Environmental Chemistry

CHEM 4351, CRN# 30828

Course Syllabus, Spring 2019

Instructor: Dr. Kristin Dooley

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Office Hours: T and R: 2:45-4:00 pm

W 8:00-10:00 am

Other times by appointment

Lecture TR 9:25-10:40 am

Required Text: Environmental Chemistry: A global Perspective (4th Ed.)

by Gary W. vanLoon and Stephen J. Duffy

Required

Materials:

calculator; Office (or something comparable)

Course Description

This course is an upper-division elective for chemistry majors and minors and a required course for the chemistry track of the Environmental Science program

Prerequisite

A grade of C or better in CHEM 3411 (Organic Chemistry II) and CHEM 3520

(Quantitative Analysis).

Grading

Your grade in this course will be based on your work in four categories: **Exams**, **Assignments**, **Participation**, and **Poster Project**. These categories are discussed in detail below.

Grade disputes concerning scores on specific assignments or exams should be addressed promptly. After the assignment has been returned, the student has one week to bring the question to my attention. After that time, the grade on the assignment or exam will not be changed.

Point Distribution	Category:		Portion of Final Grade:
	Exams	3 @ 200 Points Each	600 Points
	Assignments	Approx 7-10 total	150 Points
	Participation	Assessed Daily	50 Points
	Poster Project	200 Points Total	200 Points
			TOTAL: 1000 Points

Grading Scale Total Points Earned: A: 900-1000 points B: 800-899 C: 700-799

D: 600-699 F: <600

Course Exams

This course will be divided into three main sections (atmosphere, hydrosphere, and lithosphere). You will have three **exams** throughout this course, one at the end of each of these three sections. The exams will test your ability to discuss the topics in both qualitative and quantitative manners. Material for the exams will come from the required text, supplemental handouts (including journal articles discussed), and course notes. Supplemental material will be provided either through hard copy or through PDF files provided through my website.

The exam dates are as follows (these are subject to change):

Exam 1: Atmosphere	February 21	Chapters: 1-8
Exam 2: Hydrosphere	March 28	Chapters 9-16
Exam 3: Lithosphere	April 25	Chapters 17-21

Assignments

Several **assignments** will be given throughout the semester. The exact nature of these assignments will vary both in format and point value. You should expect an assignment to be due at intervals of about 1 to two weeks. I will assign point values to the assignments based on the difficulty and the amount of time that I expect the assignment to require. The amount of grading on these assignments may vary as well. In some cases, only spot checking will occur, in others, grading rubrics will be used and points will be assigned based on the quality of the work. Examples of assignments include sets of end of chapter problems or special problems in making reasonable estimates of relevant values. Other assignments will require literature searches and written work concerning research articles on various topics.

Class Participation Points

The quality of this course depends on the quality of the discussions that we have. For this reason, you will be awarded points for your **participation** in planned discussions, or those that arise spontaneously from the subject matter being covered. As it is impossible to participate in discussions when you are not in class, habitual absences and lateness will impact your participation points significantly. After 2 absences, I will begin deducting 5 points per absence. You are considered absent if you are 10 minutes late to class.

Participation points will also be negatively impacted if a student is overly aggressive or disruptive during a discussion. Disrespectful comments directed towards anyone in the class will not be tolerated.

Poster Project

The course will also include a **literature poster project** where each student will use published articles to explore the current experiments of one research group whose work is centered on an environmental chemistry problem. The poster project will include recent work by that particular group and should provide perspective on that group's impact in the Environmental Chemistry community. The project will culminate in a poster presentation at the end of the semester (during an x-period or other time agreed upon by the class) that the public will be invited to attend. Just like any scientific poster session, you will stand by your poster and present it to your peers and others in attendance. You will be graded not only on your poster, but also on your ability to discuss the topic you have chosen as though you performed the research. In addition to the poster session at the end of the semester, there will be several written portions of this project with due dates occurring throughout the semester.

Departmental Seminar Attendance

Part of your scientific education involves attending scientific seminars. There will be many opportunities to do this throughout the semester within the Chemistry department as well as other departments in the College of Natural Sciences and Mathematics. Your attendance at Chalk-talks, seminars sponsored by a department or the ACS, SPS or similar group, and faculty candidate seminars will be rewarded with extra credit points. Each seminar attended will correspond to 5 bonus points in the course with a maximum of 25 total bonus points. You must have a note signed by me or another faculty member in order to receive points for your attendance, or have some other approved way of proving your attendance. You must attend the full seminar (no more than 5 minutes late and no leaving early) to be awarded points.

Although only a maximum of 25 bonus points is allowed formally, you should continue to record the seminars that you attend as your involvement can be a factor in boosting your final grade if you fall right below a grade division.

Website

The majority of the content of this course will be located on my faculty web page at http://faculty.uca.edu/kdooley. This site has a course page where you will find any required handouts or other information. Please see me if you have any issues regarding the website.

Office Hours

To use my office hours most effectively, try to identify the specific point in lecture where you got confused, the homework problem you can't solve, or the exam/quiz question you missed before you come. This will make the best use of this time. If you cannot make my office hours, set up a time when you can come.

I know that there will be students that cannot come to my office hours due to time conflicts. There is also no way to predict when you will need help. You are welcome to drop by unannounced at my office at times that are not listed, but be aware that I may only be able to give you a few minutes, or may have to schedule you for later. If you email me (even the morning of the day you can come), I am much more likely to be able to accommodate your schedule.

"Snow Days"

If the university closes due to weather causing us to miss class, plan to make up the exam or assignment the next class meeting after the university reopens. Expect an email from me with more details, if needed.

Classroom Policies

Attendance:

Students who regularly miss class are rarely successful. It is the student's responsibility to obtain the information/assignments/handouts covered during an absence. An outline of the course schedule is attached to this syllabus. You should obtain specific notes of from missed lectures from a classmate.

Academic Honesty:

Cheating and plagiarism are not tolerated! The penalties for cheating will be severe. The smallest penalty being a failing grade on the assignment which will not be able to be made up or redone. While I encourage you to work on assigned problems with a group if you like, the work that you turn in should reflect your own problem solving style and should never be exactly the same as a classmate's or a solution manual's style of setting up and solving a problem. More severe penalties will be issued when deemed appropriate by the instructor. (See University Policies, below.)

Makeup Policy:

Makeup and early exams will be given only in extreme circumstances (as decided by me). You must contact me via email or phone BEFORE the exam time, as soon as the conflict arises. If there is a medical or family emergency, contact me as soon as possible (email or call) after you realize that you will not be at the exam. In most cases, you will be required to take the exam early.

Disruptions:

Electronic devices should be silenced during class. Texting and other social interactions during class are disrespectful to your classmates and will not be tolerated. Students engaged in these activities will be asked to leave the lecture, and will not be given credit for any points awarded during that lecture period.

University Policies

Americans with Disabilities Act

The University of Central Arkansas adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this Act due to a disability, please contact the UCA Office of Disability Support Services, 450-3613.

Academic Integrity

The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Students in this course are subject to the provisions of the university's Academic Integrity Policy, approved by the Board of Trustees as Board Policy No. 709 on February 10, 2010, and published in the Student Handbook. Penalties for academic misconduct in this course may include a failing grade on an assignment, a failing grade in the course, or any other course-related sanction the instructor determines to be appropriate.

Continued enrollment in this course affirms a student's acceptance of this university policy.

Course Evaluations

Evaluations are kept completely confidential. Your thoughtful feedback is highly valued and cannot negatively or positively affect your course grade. Over the years this information has changed and improved the instruction of this course. Student evaluations of a course and its professor are a crucial element in helping faculty achieve excellence in the classroom and the institution in demonstrating that students are gaining knowledge.

Students may evaluate courses they are taking starting on the Monday of the thirteenth week of instruction through the end of finals week by logging in to myUCA and clicking on the Evals button in the top right.

Emergency Procedures

An Emergency Procedures Summary (EPS) for the building in which this class is held will be discussed during the first week of this course. EPS documents for most buildings on campus are available at http://uca.edu/mysafety/bep/. Every student should be familiar with emergency procedures for any campus building in which he/she spends time for classes or other purposes.

Title IX Disclosure

If a student discloses an act of sexual harassment, discrimination, assault, or other sexual misconduct to a faculty member (as it relates to "student-on-student" or "employee-on-student"), the faculty member cannot maintain complete confidentiality and is required to report the act and may be required to reveal the names of the parties involved. Any allegations made by a student may or may not trigger an investigation. Each situation differs and the obligation to conduct an investigation will depend on those specific set of circumstances. The determination to conduct an investigation will be made by the Title IX Coordinator. For further information, please visit: https://uca.edu/titleix. *Disclosure of sexual misconduct by a third party who is not a student and/or employee is also required if the misconduct

Other Policies

Students are encouraged to familiarize themselves with all policies included in the Student Handbook, particularly the Sexual Harassment Policy, and all Academic Policies.

occurs when the third party is a participant in a university-sponsored

program, event, or activity.