

CHEM 101: Chemistry and the Environment
Fall 2016

Course Instructor

Dr. Safa Khan

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Lecture	Manzanita 1149	Mon/Wed 12:00 – 1:15 PM
Office Hours	Solano Hall 1123	Wednesday 10:00 - 11:00 AM

I am here to help you, so please visit during office hours or set an individual appointment.

Course Description

Relates the fundamentals of chemistry to contemporary environmental issues. Introduction to environmental chemistry without assuming any prior knowledge of chemistry and mathematics. Applies scientific principles to environmental problems concerning energy, air quality, the atmosphere and climate, water quality, and waste management. Essential foundational science needed to understand these problems are also discussed.

* A large portion of this course is the sustainability project. It is a part of The Sustainability Tracking, Assessment, & Rating System (STARS) Campus Sustainability program, which is a voluntary, self-reporting framework established by the Association for the Advancement of Sustainability in Higher Education (AASHE).

Learning Objectives:

Upon successful completion of this course, students will be able to:

- Describe the scientific method
- Recognize conclusions that are derived from the scientific process
- Discuss solutions designed to limit negative impact on the environment
- To analyze human impact on the environment that come from some everyday decisions we make
- Apply scientific principles to the environmental problems concerning energy, air quality, the global atmosphere, water quality, and waste management.

Course Materials

- Textbook: Environmental Chemistry in Society, James M. Beard. 2nd or 1st ed.
- Other assigned readings and classroom discussion material are considered “fair game” for quizzes and discussion questions.

****Any additional course materials will be made available on Blackboard. All changes to the course schedule will be posted on Blackboard. It is your responsibility to check Blackboard on a regular basis.****

Grading

Your grade for this course will be based on your performance on the below items:

- *Individual Writing, Quizzes, Homework and Service Hours (50%)*: There will be quizzes, homework and writing assignments during the semester. It is **YOUR responsibility** to check blackboard often for new assignments and remain informed of the deadlines. There will also be a requirement of **5 community service hours**.
- *Participation (10%)*: During class, group activities will be given over the course of the semester. You may use your notes, book, or neighboring classmates to help complete in class exercises. Some of these will turn into homework and some will be collected in class. Participation in class discussion, asking questions during presentations, and such is a graded element of this class. **Top Hat** will be utilized in this course for attendance and quizzes. You will need to create an account at <https://tophat.com/>. The join code for this course is **804047**. One absence may be made up. If you miss more than one day, you will need to provide proof of a valid reason for missing class (e.g. note from health center, towing company, etc.).
- *Sustainability Project (40%)*: This is a group project with multiple checkpoints or short assignments turned in throughout the semester. There will be a final presentation and paper. The purpose is to implement sustainability projects at CSUCI based on the funding for your group project. More details will be given at a later date.

Students are evaluated on their progress, participation, attendance and overall development. Grading will be based *approximately* on A: >90%, B: 90-80%, C: 80-70%, D: 70-60%, F: <60% and will not include +/- grades. Specific grade cutoffs may vary. Grades will be lowered for late or incomplete assignments.

Academic Dishonesty

All students are expected to complete assignments in this course as their own work. Plagiarism is defined as to pass off the ideas or words of another as one's own without crediting the source. If the instructor suspects a student has violated the academic honesty guidelines, she will discuss the apparent violation with the student to provide them with an opportunity to explain the situation. If the instructor feels that Academic Dishonesty has occurred, she will report the matter to the Vice Presidents for Academic Affairs and Student Affairs. Depending on the severity of the offense, the instructor may assign the responsible student a failing grade on the assignment/exam or an overall course grade of an "F".

Submitting Assignments

Your name, my name, the course and section, the date of submission, and the title of the assignment/essay # should appear on the top left-hand corner of the first page. All essays should be typed, double-spaced, 12 point font, Times New Roman, one inch margins. Center the title of your essay at top of first page; do NOT underline the title. Quotations

and other materials (ideas, facts, etc.) from outside sources **MUST** be fully acknowledged and documented. Documentation should be in the MLA style. Do not include a separate title page. Do not submit your essays in a cover or a folder. Staple the pages together. Essays should be fully edited for grammar and typos.

Late Policy

Because of the fast-paced nature of the course, **I will not accept late essays nor will I accept late sustainability project assignments.** Late homework assignments will be subject to a grade reduction (50% per class session). If you are absent and do not turn in your assignment, it will be considered late. In the event of an excused absence (documented extenuating circumstances such as extended illness, hospitalization, court appearance, etc.) please speak to me as soon as possible to make arrangements for submitting your work in a timely manner (if possible before the due date).

Channel Islands Disabilities Statement

Students with physical, learning, or other disabilities are encouraged to contact the Disability Resource Programs at Bell Tower 1541. Email- accommodations@csuci.edu, phone- (805) 437-3331, for personal assistance and accommodations.

Class Rules

- ***Phones are NOT allowed in class*** – if you have an emergency and need to be available by cell phone, please see me prior to class. If you are found texting, e-mailing, or messaging, you will receive a “0” for your attendance grade for that day.

By taking this class, you agree to abide by the rules in this syllabus.

CAMPUS RESOURCES

- **Writing and Multiliteracy Center (WMC):** WMC can help with your writing from brainstorming, making outlines to editing the final paper
Location: John Spooore Broome Library, Room 2675
Website: <http://www.csuci.edu/writingcenter/>

Disclaimer: *This syllabus is a “work in progress” and is therefore subject to change. It is the student’s responsibility to remain informed about alterations in course structure/content/dates/ assignments. Changes will be posted on Blackboard.*

Tentative Course Schedule

Week	Date	Topics	Project Deadlines
1	M 8-29 W 8-31	Intro and sustainability - Ch. 1 Sustainability and energy - Ch. 1- <i>Cuba Example</i>	
2	M 9-5 W 9-7	Labor Day – No School Energy - Ch. 2&7	
3	M 9-12 W 9-14 F 9-16	No Class Energy - Ch. 2&7 - <i>Sustainability Committee Visit</i> Last day to drop	List of 10
4	M 9-19 W 9-21	Energy - Ch. 2&7- <i>War Example</i> Water - Ch. 12&13	Management Plan
5	M 9-26 W 9-28	Water - Ch. 12&13 Library Visit in Broome 2490	
6	M 10-3 W 10-5	Water - Ch. 12&13 Water - Ch. 12&13	Progress Report #1 & Budget
7	M 10-10 W 10-12	Wastewater field trip - tentative Waste - Ch. 14&15 – <i>Food Waste Example</i>	
8	M 10-17 W 10-19	Waste - Ch. 14&15 Waste - Ch. 14&15	
9	S 10-23 M 10-24 W 10-26	Due via email Progress Presentations by midnight Sunday Project Update Presentations Waste - Ch. 14&15	
10	M 10-31 W 11-2	Toxins - Ch. 6 Toxins - Ch. 6	Progress Report
11	M 11-7 W 11-9	Toxins - Ch. 6 Air Pollution - Ch. 9	
12	M 11-14 W 11-16	Air Pollution - Ch. 9 Air Pollution- <i>Gas Example</i> - Ch 9 & 10	Final Paper
13	M 11-21 W 11-23	Air Pollution & Climate Change - Ch 10 & 8 Climate Change - Ch 8 & 11 – <i>Politics Example</i>	
14	M 11-28 W 11-30	Climate Change - Ch 8 & 11 Climate Change- Ch 8 & 11	Community Service
15	S 12-4 M 12-5 W 12-7	Due via email Final Presentations by midnight Sunday Final Presentations Final Presentations	