

**Spring 2012**  
**Environmental Studies**  
**Course: BIO K180, ENV K101**  
**Tentative Course Syllabus – Subject to Change**

**Meeting Day/Time: Tuesday, 6:30 – 9:15 pm, Room E206**  
**Course Instructor: Bruce Gregoire Email: [bgregoire@qvcc.commnet.edu](mailto:bgregoire@qvcc.commnet.edu)**  
**Office Hours: by appointment**

**Required Text:**

Environmental Science, 11<sup>th</sup> Ed. Authors: Richard T Wright and Dorothy F Boorse.

**Additional Suggested Reading:**

Silent Spring by Rachel Carson

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

Nature's Services: Societal Dependence on Natural Ecosystems, edited by Gretchen C. Daily

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 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.

**Spring 2012**  
**Environmental Studies**  
**Course: BIO K180, ENV K101**  
**Tentative Course Syllabus – Subject to Change**

Week	Date	Topic		Chapter Reading/Assignment
1	Jan 24 <sup>th</sup>	Introduction, Class overview, Syllabus 1) Science and the Environment - “Inconvenient Truth” video		Read Syllabus Read for next week : Ch 1, 2, & 3
2	Jan 31 <sup>st</sup>	2) Economics, Politics, and Public Policy 3) Basic Needs of Living Things -Term Project Topic		Read for next week : Ch 4 & 5. <b>HW: Ecological Footprint</b>
3	Feb 7 <sup>th</sup>	4) Populations and Communities 5) Ecosystems: Energy, Patterns, and Disturbance	<b>Quiz 1 Term Project Topic Due</b>	Read for next week : Ch 6 &7 <b>HW: Transportation Use and Expense</b>
4	Feb 14 <sup>th</sup>	- Current Issue Presentations 6) Wild Species: Biodiversity and Protection 7) Use and Restoration of Ecosystems	<b>HW: Ecological Footprint assignment due</b>	Read for next week : Ch 8
5	Feb 21 <sup>st</sup>	- Current Issue Presentations 8) The Human Population	<b>Quiz 2 Library Research</b>	Read for next week : Ch 9
6	Feb 28 <sup>th</sup>	- Current Issue Presentations 9) Population and Development - Population Supplementary		Read for next week : Ch 10 & 20
7	Mar 6 <sup>th</sup>	- Current Issue Presentations 10) Water: Hydrologic Cycle and Human Use 20) Water Pollution and Prevention	<b>Quiz 3 Term Project Outline and Reference List Due</b>	Read for next week : Ch 11
8	Mar 13 <sup>th</sup>	- Current Issue Presentations 11) Soil: the Foundation for Land Ecosystems -“Dirt-The Movie”	<b>HW: Transportation Use and Expense assignment due</b>	Read for next Class : Ch 12 & 13
9	Mar 20 <sup>th</sup>	<b>**NO CLASS - SPRING BREAK**</b>		
10	Mar 27 <sup>th</sup>	- Current Issue Presentations 12) Production and Distribution of Food 13) Pests and Pest Control		Read for next week : Ch 14 & 16 <b>HW: Water Utilization</b>
11	Apr 3 <sup>rd</sup>	- Current Issue Presentations 14)Energy From Fossil Fuels 16) Renewable Energy - Supplemental Transportation Use and Expense	<b>Quiz 4</b>	Read for next week: Ch 17
12	Apr 10 <sup>th</sup>	- Current Issue Presentations 17) Environmental Health	<b>Library Research HW: Water Utilization assignment due</b>	Read for next week: Ch 23
13	Apr 17 <sup>th</sup>	- Current Issue Presentations 23) Sustainable Communities - Supplemental Water Utilization - “A Convenient Truth” Video	<b>Quiz 5</b>	<b>Prepare for PPT presentations</b>
14	Apr 24 <sup>th</sup>	Group Presentations	<b>Term Project Papers Due</b>	
15	May 1 <sup>st</sup>	Group Presentations		
16	May 8 <sup>th</sup>	<b>Final Exam - Cumulative</b>		

**Spring 2012**  
**Environmental Studies**  
**Course: BIO K180, ENV K101**  
**Tentative Course Syllabus – Subject to Change**

Grading Plan:

Quizzes (5):	10% (Note 1)
Current Issue Presentation:	5%
Assignments (3):	30%
Term Project/Presentation:	15%
Final Cumulative Exam:	20%
Attendance and Participation	20%
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 (10%): In order to be prepared for class discussions, students must read the material prior to coming to class. A 5-point quiz will be 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 (5%):

Each student will present a brief (5-minute) presentation to the class on a current issue in environmental science from a published news/journal article. The instructor must approve the article and no two students can present on the same article. **A minimum one-page summary of the article and the article must to be turned in.** In the summary, you will state why this issue is important in environmental science and how it what the potential impact is on the environment.

Assignments (30%):

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

**Spring 2012**  
**Environmental Studies**  
**Course: BIO K180, ENV K101**  
**Tentative Course Syllabus – Subject to Change**

1) The Ecological Footprint (10 %) will be completed online at <http://www.myfootprint.org/>. In order to get credit for the assignment you must turn in a printout of your ecological footprint (with your name on it).

2) Transportation Use and Expense (10 %): Using the attached spreadsheet, keep track of expenses associated with your transportation use. Receipts are required to be turned in with the spreadsheet. An additional 2.5% can be earned for a second vehicle spreadsheet and receipts.

3) Water Utilization (10 %): Using the provided spreadsheet, you will keep track of your water consumption on a daily basis. 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, please indicate whether a low-flow showerhead is utilized.

Term Project/Presentation (15%): Each student will be responsible for completing a group term project on a topic related to Global Climate Change. The topic must be approved by the instructor (see deadline) and no two groups can present on the same topic. The project will consist of a research paper and a public education and presentation component. The research paper must provide a comprehensive review of the topic chosen, and is required to include a discussion of the ethical, political, and scientific aspects of the issue or topic. The research paper must be no less than 4 pages and no more than 7 pages (double spaced, 1-inch margins, Times New Roman font), excluding figures and tables. References must be cited using APA format. A minimum of 10 scientific references, 4 of which must be from peer-reviewed academic journals (either hard copy or from the internet) are required. Wikipedia and the course textbook will not be accepted as references. The public presentation portion of the project will be a PowerPoint presentation to the class and should include pictures, graphs and/or charts that aid in informing the public on your topic. **Late projects will not be accepted.** The term project will be 15% of your grade (Research Paper 10%, Presentation 5%).

**Note: The Library Research Work and Group Presentations are Mandatory for a Passing Grade.**

Exam (20%): There will be a final exam in this course. The exams will test you on the material covered in class and the required reading. The final exam is cumulative.

Term Project - Research Paper Grading:

An “A” project:

- Includes a minimum 10 scientific references, 4 of which are from peer-reviewed academic journals. References properly cited in text and reference list
- Provides an in-depth evaluation of the ethical, scientific, and political aspects of the topic.
- Provides a thoughtful discussion of potential future impacts on humans.
- Is well written, with proper use of language, spelling and grammar.
- Figures and tables follow a standard format
- The presentation uses at least three visual methods for educating the public (i.e. uses photographs, graphs, charts, or other visual aids) and is neat in appearance.

**Spring 2012**  
**Environmental Studies**  
**Course: BIO K180, ENV K101**  
**Tentative Course Syllabus – Subject to Change**

A “B” project:

- Includes a minimum 7 scientific references, 3 of which are from peer-reviewed academic journals. References properly cited in text and reference list
- Provides a brief evaluation of the ethical, scientific, and political aspects of the topic.
- Provides a discussion of potential future impacts on humans.
- Is well written, with proper use of language, spelling and grammar.
- Figures and tables follow a standard format
- The presentation uses at least three visual methods for educating the public (i.e. uses photographs, graphs, charts, or other visual aids) and is neat in appearance.

A “C” project:

- Includes a minimum 4 scientific references, 1 of which are from peer-reviewed academic journals. References cited in text and reference list
- Provides a brief evaluation of two of the three aspects to be addressed: ethical, scientific, and political.
- The paper is generally well written, with few spelling and grammar mistakes.
- The presentation uses at least three visual methods for educating the public (i.e. uses photographs, graphs, charts, or other visual aids) and is neat in appearance.

Tables and Figures Format:

Tables and figures should follow a standard format, such as used in Wright and Boorse (2011). Note that all tables have a table number and title given at the **top** of the table. All figures should have a number and title given at the **bottom** of the figure.

Extra credit (2.5%): Attend a local planning and zoning meeting, environmental, or conservation committee meeting. Provide a brief one-page summary of the importance of public participation at the local governmental level. What did you think of this experience? Support your reasoning 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 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 the following week after it has been assigned unless otherwise specified. After this time the assignment will not be accepted and the student will receive a zero.

*Attendance:* Missing a day of lecture/lab without prior arrangements will not result in a zero for an assignment. However, the student will be solely responsible for learning any missed material

**Spring 2012**  
**Environmental Studies**  
**Course: BIO K180, ENV K101**  
**Tentative Course Syllabus – Subject to Change**

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.

*Add/Drop:* The last day to add/drop and obtain partial tuition refund for this course is February 1<sup>st</sup>, 2012.

*Withdrawal:* The last day to withdrawal from this course is May 7<sup>th</sup>, 2012.

*Incomplete:* An incomplete must be finished within 60 days of the last day of the Spring 2012 Semester.

*Academic Conduct:* It is expected that each student will turn in only his or her own work. Violations of the Student Code are taken seriously. This includes copying or sharing answers on tests or individual assignments, plagiarism, or having someone other than yourself do your work. Depending on the act, a student could receive an F grade on the test/assignment, an F grade for the course, or could be suspended or expelled.

### **Special Needs**

Please inform me as soon as possible if you require any accommodations in addition to those provided here.

### 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 Holidays:

**Sec. 10a-50. (Formerly Sec. 10-334g). Absence of students due to religious beliefs.** No person shall be expelled from or refused admission as a student to an institution of higher education for

**Spring 2012**  
**Environmental Studies**  
**Course: BIO K180, ENV K101**  
**Tentative Course Syllabus – Subject to Change**

the reason that he is unable, because the tenets of his religion forbid secular activity on a particular day or days or at a particular time of day, to attend classes or to participate in any examination, study or work requirements on such particular day or days or at such time of day. Any student in an institution of higher education who is unable, because of such reason, to attend classes on a particular day or days or at a particular time of day shall be excused from any examination or any study or work assignments on such particular day or days or at such particular time of day. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school because of such reason an equivalent opportunity to make up any examination, study or work requirements which he has missed because of such absence on any particular day or days or at any particular time of day. No special fees of any kind shall be charged to the student for making available to such student such equivalent opportunity. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section. For the purposes of this section, "institution of higher education" shall mean any of the schools comprising the state system of higher education, as defined in section 10a-1. (P.A. 75-367, S. 1.)

### **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.

#### Academic Dishonesty:

**Plagiarism means using someone else's statement word-for-word without quotation marks (even if you cite it) or using someone else's ideas, even if you paraphrase them, without proper attribution of credit through a citation.**

Student Code of Conduct: All students should be aware of the guidelines for the Student Code ([http://www.trcc.commnet.edu/Div\\_StudentServices/StudentPrograms/PDF/TRCC-StudentHandbook.pdf](http://www.trcc.commnet.edu/Div_StudentServices/StudentPrograms/PDF/TRCC-StudentHandbook.pdf)) College Policies: Student Conduct and Discipline Policy, a portion of which is repeated below:

### **Section 3: Expectations for Student Conduct**

Consistent with the Student Conduct Philosophy set forth in Section 1 of this Policy, students are expected to:

*"2. Demonstrate academic integrity by not engaging in conduct that has as its intent or effect the false representation of a student's academic performance, including but not limited to: cheating on an examination, collaborating with others in work to be presented, contrary to the stated*

**Spring 2012**  
**Environmental Studies**  
**Course: BIO K180, ENV K101**  
**Tentative Course Syllabus – Subject to Change**

*rules of the course, plagiarizing, including the submission of others' ideas or papers (whether purchased, borrowed or otherwise obtained) as one's own, stealing or having unauthorized access to examination or course materials, falsifying records or laboratory or other data, submitting, if contrary to the rules of a course, work previously presented in another course, and knowingly assisting another student in any of the above, including an arrangement whereby any work, classroom performance, examination, or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.”*

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