

Three Rivers Community College
BIO K180: Principles of Environmental Science, ENV K101: Environmental Studies
Spring 2016
Tentative Course Syllabus

Course Instructor: Bruce Gregoire

Email: bgregoire@qvcc.commnet.edu

Meeting Day/Time: Tuesday, 6:30 – 9:15 pm, Room E206

Office Hours: By appointment.

Required Text:

Environmental Science, Toward a Sustainable Future, 12th Ed. Authors: Richard T Wright and Dorothy F Boorse.

Additional Suggested Reading:

A Sand County Almanac: And Sketches Here and There by Aldo Leopold

Garbology: Our Dirty Love Affair with Trash by Edward Humes

Silent Spring by Rachel Carson

Course Description:

This basic course in environmental studies introduces ecological principles and a global perspective on environmental problems such as deforestation, global climate change, droughts, floods, soil erosion, loss of biodiversity, and pollutants. It describes, in detail, the study of the biological and physical aspects of the environment and related issues, highlighting sound science, sustainability, and stewardship. Additionally, this course emphasizes a global and cross-cultural perspective on issues pertaining to environmental science, including discussions on human population expansion, environmental racism, socioeconomic stratification, global stewardship, social modernization, and establishing a framework for a sustainable future.

Course Outcomes:

The student will:

- Develop an understanding of their own personal impact on the environment
- Develop a global perspective of environmental issues
- Evaluate the relationship between human population growth and other environmental problems
- Demonstrate an understanding of the political, social, and economic factors in environmental management
- Describe the structure and function of ecosystem components
- Evaluate solutions to human population problems

Course Goals:

Students will have a greater understanding of how interconnected the environment is and how humans are connected to the environment. Students will learn to recognize that different environments do not exist in isolation, that actions by nature and humans can have positive and negative consequences. Students will explore their own actions and beliefs about the environment and environmental issues.

Organization:

This course is a lecture/in-class participation course. The assigned reading will form the basis for in-class discussions. In-class attendance/participation and assignments will be a significant portion of the overall grade.

Three Rivers Community College
BIO K180: Principles of Environmental Science, ENV K101: Environmental Studies
Spring 2016
Tentative Course Syllabus

Week	Date	Topic		Chapter Reading/Assignment
1	Jan 26 th	Introduction, Class overview, Syllabus 1) Science and the Environment 3) Basic Needs of Living Things - " <i>Inconvenient Truth</i> " video		Read Syllabus Read for next week : Ch 1, 3, 4, & 5 HW1: Ecological Footprint
2	Feb 2 nd	4) Populations and Communities 5) Ecosystems: Energy, Patterns, and Disturbance		Read for next week : Ch 6 & 7 HW2: Water Utilization
3	Feb 9 th	- Current Issue Presentations 6) Wild Species: Biodiversity and Protection 7) Use and Restoration of Ecosystems	HW1: Ecological Footprint assignment due	Read for next week : Ch 8 & 9
4	Feb 16 th	- Current Issue Presentations 8) The Human Population 9) Population and Development		Read for next week : Ch 11
5	Feb 23 rd	- Current Issue Presentations 11) Soil: the Foundation for Land Ecosystems - " <i>Dirt-The Movie</i> "		Read for next class : Ch 12 & 13 HW3: Transportation Use and Expense
6	Mar 1 st	- Current Issue Presentations 12) Production and Distribution of Food 13) Pests and Pest Control		Read for next week : Ch 10 & 20
7	Mar 8 th	Current Issue Presentations 10) Water: Hydrologic Cycle and Human Use 20) Water Pollution and Prevention	HW2: Water Utilization assignment due	Read for next Class: Ch 14, 15, 16, & 19
8	Mar 15 th	Mid-term Exam		
9	Mar 22 nd	**NO CLASS - SPRING BREAK**	Mar 22nd – World Water Day	
10	Mar 29 th	- Current Issue Presentations 14,15&16) Energy and Energy Production 19) Atmospheric Pollution		Read for next week Ch 21 & 22 HW4: Tracking Trash Audit
11	Apr 5 th	- Current Issue Presentations Waste: The 102 Ton Legacy		
12	Apr 12 th	- Current Issue Presentations Waste: Nurdles - Plastic and the Oceans	HW3: Transportation Use and Expense assignment due	
13	Apr 19 th	- Current Issue Presentations Waste: The Four R's - " <i>Waste Land</i> " video	Apr 22nd - Earth Day	Read for next week : Ch 17 & 18
14	Apr 26 th	- Current Issue Presentations 17) Environmental Hazards and Human Health 18) Global Climate Change		Read for next week : Ch 23
15	May 3 rd	- Current Issue Presentations 23) Sustainable Communities - " <i>A Convenient Truth</i> " video	HW4: Tracking Trash Audit assignment due	Final Exam Review
16	May 10 th	Final Exam - Cumulative		

Three Rivers Community College
BIO K180: Principles of Environmental Science, ENV K101: Environmental Studies
Spring 2016
Tentative Course Syllabus

Grading Plan:

Quizzes (5):	20% (Note 1)
Current Issue Presentation:	10%
Assignments (4):	20%
In-class activities	5%
Mid-term exam	20%
Final Cumulative Exam:	25%
Total	100%

Note 1. There will be no make-up quizzes without prior approval.

Course Grading:

Final letter grades for the course generally mean the following percentage of points:

Letter grade	Percentage of points	Percentage range
A	95	93.3 - 96.7
A-	91.65	90.0 – 93.2
B+	88.3	86.7 – 89.9
B	85	83.3 – 86.6
B-	81.65	80.0 – 83.2
C+	78.3	76.7 – 79.9
C	75	73.3 – 76.6
C-	71.65	70.0 – 73.2
D+	68.3	66.7 – 69.9
D	65	63.3 – 66.6
D-	61.65	60.0 – 63.2
F	<60.0	< 60.0

Quizzes (20%): In order to be prepared for class discussions, students must read the material prior to coming to class. A quiz may given on the assigned chapter reading(s) for that week. The lowest quiz grade will be dropped. **There will be no make-up quizzes without prior approval.**

Current Issue in Environmental Science Presentation (10%):

Each student will present a brief (5-10 minute) presentation to the class on a current issue in environmental science from a published news/journal article (you may need to get additional background information in order to do the presentation and summary). A minimum two-page summary of the article (7.5%) and a copy of the article(s) (2.5%) must to be turned in. In the summary, you will state why you think that this issue is important and what the potential impact is on the environment. **The instructor must approve the article at least one-week in advance and no two students can present on the same article.**

Assignments (20%):

During the semester, students will examine and record their local impact on the environment. This will be accomplished through four take home exercises: 1) Ecological Footprint, 2) Water Utilization, 3) Transportation Use and Expense, and 4) Trash Tracking Audit.

Three Rivers Community College
BIO K180: Principles of Environmental Science, ENV K101: Environmental Studies
Spring 2016
Tentative Course Syllabus

- 1) The Ecological Footprint (2%) will be completed online at at <http://www.earthday.org/footprint-calculator>. In order to get credit for the assignment you must turn in a printout of your ecological footprint (with your name on it).

- 2) Water Utilization (5%): Using the provided spreadsheet, you will keep track of your water consumption on a daily basis for a two-week period. This will include the total time that the water is running when you bathe (this includes the time that the water is on and you are not in the shower/bath). In addition to the spreadsheet (2%), a minimum one-page summary (3%) of your water utilization and ways to reduce your water consumption. Extrapolate your water consumption for your whole household based on your utilization .

- 3) Transportation Use and Expense (5 %): Using the provided spreadsheet, keep track of expenses associated with your transportation use for 30 days. In addition to the spreadsheet (2%), a minimum one-page summary (3%) of your transportation expenses. Include in you summary how you could further reduce you transportation expenses.

- 4) Trash Tracking Audit (8%): Using the provided spreadsheet, you will keep track of your waste generation for your household for a two-week period and summarize your results. In addition to the spreadsheet (3%), a minimum two-page summary (5%) of your trash generation and disposal and ways that you could lessen your impact on the environment and the solid waste stream.

In-class activities (5%): During the semester, in-class activities and discussions will take place. These activities are designed to foster your ability to think critically on matters relating to the world we live in and the potential impact on the environment.

Mid-term Exam (20%): There will be a mid-term exam in this course. The exam will test you on the material covered in class and the required reading.

Final Exam (25%): There will be a final exam in this course. The exam will test you on the material covered in class and the required reading. The final exam is cumulative.

Extra credit (2.5%): Attend a local planning and zoning meeting, environmental, or conservation committee meeting. Provide a brief two-page summary of the importance of public participation at the local governmental level. What did you think of this experience? Support your opinion with general examples observed at the meeting.

COURSE POLICIES

Class Etiquette:

The use of cell phones and personal handheld electronic devices during class detracts from the learning environment for both yourself and your classmates. Please place all cell phones on silent during the class. If you must answer a call, please leave the classroom quietly to do so. During

Three Rivers Community College
BIO K180: Principles of Environmental Science, ENV K101: Environmental Studies
Spring 2016
Tentative Course Syllabus

exams and quizzes, please turn in your exam/quiz prior to leaving, as it will be considered complete.

Late/Missed Work: All assignments are due by the date posted in the syllabus, unless otherwise specified. Worked turned in 1-week late will receive a 10% grade reduction. After this time the assignment will not be accepted and the student will receive a zero.

Attendance: Missing a day of lecture without prior arrangements will result in a zero for any missed quizzes. However, the student will be solely responsible for learning any missed material and handing in missed assignments. My contact information is provided at the top of this syllabus. If you inform me well in advance of an absence, I will be happy to make appropriate accommodations.

Make-ups: I need adequate notice to schedule make-ups: at least two weeks for normal life situations and at least one day for sudden emergencies. In case of a dire emergency, contact me as soon as you can through email. I reserve the right to ask for documentation of an emergency-related absence, and to deny a make-up in the absence of a clear life-or-death situation.

Withdrawal: The last day to withdrawal from this course is May 9th, 2016.

myCommNet Alert:

Is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college is delayed or closed due to weather. All students are encouraged to sign up for *myCommNet Alert*. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site.

http://www.trcc.commnet.edu/Div_IT/EducationalTechnology/Student.shtml

Student Code of Conduct:

All students should be aware of the guidelines for the Student Code (http://www.trcc.commnet.edu/Div_StudentServices/StudentPrograms/documents/TRCCstudenthandbook.pdf) College Policies: Promoting Academic Integrity at Three Rivers, a portion of which is repeated below:

“Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person’s ability to succeed in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work clearly document the sources of the material you use from others; and act at all times with honor.”

The penalty for cheating on a quiz or exam will be a zero on the affected assignment.

Three Rivers Community College
BIO K180: Principles of Environmental Science, ENV K101: Environmental Studies
Spring 2016
Tentative Course Syllabus

Counseling and Student Development Services at TRCC:

If you have a question regarding a special learning need that may affect your progress in this course, please contact Student Services, Room A-119 (860-383-5217) as soon as possible. *Please note that I cannot provide special learning accommodations until I receive the necessary paperwork from the college's Office of Counseling and Student Development Services. Accommodations cannot be provided retroactively.*

Available Support Services:

If you need additional assistance for this course, tutors, study skill workshops, and other course assistance can be arranged by contacting the Tutoring and Academic Success Centers, Room C117 (860-892-5713). If you have not yet used the library to obtain information and search scientific articles, you may contact the Library for more training and information (860-885-2346).

Religious Observances:

http://www.trcc.commnet.edu/Div_academics/Admin/Handbook/FullFacultyHandbook.pdf

Students have an obligation to notify their instructors in a timely manner regarding anticipated absences for religious observances. Based on procedures adopted by the College, students may be required to request accommodations during the first week of an academic semester or within a prescribed period of time before the anticipated absence. Requests should be made in writing stating the reason for the request, i.e., conflict with scheduled quiz, test, exam, assignment or activity, the religious observance that poses the conflict and the date or dates of such holiday. If an instructor is unfamiliar with a particular religious holiday, he/she may ask the student for a calendar or other documentation of the religious observance or holiday.

KEYS TO SUCCESS

Readings:

To ensure success in the classroom and to take active participation in your learning, each assigned reading should be read prior to the week assigned. Reading the material ahead of time will allow you to gain a familiarity with the concepts prior to learning about the concept in class. This will increase your understanding and allow you to participate by asking questions on the material that you find complex or confusing.

Attendance:

Although attendance is not mandatory, attendance is necessary to succeed in this course.

Digication:

As a student, you will maintain an online learning portfolio using a TRCC designed template. Through this electronic tool, you can see your own growth in college-wide learning. It may even help you to find the major that is a match to you. You can keep this Digication account after graduation, too. A Three Rivers General Education Assessment Team will select random works and review them so that we can improve the college experience for all. Your name will not be

Three Rivers Community College
BIO K180: Principles of Environmental Science, ENV K101: Environmental Studies
Spring 2016
Tentative Course Syllabus

attached to any of the assessment work; it is private. This tool will also be a “place” where you can connect your learning from the classroom, school, and life. Sometimes when you look at all of the work you have done and think about it, you learn something else. In Digication, you will be able to make other portfolios, too. It’s like a file cabinet with the ability to have multiple but separate files. What is exciting about the electronic tool is when you look inside you will see you are developing in new ways! Look at your class outline to see what assignments to post into the TRCC Template; you may post your own choices, too. Have fun in learning!