



**SW 210: Environmental Issues of the 21st Century
Fall Quarter 2009**

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Akilah Martin is an assistant professor at SNL and earned her Ph.D. in Agricultural and Biological Engineering from Purdue University. Her teaching and research interests include enhancing soil and water quality through education and promotion of its awareness locally, nationally, and globally.

COURSE SUMMARY: Have you ever wanted to enhance your environmental awareness locally, nationally, and internationally? Do you ponder your impact on the earths' natural resources? This course will provide students with the resources to explore environmental quality, sustainability, natural resources, water, soil, and air quality, global warming, and human interactions with the environment. A series of discussions, activities, guest speakers, debates, oral presentations, and computer modeling exercises will offer concept comprehension as well as insight in improving environmental quality. At the end of the course students will reflect on ways to improve environmental quality individually and as a community.

LEARNING EXPERIENCE

This course aims to provide students with tools that will enable critical thinking on environmental quality and sustainability topics through discussions on environmental issues/concerns locally, nationally, and globally.

CLASS MEETING TIMES: See SNL Registration

REQUIRED TEXT: Environmental Science: A Global Concern. Cunningham, Cunningham, and Saigo, 9th Ed. 2005.

COMPETENCIES:

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

S-1-A: Can explore natural phenomena or the world of everyday experiences using scientific methods, and can use theories to interpret observations.

1. Identifies aspects of the natural world or everyday experiences that spark interest or curiosity or that pose problems.
2. Applies a generally accepted model(s) of scientific inquiry to (1).
3. Uses or develops a theory, model, or set of principles to interpret observations and experience.

Students demonstrate this competence by experiencing science as a systematic and reflective process. Spurred on by curiosity or a perceived problem, students make observations and draw well-supported, justified generalizations. Wondering, getting familiar with the phenomena, posing questions, hypothesizing answers, observing, testing, interpreting results, framing conclusions, revising hypotheses — this is the process of scientific reasoning.

In this course, scenario and case studies pertaining to environmental quality (locally, nationally, and globally) will be provided for discussion, comprehension and interpretation. A series of individual (self-assessment) and community environmental “walk-through” will enable students to identify their role in improving and sustaining environmental quality. Through computer modeling, comprehension of negative impacts and/or consequences on environmental quality students will be able to hypothesize research, develop methods, and form conclusions based on results provided from modeling.

S-3-C: Can understand the scientific and social dimensions of an environmental issue.

1. Uses environmental science to understand a local, regional, or global environmental concern.
2. Demonstrates an understanding of the economic or social elements contained in an environmental problem.

Students demonstrate this competence by gaining an appreciation for the methods, models, and principles of environmental science or ecology. As humans strive to

shape the environment, our actions have both beneficial and deleterious consequences, as well as unintended ones. In the most general sense, this competence directs the student to explore the relationship between society's actions and their consequences in the environment.

In this course, soil, air and water quality will be defined, described, and discussed individually as well as collectively. Human dimensions of these natural resources will also be discussed (human interaction/impact with soil, air, and water). An exploration of various on-going political, social and economic discussions will allow students enhanced comprehension of "environmental quality" and the short and long-term impacts humans evoke, in addition to the decision-making process as impacted by stakeholders, political figures, social scientists, government agencies, and society. Students will gain an understanding that the environment in which we live is delicate and has limited natural resources, in which we as a society should be more proactive in enhancing.

S-4: Can describe and explain connections among diverse aspects of nature.

1. Describes one or more natural systems.
2. Explains how parts of the system are interconnected.
3. Demonstrates how such connections are found elsewhere in nature.

Students demonstrate competence by articulating how exchange occurs among seemingly disparate parts of nature and how interconnection among systems is basic to nature and results in an integrated whole. "Connections" is the most important word in this competence. All seemingly distinct parts of nature, including humans, are integrally connected to all other parts.

This course will explore environmental natural resources (i.e soil, water and air quality) connections scientifically as well as socially (local, national and global society). Considering that soil, water, and air are "limited" natural resources, various scientific research efforts will be explored in detail. Students will also become aware of public environmental values, perceptions, and behavior in connection with natural resources. In

addition, this course will offer students the opportunity to explore their individual connection and impact with environmental natural resources.

EVIDENCE

You will complete your competence(s) through:

- Learning various aspects of environmental natural resources, environmental quality, and sustainability. Students will be responsible for a project addressing a local or regional environmental concern. The project will be an outline of steps being taken to resolve an environmental concern that has an impact either socially or economically on a selected region. Project will address recommendations and solutions for resolving the matter based on evidence secured through various studies and databases by interested parties. The project will then be used in a student-lead environmental awareness seminar on campus.
- Several in class exercises and environmental debates will be used in this course. These items will offer a way for students to explore complex issues, to identify and analyze options from varied viewpoints, and to consider consequences.
- Students will also read, discuss and give oral presentations in current events on environmental issues locally, nationally, and globally. Students will individually give a 5-10 minute presentation on an environmental issue that has current impact, interest and relevance. Students may bring in guest speakers with prior approval to address and or augment a point of view on their particular environmental issue. PowerPoint presentations, charts, diagrams, and other visual aids are encouraged. Handouts with topic outline/presentation outline with data relevant to topic for class distribution are acceptable.
- Activities such as writing letters to community politicians, virtual tours, and computer modeling exercises will aid in building comprehension of society's impact on environmental natural resources.
- In addition, scenario driven assignments that will allow students to hypothesize and draw preliminary conclusions (problem-solving) concerning various environmental dilemmas. Students are responsible for a hands-on project dealing with differences of one of the following: water impact on agricultural needs,

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industrial water/soil pollution, waste disposal site safeguards, effective usage of recycling centers, and or political vs. industrial differences in approaches to water soil or air quality.

- Students will provide feedback (reaction comments) on various discussions throughout the quarter.

Field Trips:

- Army Corps of Engineers Restoration Site located in Hammond, IN that is strongly recommended that students attend.
- Second Field Trip (TBD)

OUTCOMES

After completing this course, students should be able to demonstrate an enhanced environmental awareness individually, as a community, socially, economically, as well as scientifically. Students should be able to recognize, discuss, and evaluate environmental issues and concerns that face today's global community. In addition to recognizing and understanding current environmental issues, students should be cognizant of the various research areas and solutions/recommendations that have been made.

EXPECTATIONS

Students will be expected to read, write, and discuss during and outside of class assigned topics as appropriate. Reaction notes and participation in discussion of assigned readings and exercises are also expected. There will be a minimum of 2 hours of homework per week. There will be some group exercises throughout the class period. Every student is expected to participate in all aspects of the course outlined in the syllabus.

ASSESSMENT CRITERIA

Completeness-did you cover all relevant materials/questions? Did you follow directions?

Connections-did you make connections between issues?

Clarity-was the paper readable, grammatically appropriate, and well organized?

Course Material-did you use appropriate reading and other course materials in your work?

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Note: All assignments handed in should contain student contact info, such as: Name, Number, Student ID, Enrolled Competence, Assignment title and Date.

Course Topics

**Note: You will receive at each class period class and homework assignments.
I reserve the right to modify syllabus and assignments.**

Tentative Topics
Our Environment
Water: Is there enough?
Human Populations
What is in the wake of Pollution and Global Warming?
Organic Food? Land Use
Recycling/Waste Management: Where exactly does it go?
Energy and Oil: what are the alternatives?
Conservation, Sustainability, and Quality: where do we go from here?

Expected Weekly Assignments:

Chapter Readings, Review and Critical Thinking Questions, Environmental Journal, Current Event Article, Case Study Notes/Findings, Lead Discussions, and any other small additional assignments for knowledge enrichment.

Note: Class participation is mandatory, as this has an assigned point value.

Online resource for writing up scientific research: <http://www.clet.ait.ac.th/el21open.htm>

General resource for “The Nuts and Bolts of College Writing”
<http://nutsandbolts.washcoll.edu/>

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Grading Scale

Homework and Group Assignments 40%

Class Participation 20%

Debate 20%

Assessments/Evidence 20%

A- 90-100%

B- 80-89%

C-70-79%

D-60-69%

F- <60%

DePaul University Academic Integrity Policy

DePaul University is a learning community that fosters the pursuit of knowledge and the transmission of ideas within a context that emphasizes a sense of responsibility for oneself, for others and for society at large. Violations of academic integrity, in any of their forms, are, therefore, detrimental to the values of DePaul, to the students' own development as responsible members of society, and to the pursuit of knowledge and the transmission of ideas. Violations include but are not limited to the following categories: cheating; plagiarism; fabrication; falsification or sabotage of research data; destruction or misuse of the university's academic resources; alteration or falsification of academic records; and academic misconduct. Conduct that is punishable under the Academic Integrity Policy could result in additional disciplinary actions by other university officials and possible civil or criminal prosecution. Please refer to your Student Handbook or visit <http://studentaffairs.depaul.edu/homehandbook.html> for further details.

Plagiarism

Plagiarism is a major violation of academic integrity involving the presentation of the work of another as one's own. Plagiarism includes but is not limited to the following:

- The direct copying of any source, such as written and verbal material, computer files, audio disks, video programs or musical scores, whether published or unpublished, in whole or part, without proper acknowledgement that it is someone else's.
- Copying of any source in whole or part with only minor changes in wording or syntax, even with acknowledgement.
- Submitting as one's own work a report, examination paper, computer file, lab report or other assignment that has been prepared by someone else. This includes research papers purchased from any other person or agency.
- The paraphrasing of another's work or ideas without proper acknowledgement.

DePaul University Incomplete Policy

Undergraduate and graduate students have two quarters to complete an incomplete. At the end of the second quarter (excluding summer) following the term in which the incomplete grade was assigned, remaining incompletes will automatically convert to "F" grades. In the case of the Law School incompletes must be completed by the end of the semester following the one in which the incomplete was assigned. Ordinarily no incomplete grade may be completed after the grace period has expired. Instructors may not change incomplete grades after the end of the grace period without the permission of a college-based Exceptions Committee. This policy applies to undergraduate, graduate and professional programs. NOTE: In the case of a student who has applied for graduation and who has been approved for an Incomplete in his or her final term, the incomplete must be resolved within the four week grace period before final degree certification.

Note: The SNL student who wishes to receive the grade of IN must formally request in writing that the instructor issue this grade. This request must be made before the end of the quarter in which the student is enrolled in a course.

Disability Accommodations

Reasonable accommodations will be provided for students with disabilities on an individualized and flexible basis. The Office of Students with Disabilities (OSD) determines appropriate accommodations through consultation with the student. For certain learning disabilities and/or attention deficit disorders, the Productive Learning Strategies Program (PLuS) determines the appropriate accommodations. See the instructor for more information or call OSD at 773-325-7290 (phone) or 773-325-7296 (TTY); or call PLuS at 773-325-1677.

Chronic Illness Initiative

The Chronic Illness Initiative (CII) provides access to higher education for students disabled by a chronic illness. Students who struggle with illnesses that unpredictably increase and decrease in severity such as chronic fatigue syndrome, rheumatoid arthritis, lupus or illnesses requiring frequent hospitalizations such as cancer or heart disease, may have found it difficult, if not impossible, to meet the requirements of a conventional college program. At the School for New Learning, staff and faculty are compassionate and committed to helping CII students achieve their educational goals. For more information, contact CII at CII@depaul.edu.

Resources for Student Writers

The DePaul University Writing Centers offer resources for student writers through drop-in, by- appointment, and online services. Learn more about the Writing Centers by visiting their Web site at <http://condor.depaul.edu/~writing/>. The Loop Writing Center is located at 1620 Lewis Center; for hours and more information call 312-362-6726 or email wcenter@depaul.edu.

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DePaul Code of Student Responsibility

The Code outlines the minimum acceptable level of conduct expected of every student of DePaul University, including respectful classroom behavior. DePaul condemns any form of harassment, discrimination, and/or assault behavior and any such conduct is subject to University disciplinary sanctions. See <http://studentaffairs.depaul.edu/handbook/index.html> for the complete Code of Student Responsibility.

Complaints Regarding Grades, Teaching, or Advising

Students with complaints about grades, teaching, or advising should first try to resolve the problem with the faculty or staff member involved. If no satisfactory resolution can be reached, students may then discuss the matter with the Dean of the School for New Learning, 200 Lewis Center, 312-362-8001.