Washington State University MAJOR CURRICULAR CHANGE FORM COURSE (Submit original signed form and ten copies to the Registrar's Office, zip 1635.NS) Future Effective Date: 08/01/2013 New course Temporary course Drop service Course	VED
Future Effective Date: 08/01/2013 (effective date cannot be retroactive) New course Temporary course Drop service course There is a course fee associated with this course (see instructions)	
☐ Variable credit hours)	,
☐ Increase credit (former credit) ☐ Lecture-lab ratio (former ratio)	
□ Number (former number) □ Prefix (former prefix)	
Crosslisting (between WSU departments) (Must have both departmental signatures) □ Conjoint listing (400/500) □ Conjoint listing (400/500) □ Consoliting (500) □ Cooperative listing (1000) □ Cooperative listing (1000) □ Cooperative listing (1000) □ S, F grading	
Request to meet Writing in the Major [M] requirement (Must have All-University Writing Committee Approval)	
Request to meet GER in (Must have GenEd Committee Approval) Fulfills GER lab (L) requirement Professional course (Pharmacy & Vet Med only) Graduate credit (professional programs only) Other (please list request)	
FS 409/509 Principles of Environmental Toxicology	
course prefix course no. title	
3 same	
Description (20 words or less) same This course was approved as a new case. The for Lisa prerequisite This course was approved as a new case. The course in zoiz. Now needs to the course in zoiz. Now needs to the course in zoiz. I want to was a well review.	
Instructor: Dr. Greg Möller Phone number: (208) 885-0767 Email: gmoller@uidaho.edu	٦
Contact: Jodi Anderson Phone number: 335-4763 Email: jlanderson@wsu.edu	
Campus Zip Code: 6376	
- Please attach rationale for your request, a current and complete syllabus, and explain how this impacts other units in Pullman and other branches (if applicable) Secure all required signatures and provide 10 copies to the Registrat's Office. Mark 10-1-12	7
Chair (if crosslisted/interdisciplinary)* Dean (if crosslisted/interdisciplinary) * Graduate Studies Com/date	
All-University Writing Com/date Academic Affairs Com/date Senate/date	
*If the proposed change impacts or involves collaboration with other units, use the additional signature lines provided for each impacted unit and college.	

Course Description

FS 409/509:

Principles of Environmental Toxicology 3 Study of the nature, properties, effects and detection of toxic substances in the environment and in any environmentally exposed species, including humans. General understanding of toxicology related to the environment. Fundamental toxicological concepts: dose-response relationships, absorption of toxicants, distribution and storage of toxicants, biotransformation and elimination of toxicants, target organ toxicity and teratogenesis, mutagenesis, carcinogenesis and risk management. Cooperative: Open to UI degree-seeking students. Recommended preparation: BIOLOGY 102 or 107; CHEM 102; CHEM 105; CHEM 106; STAT 205. Offered at 400 and 500 level.



University of Idaho

SCHOOL OF FOOD SCIENCE

PO Box 646376, Pullman, WA 99164-6376 509-335-3843 • Fax: 509-335-4815

PO Box 442312, Moscow, Idaho 83844-2312 208-885-0707 • Fax: 208-885-2567

Date:

October2, 2012

From:

Denise Smith, Director, School of Food Science

To:

Julia Pomerenk, WSU Registrar

RE.:

Change of Major - Add Cooperative listing to classes

Per the attached email conversations with WSU and UI Registrar's Julia Pomerenk and Nancy Krough, they agreed the statement 'Cooperative course taught jointly by WSU and UI (FS XXX)' should be added to almost all the Food Science courses that do not currently have the 'coop' statement in their description. The classes that need the 'coop' statement added are: FS 201, FS 401, FS 409/509, FS 436/536, FS 495, FS 496, FS 499, FS 501, FS 531, FS 538, FS 538.

The rationale for this request is: The merged School of Food Science proposes to cooperatively list almost all of the courses with University of Idaho, so courses are available to all students, on either campus during any semester. Adding 'coop' status strengthens the academic course offerings for the bistate School of Food Science's academic program. With 'coop' status, this adds more variety to the classes they can choose and allows flexibility so classes can be offered on either campus for any semester. This is especially helpful for those semesters when a Faculty member is on sabbatical, on leave from teaching, or medical reasons, is retiring, or there are changes in teaching assignments.

I have attached a major curriculum form and syllabi to this one page memo with rationale as directed by Dr. Julia Pomerenk (see attached email). All are effective Fall 2013, except we are asking for retroactive approval for Fall 2012 for FS 401, FS 499 and FS 501 since the coop statement was already added to the catalog for Fall 2012.

If you need clarification or have questions, feel free to contact me at 335-9103, or Jodi Anderson, Academic Coordinator 335-4763.

Principles of Environmental Toxicology – EnvS/FS 409/509 (3/cr) – Fall 2012

(ver 08.10a.12)

Lectures: Online – Scheduled Twice Weekly on Tuesdays and Thursdays

Prerequisites: Recommended: Biol 102 or Biol 115, Chem 111, Chem112, Chem 275, and Stat 251.

Instructor(s): Greg Möller Office Location: 204a Food Research Center

Telephone: 208-885-0401 or personal cell phone E-mail: gmol/er@uidaho.edu

Delivery: Over Internet via Web cast (streaming video/audio). Video/Audio Podcast via direct download. Students are required to have modern computer hardware and software, and access to a broadband internet connection. Specific requirements are given on the course web site. Lectures are available by streaming video or downloadable podcast on a two lecture module per week schedule. Office hours are by arrangement with the instructor via email at gmoller@uidaho.edu Phone/text contact via personal cell phone # given to enrolled students. We will occasionally use Skype and/or other VOIP clients; Individual and small (<10) group voice conferencing available (via Skype or Google+). Both on-campus and off-campus students will view formal lectures over the Web. Lectures are available by streaming video Webcast from the course website. Webcast lecture videos are available at www.agls.uidaho.edu/etox. Students can view lectures anytime over the Web as your schedule and location permit. Because of the nature of the course, no formal office hours are scheduled; however I can meet with you online, by phone, by text, or in my office almost anytime you wish — please contact me with any questions or concern you may have. Email/phone contact (off/@n-campus) or office appointments (on-campus) are welcome.

Textbook:

Principles and Practice of Toxicology in Public Health, by Ira S. Richards; ISBN-13: 9780763738235; ISBN-10: 0763738239; Paperback, ©2008, 464 Pages (available via online booksellers)

Online Course Web Site and Learning Management System:

Course Web Site: http://www.agls.uidaho.edu/etox

Blackboard: <u>UI Blackboard</u> LMS for lecture homework and exams (linked via course website for enrolled student log-in).

Course Abstract: Environmental toxicology is the study of the nature, properties, effects and detection of toxic substances in the environment and in any environmentally exposed species, including humans. This course will provide a general understanding of toxicology related to the environment. Fundamental toxicological concepts will be covered including dose-response relationships, absorption of toxicants, distribution and storage of toxicants, biotransformation and elimination of toxicants, target organ toxicity and teratogenesis, mutagenesis, carcinogenesis and risk assessment. The course will include an overview of chemodynamics of contaminants in the environment including fate and transport. The course will examine chemicals of environmental interest and how they are tested and regulated. Case studies and special topics will be critically reviewed.

Student Learning Outcomes: Upon successful completion of this course, students will

- be able to demonstrate a fundamental knowledge of processes and endpoints in the human body associated with exposure to toxic agents;
- 2. be able to demonstrate a fundamental knowledge of risk assessment and risk management as it is applied to toxic agents in the environment;
- 3. acquire mastery with the major issues, concepts, and subject areas in environmental toxicology;
- 4. acquire/mastery of sourcing and synthesizing information in the major aspects of Environmental Toxicology and Chemistry;
- 5. be able to demonstrate sufficient knowledge about the occurrence and significance of major environmental toxicants and be able to apply that knowledge for advanced analysis in the context of the environmental quality, public health, sustainability, regulatory science, and public communication.

Week-to-Week Course Outline: There are two lectures per week and each Web lecture module can have a assigned homework question set that is available in Blackboard. Lectures are 40-75 minutes via streaming video. Downloadable lecture companion slide sets are 35-65 slides (save a tree-please do not print).

Class Lecture Schedule:

70/04	
T 8/21	Introduction to Environmental Toxicology
Th 8/23	"Silent Spring"
T 8/28	Concepts of Toxicology
Th 8/30	Special Topics: Pesticide Residues
T 9/4	Dose-Response Relationships
Th 9/6	Absorption of Toxicants
T 9/11	Distribution and Storage of Toxicants
Th 9/13	Biotransformation and Elimination of Toxicants
T 9/18	Target Organ Toxicity
Th 9/20	Teratogenesis, Mutagenesis, and Carcinogenesis
T 9/25	Special Topics: Dioxins and Related Compounds
Th 9/27	Midterm Exam I
T 10/2	Risk Assessment I
Th 10/4	Risk assessment II
T 10/9	Case Studies: 1) Selenium Ecotoxicology 2) Arsenic in Drinking Water
Th 10/11	Ecological Biochemistry
T 10/16	Abiotic Transformation in the Environment
Th 10/18	Environmental Chemodynamics
T 10/23	Environmental Transport
Th 10/25	Environmental Chemicals I: heavy metals and metalloids; nutrients; radionuclides
T 10/30	Environmental chemicals II: heavy metals and metalloids; nutrients; radionuclides
Th 11/1	Environmental chemicals III: industrial chemicals, pesticides, petrochemicals, biotoxins
T 11/6	Environmental chemicals IV: industrial chemicals, pesticides, petrochemicals, biotoxins
Th 11/8	Special Topic: Endocrine Disruption
T 11/13	Midterm Exam II
Th 11/15	Case Study Work (lecture break)
T 11/20	Thanksgiving break (no class)
Th 11/22	Thanksgiving break (no class)
T 11/27	Monitoring Chemicals in the Environment
Th 11/29	Regulating Chemicals in the Environment: RCRA, CERCLA, CWA, CAA, FIFRA
T 12/4	Frontiers of Environmental Toxicology
Th 12/6	Course Review
T 12/11	Final Exam

Readings: As assigned on course Web site. Each lecture has reading assignments that will average 1-2 hours each.

Homework: As assigned on course Web site. Delivered online via *ETox* Blackboard site. Each lecture module has an online homework submission and discussion that will take approximately 30 minutes to 1 hour.

Homework Projected Percent of Effort:

409 Homework		509 Homework
50% Case study report		40% Case study report
50% (total) Lecture homework & discussion		30% (total) Lecture homework & discussion
· 0	2	30% Book review project

Examinations: All examinations are electronically delivered and electronically returned. The exams are individual effort, take home, and open book. Midterms are ½ multiple choice and ½ problems. The final exam is multiple

choice. The open book, open web, individual effort midterm exams will take 4-12 hours to complete, depending on the individual student.

Case Study Report: All students will be required to prepare a case study report (maximum total of 20 pages, double spaced; 1 inch margins; 12 pt font; 10 references minimum). Your case study will examine a chemical in a specific contaminated site or media. The case study will examine sources, pathways, receptors and controls for your target chemical(s) in the target environment. Your paper will be submitted according to a required format and will reference major peer-reviewed work and reviews. You will review major sources of the chemical - natural or manmade, fate and transport in the environment, toxicological endpoints in animals or humans and what environmental (natural or engineered) or regulatory controls aid in the mitigation of the exposure. The full paper is due on or before 11/25. A grading rubric for performance expectations will be available. Additional information is presented in the Resources section of the course web site. This work product is the most important in the course for demonstrating your mastery of the material.

Graduate Credit Book Review: Students taking the course for graduate credit will be required to perform a critical book review for a book from a recommended list found on the course Web site or a book submitted for instructor approval. The books are focused, in-depth analyses of subjects such as endocrine disruption, risk analysis, pesticide use or specific chemicals. There is an option to submit a proposal for your own book selection. The report will be reviewed for completeness, scientific accuracy, and presentation (readability, grammar, and spelling). The report should review the technical issues of the book and examine the presentation for bias and completeness. The review should reflect your scientifically defendable, critical opinion of the thesis of the book. The report should attempt to update the material and/or conclusions presented in the book with a review of current information found from reliable sources such as the scientific literature (5 or more references). The max length for this double spaced (1 inch margins; 12 pt font) report is 15 pages (fully inclusive). The completed review is to be submitted no later than 12/7. Additional information is presented in the Resources section of the course web site. The expected standard of writing is that of professional publication.

It is your responsibility to understand what plagiarism is and how to avoid it. Any paper with sections that are either entirely or partly copied, is copied word-for-word, or is rephrased by changing words in a sentence (or from another student's or author's work) is not acceptable. These are instances of plagiarism, which is a very serious academic offense that involves stealing another person's thoughts. Your writing will be compared electronically with millions of data-based documents and examined for copied phrases and for sentence structure rearrangements. Copying phrases or rearranging an author's sentence structure is considered plagiarism, which is a very serious academic offense with the consequences outlined in the syllabus. If you are unfamiliar with the definition and examples of plagiarism, or the guidelines for avoiding plagiarism please refer to the course syllabus and the wealth of quality plagiarism guidelines searchable on the WWW.

***IMPORTANT: All papers submitted will be electronically scanned for evidence of plagiarism. Evidence of plagiarism will result in an automatic grade of zero for the submitted work, and in severe cases carries the potential for university academic dishonesty review and sanction according to university policies (see below).

Grading Breakdown:

	409 Students	509 Students
Homework & discussion	25%	20%
Exams #1 and #2	25%	20%
Final Exam	20%	15%
Case Study Report	30%	25%
Book Review	Not required	20%

Grade Distribution: Varies year to year depending on student quality and course effort.

Relationship of Grading Strategy and Student Learning Outcomes:

- 1. Homework will require an understanding of lecture material and reading assignments.
- 2. Exams will require students to demonstrate mastery of course material and synthesize available information into practical demonstrations of food toxicology concepts.

- Course papers will require the student to demonstrate their subject matter mastery, communication skill, and ability to obtain primary sources of best available information in an applied science interpretative challenge.
- 4. Grading rubics for written papers will be available to students to link subjective assessment targets with student work submission.

Course Honor Code: Terms and conditions for students taking this course (EnvS/FS 409/509). By enrolling in this course, you agree to the following terms and conditions:

- 1. I will not use or represent the work of another as my own. This specifically includes the use of other students' work, WWW resources, and published works. I understand that attribution of source is encouraged and a part of the ethical practice of science and learning.
- 2. I will abide by the instructions on exams, tests, quizzes and homework assignments when they are labeled or assigned as closed book, individual effort or other such designation of assistance or period of performance. I further understand that it is my ethical duty, on my honor, that I abide by these instructions even in the absence of an instructor or exam proctor.

Campus Resources: <u>UI Library</u>; <u>WSU Library</u>; <u>UI Writing Center</u>; <u>WSU Writing Center</u>

Disability Support Services Reasonable Accommodations Statement:

<u>UI</u>: Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through Disability Support Services located in the Idaho Commons Building, Room 306 in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course.

- 208-885-6307
- email at <dss@uidaho.edu>
- website at <www.access.uidaho.edu>

Students should present a completed and signed Accommodation Checklist for the current semester from Disability Support Services when requesting accommodations. Students should not present the checklist before or after class, if they do, request that they see you during your office hours. If they do not have a current checklist both completed and signed, please refer them to the Disability Support Services office (Idaho Commons, Room 306) to obtain one. If you have any questions regarding a student(s) with a disability(s), or how to best work with a particular student in class, please contact our office.

WSU: Reasonable accommodations are available for students with a documented disability. WSU Online and the Access Center work together to provide reasonable accommodations for students who have documented disabilities and who are registered both with WSU Online and the Access Center. WSU Online's liaison to the Access Center will assist you in getting started. To begin this process, contact WSU Online (800-222-4978 or distance@wsu.edu). We strongly recommend that you notify us as soon as possible. All accommodations must be approved through the Access Center.

Plagiarism and Academic Integrity Addendum:

University of Idaho, Faculty Staff Handbook

ARTICLE II--ACADEMIC HONESTY. [section renumbered 8-07]

- 1. Cheating on classroom or outside assignments, examinations, or tests is a violation of this code.
- **2.** Plagiarism, falsification of academic records, and the acquisition or use of test materials without faculty authorization are considered forms of academic dishonesty and, as such, are violations of this code.
- **3.** Because academic honesty and integrity are core values at a university, the faculty finds that even one incident of academic dishonesty seriously and critically endangers the essential operation of the university and may merit expulsion. *[rev. 7-98]*

- **4.** The operation of UI requires the accuracy and protection of its records and documents. To use, make, forge, print, reproduce, copy, alter, remove, or destroy any record, document, or identification used or maintained by UI violates this code when done with intent to defraud or misinform.
- **5.** All data acquired through participation in UI research programs is the property of the university and must be provided to the principal investigator. In addition, collaboration with the University Research Office for the assignment of rights, title, and interest in patentable inventions resulting from the research is also required [see <u>5400 A through E]</u>.
- **6.** Entrance without proper authority into any private office or space of a member of the faculty, staff, or student body is a violation of this code.
- **7.** It is also a violation to hack or make unauthorized use of any computer or information system maintained by the university or a member of the faculty, staff, or student body. [rev. 7-05]
- **8.** Instructors and students are responsible for maintaining academic standards and integrity in their classes. Consequences for academic dishonesty may be imposed by the course instructor. Such consequences may include but cannot exceed a grade of "F" in the course. The instructor should attempt to notify the student of the suspected academic dishonesty and give the student an opportunity to respond. The notice and the opportunity may be informal and need not be in writing. Penalties for any disciplinary infraction must be judicially imposed. [See <u>1640.02 C-5</u>] [rev. 7-98]
- **9.** Instructors may report incidents of academic dishonesty to the dean of students. Upon receiving such a report, the dean of students shall provide the student with written notice that a report has been made and an opportunity to meet with the dean to discuss the report. The dean of students shall maintain the report and any record of the meeting for a period of time deemed appropriate by the dean. The dean of students may file a complaint against the student after the meeting has taken place or the student has elected, either affirmatively or through inaction, not to meet with the dean. [add. 7-98]

Plagiarism statement and link to WSU academic integrity statement: Academic Dishonesty: Cases of academic dishonesty shall be processed in accordance with the Academic Integrity Policy as printed in the Washington State University Student Handbook, Faculty Manual, and as available from the Office of Student Affairs.

Plagiarism:

Plagiarism is defined by Webster's Dictionary as, "to steal and pass off the ideas or words of another as one's own." There are two general forms of plagiarism:

- (a) Unintentional: the use of other writers' words, phrases, sentences, paragraphs as though they were your own without understanding the need to cite the original source. Unintentional plagiarism normally occurs when the individual does not understand the conventions of scientific writing and the need to cite sources of information.
- (b) Intentional: the use of other writers' work and claiming it as your own. Intentional plagiarism includes *knowingly copying* or incorporating sections of books, articles, or other sources into your work without citation.

To avoid plagiarism, you must acknowledge the source of information. In scientific writing, this can be performed in the text of your work through the use of surnames of authors and the year of publication or by using numbers enclosed by parentheses which correspond to specific citations in the reference section. In addition to employing citations in the text, plagiarism can be avoided by applying special techniques when writing about information obtained from a source:

- (a) Paraphrase: rewording information in which you accurately present the main ideas from the source but do so using your own organization, words, and sentence structures.
- (b) Summary: a concise statement of the main idea from a section within a source.
- (c) Direct quotation: use of quotes surrounding the passage written by another author.

In general, paraphrasing (a) and the use of summary statements (b) are very common techniques used in scientific writing. Use of quotations (c) in scientific writing is rare and should be avoided.

Plagiarism is dishonest and is **not** tolerated. If caught using all or portions of a current or former classmate's writing or other sources of information, a grade of "zero" will be given for the exercise. Additional penalties for plagiarism are possible as outlined in the *Washington State University Student Handbook*.

Course Sustainability Statement: With the possible exception of the textbook, this course is designed to be electronically available, and paper-free. Exams, homeworks, and students papers are all distributed and returned electronically. Think first about printing, and please only print course material if it is necessary.



#113

Principles of Environmental Toxicology – FS 409/509 (3 cr) Lectures: Online – Scheduled Twice Weekly on Tuesdays and Thursdays

Prerequisites:

Recommended: Biol 102 or Biol 115, Chem 111, Chem 112, Chem 275, and Stat 251 or WSU

equivalent

Instructor(s): Professor Greg Möller

Office Location: 204a Food Research Center

Telephone: 208-885-0401 or personal cell phone

E-mail: gmoller@uidaho.edu

Delivery:

Over Internet via Web cast (streaming video/audio). Video/Audio Podcast via direct download. Students are required to have modern computer hardware and software, and access to a broadband internet connection. Specific requirements are given on the course web site. Lectures are available by streaming video or downloadable podcast on a two lecture module per week schedule. Office hours are by arrangement with the instructor via email at gmoller@uidaho.edu Phone/text contact via personal cell phone # given to enrolled students. We will occasionally use Skype and/or other VOIP clients; Individual and small (<6) group voice conferencing available (via Skype or Google+). Both on-campus and off-campus students will view formal lectures over the Web. Lectures are available by streaming video Webcast from the course website. Webcast lecture videos are available at www.agls.uidaho.edu/etox. Students can view lectures anytime over the Web as your schedule and location permit. Because of the nature of the course, no formal office hours are scheduled; however I can meet with you online, by phone, by text, or in my office almost anytime you wish – please contact me with any questions or concern you may have. Email/phone contact (off/on-campus) or office appointments (on-campus) are welcome.

Textbook:

<u>Principles and Practice of Toxicology in Public Health</u>, by Ira S. Richards; ISBN-13: 9780763738235; ISBN-10: 0763738239; Paperback, ©2008, 464 Pages (available via online booksellers)

Online Course Web Site and Learning Management System:

Course Web Site: http://www.agls.uidaho.edu/etox

Blackboard: UI Blackboard (or WSU Angel) LMS for lecture homework and exams (linked via course website for enrolled student log-in).

Course Abstract:

Environmental toxicology is the study of the nature, properties, effects and detection of toxic substances in the environment and in any environmentally exposed species, including humans. This course will provide a general understanding of toxicology related to the environment. Fundamental toxicological concepts will be covered including dose-response relationships, absorption of toxicants, distribution and storage of toxicants, biotransformation and elimination of toxicants, target organ toxicity and teratogenesis, mutagenesis, carcinogenesis and risk assessment. The course will include an overview of chemodynamics of contaminants in the environment including fate and transport. The course will examine chemicals of environmental interest and how they are tested and regulated. Case studies and special topics will be critically reviewed.

Student Learning Outcomes: Upon successful completion of this course, students will

- 1. be able to demonstrate a fundamental knowledge of processes and endpoints in the human body associated with exposure to toxic agents;
- 2. be able to demonstrate a fundamental knowledge of risk assessment and risk management as it is applied to toxic agents in the environment;
- 3. acquire mastery with the major issues, concepts, and subject areas in environmental toxicology;
- 4. acquire mastery of sourcing and synthesizing information in the major aspects of Environmental Toxicology and Chemistry;
- 5. be able to demonstrate sufficient knowledge about the occurrence and significance of major environmental toxicants and be able to apply that knowledge for advanced analysis in the context of the environmental quality, public health, sustainability, regulatory science, and public communication.

Week-to-Week Course Outline:

There are two lectures per week and each Web lecture module can have a assigned homework question set that is available in Blackboard. Lectures are 35-70 minutes via streaming video. Downloadable lecture companion slide sets are 35-65 slides (save a tree-please do not print).

Class Lecture Schedule:

	cture 50	
T 8/21		Introduction to Environmental Toxicology
Th 8/23		"Silent Spring"
T 8/28		Concepts of Toxicology
Th 8/30		Special Topics: Pesticide Residues
T 9/4	g.	Dose-Response Relationships
Th 9/6		Absorption of Toxicants
T 9/11		Distribution and Storage of Toxicants
Th 9/13	96	Biotransformation and Elimination of Toxicants
T 9/18		Target Organ Toxicity
Th 9/20		Teratogenesis, Mutagenesis, and Carcinogenesis
T 9/25		Special Topics: Dioxins and Related Compounds
Th 9/27		Midterm Exam I
T 10/2		Risk Assessment I
Th 10/4		Risk assessment II
T 10/9		Case Studies: 1) Selenium Ecotoxicology 2) Arsenic in Drinking Water
Th 10/11	1	Ecological Biochemistry
T 10/16		Abiotic Transformation in the Environment
Th 10/18	3	Environmental Chemodynamics
T 10/23		Environmental Transport
Th 10/25	5	Environmental Chemicals I: heavy metals and metalloids; nutrients; radionuclides
T 10/30		Environmental chemicals II: heavy metals and metalloids; nutrients; radionuclides
Th 11/1	9	Environmental chemicals III: industrial chemicals, pesticides, petrochemicals, biotoxins
T 11/6		Environmental chemicals IV: industrial chemicals, pesticides, petrochemicals, biotoxins
Th 11/8		Special Topic: Endocrine Disruption
T 11/13		Midterm Exam II
Th 11/15	5	Special Topic: Dioxin and Related Compounds
T 11/20		Thanksgiving break (no class)
Th 11/22	2	Thanksgiving break (no class)
T 11/27		Monitoring Chemicals in the Environment
Th 11/29)	Regulating Chemicals in the Environment: RCRA, CERCLA, CWA, CAA, FIFRA
T 12/4		Frontiers of Environmental Toxicology
Th 12/6		Course Review
T 12/11		Final Exam



Course Accessibility: Principles of Environmental Toxicology has been designed towards best practices for access by people with or without disabilities. Enrolled students can request transcripts of lectures by emailing gmoller@uidaho.edu Please contact the instructor for support in accessing course materials.

Readings: As assigned on course Web site. Each lecture has reading assignments that will average 1 hour each.

Homework: As assigned on course Web site. Delivered online via UI *ETox* Blackboard site (or WSU Angel). Each lecture module has an online homework submission and discussion that will take approximately 30 minutes to 1 hour.

Homework Projected Percent of Effort:

409 Homework

50% Case study report

50% (total) Lecture homework & discussion

509 Homework

40% Case study report

30% (total) Lecture homework & discussion

30% Book review project

Examinations:

All examinations are electronically delivered and electronically returned. The exams are individual effort, take home, and open book. Midterms are ½ multiple choice and ½ problems. The final exam is multiple choice. The open book, open web, individual effort midterm exams will take 4-12 hours to complete, depending on the individual student.

Case Study Report:

All students will be required to prepare a case study report (maximum total of 20 pages, double spaced; 1 inch margins; 12 pt font; 12 references minimum). Your case study will examine a chemical in a specific contaminated site or media. The case study will examine sources, pathways, receptors and controls for your target chemical(s) in the target environment. Your paper will be submitted according to a required format and will reference major peer-reviewed work and reviews. You will review major sources of the chemical - natural or manmade, fate and transport in the environment, toxicological endpoints in animals or humans and what environmental (natural or engineered) or regulatory controls aid in the mitigation of the exposure. The full paper is due on or before 11/25. A grading rubric for performance expectations will be available. Additional information is presented in the Resources section of the course web site. This work product is the most important in the course for demonstrating your mastery of the material.

Graduate Credit Book Review:

Students taking the course for graduate credit will be required to perform a **critical** book review for a book from a recommended list found on the course Web site or a book submitted for instructor approval. The books are focused, in-depth analyses of subjects such as endocrine disruption, risk analysis, pesticide use or specific chemicals. There is an option to submit a proposal for your own book selection. The report will be reviewed for completeness, scientific accuracy, and presentation (readability, grammar, and spelling). The report should review the technical issues of the book and examine the presentation for bias and completeness. The review should reflect your scientifically defendable, critical opinion of the thesis of the book. The report should attempt to update the material and/or conclusions presented in the book with a review of current information found from reliable sources such as the scientific literature (5 or more references). The max length for this double spaced (1 inch margins; 12 pt font) report is 15 pages (fully inclusive). The completed review is to be submitted no later than 12/7. Additional information is presented in the Resources section of the course web site. The expected standard of writing is that of professional publication. At least one online, telephone, or in-person instructor-graduate student interview will be scheduled to discuss the outline, scope, and progress of this paper.

It is your responsibility to understand what plagiarism is and how to avoid it. Any paper with sections that are either entirely or partly copied, is copied word-for-word, or is rephrased by changing words in a sentence (or from another student's or author's work) is not acceptable. These are instances of plagiarism, which is a very serious academic offense that involves stealing another person's thoughts. Your writing will be compared electronically with millions of data-based documents and examined for copied phrases and for sentence structure rearrangements. Copying phrases or rearranging an author's sentence structure is considered plagiarism, which is a very serious academic offense with the consequences outlined in the syllabus. If you are unfamiliar with the definition and examples of plagiarism, or the guidelines for avoiding plagiarism please refer to the course syllabus and the wealth of quality plagiarism guidelines searchable on the WWW.

***IMPORTANT: All papers submitted will be electronically scanned for evidence of plagiarism. Evidence of plagiarism will result in an automatic grade of zero for the submitted work, and in severe cases carries the potential for university academic dishonesty review and sanction according to university policies (see below).

Grading Breakdown:

	409 Students	509 Students
Homework & discussion	25%	20%
Exams #1 and #2	25%	20%
Final Exam	20%	15%
Case Study Report	30%	25%
Book Review	Not required	20%

Grade Distribution:

The grade scale applied each semester may be curved depending on class achievement (e.g., an A grade may be earned with 89% as opposed to 90%). Students enrolled in 409 or 509 are in different final course grade distribution pools so the extent of grade curving could be different.

Grade Scale		
>90%	Α	
80-89%	В	
70-79%	С	
60-69%	D	
≤59%	F	

Relationship of Grading Strategy and Student Learning Outcomes:

- 1. Homework will require an understanding of lecture material and reading assignments.
- 2. Exams will require students to demonstrate mastery of course material and synthesize available information into practical demonstrations of food toxicology concepts.
- 3. Course papers will require the student to demonstrate their subject matter mastery, communication skill, and ability to obtain primary sources of best available information in an applied science interpretative challenge.
- 4. Grading rubics for written papers will be available to students to link subjective assessment targets with student work submission.

Campus Resources: UI Library; WSU Library; UI Writing Center; WSU Writing Center

Disability Support Services Reasonable Accommodations Statement:

<u>UI</u>: Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through Disability Support Services located in the Idaho Commons Building, Room 306 in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course.

- 208-885-6307
- email at <dss@uidaho.edu>
- website at <www.access.uidaho.edu>

Students should present a completed and signed Accommodation Checklist for the current semester from Disability Support Services when requesting accommodations. Students should not present the checklist before or after class, if they do, request that they see you during your office hours. If they do not have a current checklist both completed and signed, please refer them to the Disability Support Services office (Idaho Commons, Room 306) to obtain one. If you have any questions regarding a student(s) with a disability(s), or how to best work with a particular student in class, please contact our office.

WSU: Reasonable accommodations are available for students with a documented disability. WSU Online and the Access Center work together to provide reasonable accommodations for students who have documented disabilities and who are registered both with WSU Online and the Access Center. WSU Online's liaison to the Access Center will assist you in getting started. To begin this process, contact WSU Online (800-222-4978 or distance@wsu.edu). We strongly recommend that you notify us as soon as possible. All accommodations must be approved through the Access Center.

Course Honor Code:

Terms and conditions for students taking this course (EnvS/FS 436/536). By enrolling in this course, you agree to the following terms and conditions:

- 1. I will not use or represent the work of another as my own. This specifically includes the use of other students' work, WWW resources, and published works. I understand that attribution of source is encouraged and a part of the ethical practice of science and learning.
- 2. I will abide by the instructions on exams, tests, quizzes and homework assignments when they are labeled or assigned as closed book, individual effort or other such designation of assistance or period of performance. I further understand that it is my ethical duty, on my honor, that I abide by these instructions even in the absence of an instructor or exam proctor.

UI Academic Integrity:

University of Idaho, Faculty Staff Handbook: ARTICLE II--ACADEMIC HONESTY. [section renumbered 8-07]

- 1. Cheating on classroom or outside assignments, examinations, or tests is a violation of this code.
- **2.** Plagiarism, falsification of academic records, and the acquisition or use of test materials without faculty authorization are considered forms of academic dishonesty and, as such, are violations of this code.
- **3.** Because academic honesty and integrity are core values at a university, the faculty finds that even one incident of academic dishonesty seriously and critically endangers the essential operation of the university and may merit expulsion. [rev. 7-98]
- **4.** The operation of UI requires the accuracy and protection of its records and documents. To use, make, forge, print, reproduce, copy, alter, remove, or destroy any record, document, or identification used or maintained by UI violates this code when done with intent to defraud or misinform.
- **5.** All data acquired through participation in UI research programs is the property of the university and must be provided to the principal investigator. In addition, collaboration with the University Research Office for the assignment of rights, title, and interest in patentable inventions resulting from the research is also required [see <u>5400</u> A through E].
- **6.** Entrance without proper authority into any private office or space of a member of the faculty, staff, or student body is a violation of this code.
- **7.** It is also a violation to hack or make unauthorized use of any computer or information system maintained by the university or a member of the faculty, staff, or student body. [rev.7-05]
- **8.** Instructors and students are responsible for maintaining academic standards and integrity in their classes. Consequences for academic dishonesty may be imposed by the course instructor. Such consequences may include but cannot exceed a grade of "F" in the course. The instructor should attempt to notify the student of the suspected academic dishonesty and give the student an opportunity to respond. The notice and the opportunity may be informal and need not be in writing. Penalties for any disciplinary infraction must be judicially imposed. [See 1640.02 C-5] [rev. 7-98]
- 9. Instructors may report incidents of academic dishonesty to the dean of students. Upon receiving such a report, the dean of students shall provide the student with written notice that a report has been made and an opportunity to meet with the dean to discuss the report. The dean of students shall maintain the report and any record of the meeting for a period of time deemed appropriate by the dean. The dean of students may file a complaint against the student after the meeting has taken place or the student has elected, either affirmatively or through inaction, not to meet with the dean. [add. 7-98]

WSU Academic Integrity:

WSU expects all students to behave in a manner consistent with its high standards of scholarship and conduct. Students are expected to uphold these standards both on and off campus and acknowledge the university's authority to take disciplinary action. The purpose of these standards and processes is to educate students and protect the welfare of the community. The standards of Conduct for Students can be found at http://conduct.wsu.edu University instructors have the authority to intervene in all situations where students are

suspected of academic dishonesty. In such instances, responsible instructors retain the authority to assign grades to students considering, from an academic standpoint, the nature of the student action. More information regarding responding to academic integrity violations can be found at http://conduct.wsu.edu. Feel free to contact the Office of Student Standards and Accountability (335-4532) if you would like more specific information about the process. Writing Programs (335-7959) can assist with proactive assignment design that minimizes intentional or unintentional academic dishonesty.

Plagiarism:

Plagiarism is defined by Webster's Dictionary as, "to steal and pass off the ideas or words of another as one's own." There are two general forms of plagiarism:

- (a) Unintentional: the use of other writers' words, phrases, sentences, paragraphs as though they were your own without understanding the need to cite the original source. Unintentional plagiarism normally occurs when the individual does not understand the conventions of scientific writing and the need to cite sources of information.
- (b) Intentional: the use of other writers' work and claiming it as your own. Intentional plagiarism includes knowingly copying or incorporating sections of books, articles, or other sources into your work without citation.

To avoid plagiarism, you must acknowledge the source of information. In scientific writing, this can be performed in the text of your work through the use of surnames of authors and the year of publication or by using numbers enclosed by parentheses which correspond to specific citations in the reference section. In addition to employing citations in the text, plagiarism can be avoided by applying special techniques when writing about information obtained from a source:

- (a) Paraphrase: rewording information in which you accurately present the main ideas from the source but do so using your own organization, words, and sentence structures.
- (b) Summary: a concise statement of the main idea from a section within a source.
- (c) Direct quotation: use of quotes surrounding the passage written by another author.

In general, paraphrasing (a) and the use of summary statements (b) are very common techniques used in scientific writing. Use of quotations (c) in scientific writing is rare and should be avoided.

Plagiarism is dishonest and is **not** tolerated. If caught using all or portions of a current or former classmate's writing or other sources of information, a grade of "zero" will be given for the exercise. Additional penalties for plagiarism are possible as outlined in the University of Idaho and/or *Washington State University Student Handbook*.

Safety:

Washington State University is committed to maintaining a safe environment for its faculty, staff, and students. Safety is the responsibility of every member of the campus community and individuals should know the appropriate actions to take when an emergency arises. In support of our commitment to the safety of the campus community the University has developed a Campus Safety Plan, http://safetyplan.wsu.edu It is highly recommended that you visit this web site as well as the University emergency management web site at http://oem.wsu.edu/ to become familiar with the information provided.

Course Sustainability Statement:

With the possible exception of the textbook, this course is designed to be electronically available, and paper-free. Exams, homeworks, and students papers are all distributed and returned electronically. Think first about printing, and please only print course material if it is necessary.