CHEMISTRY OF THE ENVIRONMENT (CHMY 591-804)

From the time we wake each day and even while sleeping each night, we interact chemically with our environment. This course will provide interesting and useful examples of the chemistry connections between water, air and soil in Earth’s environment. We will utilize various learning and assessment strategies to understand the interconnectedness of our air, water and Earth environments through three, 14-day modules.

Each module may include (details to follow):
• 2 narratives to be read prior to completing the homework questions
• 1 set of “open resource” assessment questions (these will be found in the “quizzes” section of D2L)
• 1 project specific to each module
• 2 online discussions

You will have 14 days (until 11:59 PM MST Day 14) to complete the course work and mesh with other professional and personal commitments. You will have 1 “Day Off” between modules. See course calendar for more details and exact dates.

The tentative schedule for each module is as follows (see the published Course Calendar in the Content section of D2L for more details and exact dates):

Day 1 – module begins: first of two discussions begin, project guidelines open, assessment questions open.
Day 4 – first post of first discussion due
Day 7 – discussions due

Day 8 – second discussion begins
Day 11 – first post of second discussion due
Day 14 – module ends: discussions due, assessment questions due, project due
Day 15 – DAY OFF

Investigating these topics via an on-line approach will require your diligent, consistent and self-teaching efforts. You may need to complete outside research to fully understand each topic and the connections associated with each topic. Please pay careful attention to the pacing articulated in the published course calendar in the “Content” area. You are expected to check our class D2L site regularly and ask the appropriate instructor questions promptly.

Our weekly course plan utilizes the following texts:


*The optional supplementary resource may be useful to teachers teaching grades 6-9.
Textbook and course content
This is a unique course with a diverse clientele who teach in a variety of environments. Conversely, Environmental Chemistry textbooks vary substantially in terms of what material they cover, and none perfectly fit with the objectives of this course. The textbook we have selected meets many of our needs – however, it is an advanced textbook. **You should first read our instructor written weekly narratives posted on D2L, as the bulk of the custom course content is located there.** Keep the textbook handy to refer to those sections indicated in each narrative – you may be tested over both the narratives and sections of the textbook indicated in the narratives. At times you will also find suggested advanced curriculum content readings for those teaching higher level courses – you will not be tested on advanced curriculum content readings.

Module 1 will focus on the following chemistry examples in Earth Science and a vocational project:

Module 2 will detail chemical examples related to environmental issues of air and an essay project:

Module 3 will focus on chemistry examples in water, and a curriculum based project.

**EARNING YOUR GRADE Environmental Chemistry Point Distribution**

**Tentative grading criteria**

(300 pts) Assessment Questions (20 chemistry based multiple-choice questions per module, 5pts per question.)

(120 pts) Discussions (20 pts per discussion, 40 pts per module)

(180pts) Projects – one per module, 60 pts each

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Communication is very important. **CHECK THE COURSE D2L SITE FREQUENTLY EACH WEEK.**

**CONTACTS:**

amy.washtak@montana.edu (Module 1)
holmgren@chemistry.montana.edu (Module 2)
LATE WORK
Internet access is a requirement of the course, and the expectation is that you will complete all work on time. This requires frequently throughout each week checking the course D2L website.

There will be significant deductions of 50% from your earned grade for late work if prior communication and arrangements have not taken place. If you experience some unanticipated difficulty contact the current instructor right away. As a teacher, you realize that fairness to everyone is important and you also realize that a semester often contains “unknowns.”

Every instructor in the MSSE Program is asked to include the following statement in their syllabi:

Maintaining Intellectual Integrity (Plagiarism)
Paraphrasing or quoting another’s work without citing the source is a form of academic misconduct. Even inadvertent or unintentional misuse or appropriation of another's work (such as relying heavily on source material that is not expressly acknowledged) is considered plagiarism. All sources of information that are not your original thoughts need to be cited. This includes, but is not limited to, journal articles, textbooks and online resources. Adapted from MSU Syllabus language page: http://www.montana.edu/teachlearn/TLResources/SyllabusLanguage.html