

**CEDAR CREST COLLEGE**  
**Welcome to BIO 111, Concepts in Ecology and Environmental Issues**  
**Lecture Syllabus – Fall 2009**

**Instructor:** Professor Judith Malitsch

**Office:** Miller 23; **Office Hours:** M 4-5 PM, W 1-4, R 1-2 and by appointment.

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**Meeting Times/Places/Important Dates:**

Lecture (SCI 136): MWF 10-10:50

Labs (SC 102): M 1-4, T 8-11

Labor Day: 9/7-NO CLASSES

Fall Break: 10/12, 10/13

President's Inauguration 10/23 – NO CLASSES

Withdrawal Date: 11/9 @ 4 PM

Thanksgiving: 11/25-11/29

Classes End: 12/8

Reading Days: 12/9, 12/10

Final Exam: TBA (12/11- 12/15)

***From The Provost's Office:*** "Your obligations for this course include attendance at the final exam. Do not make travel arrangements until the final exam schedule is published; if you must make plans early, you should schedule your travel after the last final exam day."

**BIO 111 Concepts in Ecology and Environmental Issues**

4 credits (lecture and lab)

This course will heighten your awareness about contemporary environmental issues and concerns that affect us locally, nationally and globally. We will also explore the relationships of environmental problems to social, economic, political and ethical issues. Historical perspectives about the environment will also be presented in order to increase your appreciation for the world around you. In order to understand these environmental concerns it is important to study the nature of our non-renewable and renewable resources and the relationships of organisms to one another and to their environment. As a result of your experiences in lecture and lab, you will improve your scientific literacy in the understanding of ecological organization and biodiversity, environmental problems and their impact and application to human existence, and how the consequences of our activities affect air, land, water and organism interactions. Hopefully, your curiosity will be intensified and you will become a better evaluator, develop opinions based on information and embrace environmental stewardship.

*Prerequisites: None; Lecture 3 hours/week; Laboratory 3 hours/week*

**I. Course Objectives**

Biology 111 fulfills a *Natural Science* requirement of the Liberal Arts Curriculum at Cedar Crest College. For this component of your Liberal Arts Curriculum, the content will focus on providing environmental literacy through a development of terminology, ecological concepts, scientific reasoning, an exposure to global, national and local environmental issues and experiences, knowledge of issues impacting humans and an understanding of the nature and extent of human influences on the natural systems and an appreciation for environmental

sustainability. Instruction is aimed at understanding and developing responsible environmental behavior, a respect for the equilibrium that needs to exist between the quality of life and the quality of the environment and a sense of stewardship towards preserving the environment.

## **II Learning Outcomes/Assessment:**

1. Students will develop scientific reasoning skills by studying and observing ecosystems, biodiversity, renewable and non-renewable resources, and exploring the scientific debates about environmental issues with the application of the scientific method and environmental impact statements.  
**Assessment:** 4 exams with objective and essay questions, writing assignments, discussion.
2. Students will develop the ability to understand issues of local, national and global significance through a biological and chemical lens.  
**Assessment:** Class discussion, writing assignments, 4 exams with objective/essay questions.
3. Students will address health issues consequential of environmental alteration.  
**Assessment:** Writing Assignments, 4 exams with objective/essay questions, class discussion
4. Students will demonstrate the ability to communicate clearly, both orally and written.  
**Assessment:** Reading assignments, discussions, 4 exams.
5. Students will demonstrate technological competency and information literacy, including the ability to evaluate credible technological and informational resources.  
**Assessment:** Internet assignments.
6. Students will demonstrate social responsibility, good citizenship and articulate the value systems of themselves and others.  
**Assessment:** Writing Assignments, discussions and 4 exams.
7. Students will demonstrate in writing their ability to think critically about environmental issues as they evaluate the media and other sources.  
**Assessment:** Class discussion, writing assignments.
8. Students will demonstrate their understanding and appreciation of the concept that the effects of human activities are transmitted through linkages among air, water, land and biodiversity and often difficult to predict.  
**Assessment:** Class discussion, writing assignments, exam essay questions.

## **III. Required Texts and other Materials:**

Raven, Peter H., Berg, Linda R. & Hassenzahl, David M. (2008). *Environment, 6<sup>th</sup> Ed.*  
Somerset, New Jersey: John Wiley & Sons, Inc.

Visit [www.cedarcrestonline.net](http://www.cedarcrestonline.net) for the eCompanion component of this course. All power point presentations and other information can be found under *content* and *document sharing*. A brochure is being provided to help you navigate the website.

[www.wiley.com/college/raven](http://www.wiley.com/college/raven), Student Companion Site

Kayhart, Marion, Y. Sproule, Dolores, (2009). 8<sup>th</sup> edition, *Contemporary Biology: Ecology and the Environment*. DOLMAR BIO, LLP

Notebook, Folder, Highlighter

## IV. POLICIES

### Attendance:

**Lecture- Expected;** if an *unavoidable* absence occurs on a test date, you must notify me prior to the start of class for any make-up consideration. Additionally, documentation from the Dean of Student's Office is required. Extended illnesses must also be reported to the Dean of Student's Office. For other absences, ask a classmate to collect any handouts for you and review the notes with you. **You** are responsible for any missed information, assignments and due dates. Excessive tardiness may also be penalized at my discretion. It is disruptive and violates classroom protocol.

**Lab - Mandatory;** on non-test days absences without documentation from the Dean of Student's Office will result in a zero for missed the lab class(s). Zeroes will be averaged into your lab report grade for each absence. Extended illnesses must also be reported to the Dean of Student's Office. Lab absences on a test day will result in a zero without documentation from the Dean of Student's Office or an incomplete grade for the course (as outlined in the laboratory syllabus) with proper documentation.

### Tests/Assignments:

You have a responsibility to be present for all lecture tests. Tests are non-cumulative, thus covering information from the last test to the present information. Remember, in the event of an **unavoidable** absence, you must notify me prior to class time and provide documentation as stated above. Tests must be completed within one week of an unavoidable absence; non-compliance will result in a zero. If you arrive late for a test, you forfeit that time for completing the test. Test etiquette will be enforced which means that unnecessary writing, drawing or comments are not permitted.

FINAL EXAM TIMES CANNOT BE REARRANGED (Departmental Policy) unless 3 or more exams occur within a 24 hour period. Any exception must be petitioned and reviewed by the Department of Biological Sciences. Please note the week scheduled for final exams and plan to be on campus. As soon as the exam schedule is finalized, I will announce our exam day in class. **Failure to be present for your final exam results in an automatic zero for the exam.**

Writing (Journal) assignments are assigned throughout the semester relevant to class topics. **All assignments must be word-processed, 12 font-*Times New Roman*, SOLID BLACK ink and stapled in order unless otherwise indicated.** A printer out of ink is not an acceptable excuse. If the assignment is late or prerequisites are not followed, penalties will be assessed or the assignment may not be graded = zero points for that assignment. Assignments handed in after class are considered late and will be assessed a 10% penalty per day including weekends. The criteria for credit are given with each assignment. Each assignment will be graded on a point system = # correct divided by the total # possible points. Therefore, no assignment, no points. Emailed journal assignments will NOT be accepted unless authorized through eCompanion.

\*\*\*\*\*Collectively, the Journal Assignment Average = 1 Test Grade\*\*\*\*\*

## **Grading:**

You will earn one grade for this course and your final grade is computed as follows:

**Your final course grade = 2/3 lecture + 1/3 lab**

**A minimum grade of 'C' is required for all LAC courses.**

**Lecture Grade:** An average of 5 grades: 4 tests + the *JA* Grade  
(the final exam = Test #4)

Seminars/Extracurricular Opportunities will count as bonus points added directly to your final lecture grade. These opportunities may be self-designed, notifying me of your intent or attended through the CCC community or the Department of the Biological Sciences. I will announce these opportunities in class. Points awarded will depend upon the opportunity, generally in the range of 1-3 points. **A maximum of 5 bonus points will be allowed.**

**Lab Grade:** 60% of the average of 2 practical tests + Exercise 9  
40% of the lab report average from Exercises 1-9

<b>Grading Scale:</b>	A	93-100	C+	77-79
	A-	90-92	<b>C</b>	<b>73-76</b>
	B+	87-89	C-	70-72
	B	83-86	D+	67-69
	B-	80-82	D	60-66
			F	Below 60

*Attendance and participation always considered in borderline cases.*

**Cedar Crest College: The professors within the Department of Biological Sciences support the campus-wide policies as described in the *Student Handbook*.**

I fully support the **Cedar Crest College Honor Code, Academic Standards of Integrity and the Classroom Protocol code** as stated in the *Student Handbook*. Cheating will result in a zero for tests/assignments. If necessary, violations should be brought to my attention. We must respect the rights of others in this learning environment. Depending upon the infractions regarding classroom protocol, violations may result in a forfeit of all bonus points, removal from class and be formally addressed by the appropriate individuals: Dr. Carol Pulham (Provost), Dr. John Cigliano (Chair), Dr. Denise O'Neill (Acting Dean of Students), Christine Nowik (Director of the Academic Services), and the Honor and Judicial Board. There will be zero tolerance for disruptive, disrespectful behavior. Security may be called in the event such behavior occurs. *Each student should read the codes and abide by them throughout the course.*

I fully support the College's policy on plagiarism as described in the Student Handbook. Based on the severity of the offense, students may be required to redo an assignment or earn an F for the assignment. Cases will be reported to the Provost as necessary.

Students with documented disabilities who may need academic accommodations should discuss these needs with their professors during the first two weeks of class. Students with disabilities who wish to request accommodations should contact the advising center.

### **Need To Know:**

1. All students must have CCC email for communication and in the event of an emergency.
2. Promptness, courtesy and respect are expected in all aspects of the course.
3. Cell phones must be turned off or silenced unless there is an emergency.
4. Guests, cell phones and any other technological devices are not allowed during tests.
5. It is highly recommended that students DO NOT sit close to each other during tests
6. Food and drinks, including anything bottled, are not permitted in the laboratory.
7. You must wear closed-toe shoes while in the laboratory.
7. Children are not permitted in the laboratory.
8. SC Building Hours: Sun. – Fri. 7 AM – 10 PM; Sat. 7 AM – 6 PM
9. Reference books are located in SC 102. You may use them but please do not remove them.

### **V. SUCCESS IN CLASS (Survival Notes):**

1. Read, Read, Read..... the **TEXT** noting assigned chapters/chapter summaries, tables, graphs, figures and any handouts. Make an effort to preview the chapter prior to class.
2. Highlight all **bold-faced** terms and their definitions; Read the *EnviroNews*, *You Can Make a Difference*, *Case In Point* and *MEETING THE CHALLENGE* sections. We will access *World View and Closer to You* as needed.
3. Study the end of chapter *Review of Learning Objectives with Key Terms*. Note all bold-faced terminology in the chapters.
4. **STUDY YOUR NOTES; let your notes be your guide to studying the text information**
5. Maintain organization with all the information.
6. Complete all journal assignments-**remember they count as a test grade!**
7. Be an active learner-participate in class; each of you has a lot to offer!
8. Seek the help of a tutor (free) available through Academic Services now or as soon as you are experiencing difficulty; ext = 3484, Curtis 109.
9. Remember these 3 important C's: Communication, Courtesy & Common Sense
10. With effort in this class, everyone should be successful! ☺

## Concepts in Ecology and Environmental Issues Content Outline/ Topic Sequence – Fall 2009

<b>Test Dates: Wednesday, September 16, 2009:</b>	<b>Test #1</b>
<b>Wednesday, October 14, 2009:</b>	<b>Test #2</b>
<b>Wednesday, November 11, 2009:</b>	<b>Test #3</b>
<b>December 11-15 2009, TBA:</b>	<b>Test #4</b>

<b>Topics</b>	<b>Chapters</b>
Importance of Scientific (Environmental) Literacy	1, 2, 25
Understanding Our Environment	
Overview of Global/National Environmental Areas of concern	
Addressing Environmental Problems	
Environmental Ethics/Philosophies	
Environmental Policies and Law	
Recommendations for Sustainable Living	
Ecological Concepts, Ecosystems	3, 4, 5, 6
Environmental Interrelationships	
Biodiversity	17
Importance of Land Sustainability	18
The Pesticide Dilemma	23
Toxicology & Environmental Health	7
Our Atmosphere, Air Pollution	20, 21
Atmospheric Change	
Water: Use, Management and Pollution	14, 22, page 142
Soil, Crops, Our Food	15, 19
All About Populations	8, 9, 10
Waste: Solid, Toxic, Hazardous	24
Energy	11, 12, 13
Our Environmental Accountability	25

Also note Appendices II- Graphing (useful for lab also) IV- Metric Conversions, V-Abbreviations & Acronyms and the Glossary

*This outline is a guideline for the topics that we will be addressing. The dates for these topics remain flexible unlike the test dates which will occur as listed. Test material will only include what we have accomplished. Since environmental issues are contemporary issues, sometimes our class will need to discuss a current event in lieu of the ongoing class topic. I encourage open discussion and a free exchange of ideas and by all means, if you have something to share from your own experience or an article you have read, please do so! My responsibility to you, my students, is to provide you with information from many different disciplines, and wherever possible, from differing viewpoints.*