ctc.edu)
- Science Study Center: The Center is located in S114. It is staffed by science and math faculty, and is a great place to study and get help. For hours and a schedule showing when you can get help in specific subjects, visit: <http://scidiv.bellevuecollege.edu/SSC/>
- Academic Success Center: The Academic Success Center (D204) offers drop-in tutoring times for chemistry. Also, students with a C or lower are eligible for individual tutoring.
- Open Computer Labs: Module completion for this course relies heavily on computer access. If you do not have a personal computer, you can use campus computer labs for free: <http://www.bellevuecollege.edu/servicedesk/students/n250-open-lab/>
- Advising: To learn about transfer credits to 4-year institutions or other academic advising, schedule an appointment with a Science Division advisor: <http://scidiv.bellevuecollege.edu/science-advising/>
- Disability Resources Center: The Disability Resource Center serves students with a wide array of learning challenges and disabilities. If you are a student who has a disability or learning challenge for which you have documentation or have seen someone for treatment and if you feel you may need accommodations in order to be successful in college, please contact us as soon as possible. If you are a person who requires assistance in case of an emergency situation, such as a fire, earthquake, etc, please meet with your individual instructors to develop a safety plan within the first week of the quarter. If you are a student with a documented autism spectrum disorder, there is an additional access program available to you. Contact <http://www.bellevuecollege.edu/autismspectrumnavigators/> for more

information. Email and phone number is on the web page. ASN is located in the Library Media Center in D125. The DRC office is located in B132 or you can call our reception desk at 425.564.2498. Deaf students can reach us by Skype: the address is DRCatBC (NOTE: There is no @ sign...it is actually DRCatBC). Please visit our website at <http://www.bellevuecollege.edu/drc/> for application information into our program and other helpful links.

▪ Canvas: We will use the Canvas online Learning Management System (LMS) for this course. For help Canvas: <http://depts.bellevuecollege.edu/helpdesk/students/canvas/>.

The Fine Print: Course Policies and Expectations

- Time Required to Complete Course Assignments: You should plan to set aside 2 hours of out-of-class study time for every hour of class. (You may need more or less than this, depending on your prior experience and comfort level with chemistry.) Figure out (right now!) how you can devote the necessary time to this class.
- Email and Canvas Announcements: When school is in session, it is good practice to check your BC email account and our course Canvas sites at least once every 24 hours from Monday through Friday. This is to ensure that you receive important Announcements and other course information. I check email Monday through Friday and will always get back to you within 24 hours (excluding weekends).
- Bellevue College Affirmation of Inclusion: Bellevue College is committed to an environment in which everyone feels welcome to participate in college life, free from harassment and discrimination. We value our different backgrounds at Bellevue College, and students, faculty, staff members, and administrators are to treat one another with dignity and respect. For more information: <https://www.bellevuecollege.edu/inclusion/>
- Religious Holidays: Students who expect to miss classes, examinations, or any other assignments as a consequence of their religious observance should be provided with a reasonable alternative opportunity to complete such academic responsibilities. It is the obligation of students to provide faculty with reasonable notice of the dates of religious holidays on which they will be absent, preferably at the beginning of the term. Students who are absent on days of examinations or class assignments should be offered an opportunity to make up the work without penalty (if they have previously arranged to be absent), unless it can be demonstrated that a makeup opportunity would constitute an unreasonable burden on a member of the faculty. Should disagreement arise over what constitutes an unreasonable burden or any element of this policy, parties involved should consult the department chair, or Dean.
- College Anti-Discrimination Statement (Title IX): Bellevue College does not discriminate on the basis of race or ethnicity; color; creed; national origin; sex; marital status; sexual orientation; age; religion; genetic information; the presence of any sensory, mental, or physical disability; gender identity or veteran status in educational programs and activities which it operates. For further information and contacts, please consult <http://www.bellevuecollege.edu/titleix/>
- Science Division Policy on Cheating: You are expected to conduct yourself with integrity. If you cheat*, or aid someone else in cheating, you violate a trust, and the following actions will be taken: (1) You will receive a grade of "0" on the work where the cheating occurred. This grade cannot be dropped. (2) A report of the incident will be sent to the Dean of Student Success. The Dean may file the report in your permanent record or take further disciplinary action such as suspension or expulsion from the College. If you feel you have been unfairly accused of cheating, you may appeal. (For a description of due process, see WAC 132H-120 and/or the Student Handbook.) (*Cheating includes, but is not limited to, copying answers on tests or assignments, glancing at nearby test papers, swapping papers, stealing, plagiarizing, lying, use of electronic information storage or communication devices to store or share answers and illicitly giving or receiving help on exams or assignments.)
- Public Safety and Emergencies: Public Safety is located in the K building and can be reached at 425-564-2400 (easy to remember because it's the only office on campus open 24 hours a day—2400). Among other things, Public Safety serves as our Parking Permits, Lost and Found, and Emergency Notification center. Please ensure you are signed up to receive alerts through our campus alerting system by registering at <http://www.bellevuecollege.edu/alerts/?ref=footer>. If you work late and are uneasy about going to your car, Public Safety will escort you to your vehicle. To coordinate this, please phone ahead and let Public Safety know when and where you will need an escort. Please familiarize yourself with the emergency postings by the door of every classroom and know where to go in the event of an evacuation. Your instructor will be asked if anyone might still be in the building, so check in before you do anything else. Emergency responders will search for anyone unaccounted for. If a major emergency occurs, please follow these two rules: 1) Take directions from those in charge of the response -We all need to be working together, 2) Do not get in your car and leave campus (unless directed to) - Doing so will clog streets and prevent emergency vehicles from entering the scene. Instead, follow directions from those in charge. Please do not hesitate to call Public Safety if you feel safety questions or concerns at any time.