Central Washington University

Douglas Honors College, DHC 180

**Environmental Pollution**

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| **Credits:** 4 | **DHC 180**  |

**Objectives**

Humans have negatively impacted our atmosphere, biosphere, geosphere and hydrosphere, primarily with chemicals released related to various industrial processes. This class will work through the different spheres, examine the sources, sinks, impacts, and pathways of different chemicals.

Students will:

* Articulate how scientific methods and forms of inquiry can be used to describe phenomena and create evidence-based explanations of the natural world.
	+ This class will trace different pollutants from source onward and include the scientific explanations for how we know what we know.
* Recognize social, political, and ethical implications of scientific and/or mathematical discoveries and technological advancements.
* Demonstrate strong analytical skills including quantitative reasoning and experimental techniques.
* Demonstrate effective use of written and oral communication skills both in form and structure within appropriate disciplinary conventions.

Pollution is either a direct or indirect side effect of attempts to (usually) make our lives better, dealing with the reasons for the process are built into this class.

**Professor:**

Dr. Robert Hickey
234 Dean Hall
Phone: 963-2178
e-mail: rhickey@cwu.edu
Home Page: <http://www.onlinegeographer.com>

**Calendar**

* Lectures Monday through Thursday, 11:00 - 11:50 in Hebeler 218

**Office Hours**

* Tuesday/Thursday 10:00-11:00. Or by appointment – email me to set something up.

**Textbook**

All class material will be posted to my personal class website: <http://www.onlinegeographer.com>

I do this to make my class material available to people outside my class. I often use internet resources, it only seems fair to share my own work. Plus, I hate how Canvas organizes things.

All grading, quizzes, and material submission will be done via Canvas.

**Assessment**

Assignments, labs, and reading writeups must be submitted by the DUE DATE to qualify for full credit unless PRIOR arrangements have been made with the professor. Late assignments will be penalized by reducing the marks achieved by 25 percent (or .5 point, whichever is larger) for each day or part of day that the work is late.

To pass the class, students must achieve an overall class grade of at least 60%.

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| **type** | **Percent** | **Description** |
| Weekly exam questions | 9% | Due Thursday by midnight. |
| weekly quizzes | 9% | Online. Review of each week’s materials, due by midnight sunday. |
| In the news | 8% | Weekly write-ups. Due Thursday by midnight.  |
| Newspaper assignment | 11% |  |
| Book review | 23% |  |
| Midterm | 20% |  |
| Final exam  | 20% |  |
| Total | 100% |  |
|  |  |  |

Note: students are responsible for ALL material covered in lecture (or lab), unless otherwise stated. If you miss class, BOTH check the online material and at least two of your compatriot's notes.

Makeup exams will ONLY be given during the two-hour slot immediately following the final exam. Unless it is for a university sponsored activity (conference, athletics, etc) - in which case, the student must contact me at least two days prior to the exam to make arrangements. Without such early contact, the makeup will be after the final exam.

Disclaimer - the grading and point assignments shown above may change slightly during the quarter at the professor's discretion.

***Misc. Rules:***

The following requirements are compulsory. Failure to comply with these instructions will result in the student failing the class.

* Copying another student's work with or without his/her knowledge or giving/receiving aid during any test or examination is cheating.
* Copying an author's work without proper citation is plagiarism. Ensure that you provide proper citation in ALL WORK submitted in this class.
* The submission for assessment of identical or nearly identical work by two or more students is collusion.
	+ Students who engage in copying, plagiarism, or collusion will receive zero (0) points for the work submitted. At the professor's discretion, the student may also be reported to the appropriate administrator.

**Attendance**: I don’t take attendance. You’re adults. If you don’t show, it’s likely you will fail. Your call!

Seriously, show up. The ppts I post are only outlines of what I talk about. Looking at those won’t help your grade unless you have solid notes to back them up.

**Make-up exams**: Students are required to take all examinations at the assigned times. There are only two categories in which I allow makeups

1. You’re an athlete and have a game on exam day. Or there is some other sort of university-required absence. Contact me well in advance of the exam date about setting up a make-up time.
2. Everyone else…. (and athletes/etc who don’t see me at least two days PRIOR to the exam day) –with prior approval (ie. get to me within two days of the exam), I will allow you to make up the exam AFTER the final exam. Yup, back-to-back exams. In other words, IF the student sees the professor asap AND get permission to take a makeup, they may take the makeup after the final exam.

Do not assume you automatically get to make something up. All that stuff about talking to me asap isn’t optional.

Be sure to tell your mom, dad, aunt, etc about your finals schedule. No early (or late) exams will be given for non-university-required reasons.

COVID: Yup, it’s still with us because far too many people are choosing to not vaccinate. If you are one of those people, please mask up and socially distance.

**At the instructor's discretion**: points will be deducted for classroom interruptions. This includes (but is not limited to) cell phones - a maximum of 1 point will be deducted for every time the phone rings (not per call). Answering the phone is included as a separate distraction. For example, Johnny's phone rings three times before he answers it (not turns it off) - he could lose 4 points (same as 4% of his final grade).

**Course alterations**: The instructor reserves the right to change the schedule, readings, exams, and assignments as deemed necessary to improve the quality of your education in this course.

A............................................ 93% - 100%
A-........................................... 90% - 93%
B+.......................................... 87% - 90%
B............................................ 83% - 87%
B-........................................... 80% - 83%
C+.......................................... 77% - 80%
C............................................ 73% - 77%
C-........................................... 70% - 73%
D+.......................................... 67% - 70%
D............................................ 63% - 67%
D-........................................... 60% - 63%

F…………………………... < 60%

**Lecture Topics:**

The lectures (and associated readings) will roughly follow the below. Main topics will include:

* Understanding Pollution
* Reducing pollution to reduce risk (risk assessment)
* Chemical toxicity
* Air pollution
* Acid Rain
* Global Warming
* Energy and pollution
* Ozone depletion
* Water pollution
* Drinking water
* Solid waste
* Hazardous waste
* Persistent, bioaccumulative, and toxic waste
* Metals
* Pesticides and Hervbicides
* Indoor air pollution

Each topic will be discussed, then we will go into case studies about each. We’ll see how much we get through during the quarter.

**Student conduct rules and regs**. Please review:

* <https://apps.leg.wa.gov/WAC/default.aspx?cite=106-125-020> Note, this is the State’s rules and regs regarding “Prohibited student conduct” which we all follow. It’s worth a read.
* <https://apps.leg.wa.gov/wac/default.aspx?cite=106-125> for more stuff vaguely related to you and CWU.

“CWU expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events.”

Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any obstacles to learning, contact Disability Services to discuss a range of available options. Student Disability Services is located in Hogue 126. Call (509) 963-2214 or email ds@cwu.edu for more information.

In compliance with RCW 28B.137.010, Central Washington University makes every effort to deal reasonably and fairly with students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Students must present written notice to their instructor within the first two weeks of class listing the specific dates on which accommodations are required. Contact the Dean of Student Success at (509) 963-1515 for further information or questions.

* Due to COVID-19, students in this classroom are required to wear masks that cover both the nose and the mouth. If you attend class without an appropriate mask you will be asked to leave and obtain a mask before returning.
* If you do not have a face mask, Central Washington University can provide one for you. If you have not yet received your CWU-supplied mask, please go the SURC Information Desk. Some departments/programs may also provide disposable masks. Please obtain a suitable mask prior to the start of your first class. Information on appropriate masks can be found at this web site: [https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprevent-getting-sick%2Fabout-face-coverings.html&data=04%7C01%7CRobert.Hickey%40cwu.edu%7Cfdeac7ccc2134c41bd9608d9cbef07a6%7Cf891d6c191d6444ba700d371910716c7%7C0%7C0%7C637765049775624998%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=sWUc%2FtLjPfVQY4VwZxyEXPwSBPMi%2FSCAqIwxzhNCi%2Fo%3D&reserved=0). Standard face shields, single-layer neck gaiters, single layer masks, masks with one-way vent valves, and handkerchiefs are *not* considered appropriate masks for this course.