**ENVS 3301 – VC-01: Environmental Science**

**Virtual Campus**

**School of Mathematics and Sciences**

**COURSE: ENVS 3301 – Environmental Science TERM: Spring, 2014**

**INSTRUCTOR** Dr. Tracy Beedy **Office:** Online

**Email:** [tracy.beedy@wayland.wbu.edu](mailto:tracy.beedy@wayland.wbu.edu) **Office Hours:** Online

**CATALOG DESCRIPTION:** Study of human interactions with the environment focusing on human population growth, renewable resource usage, energy usage, industrial pollution and waste minimization, sustainable technologies. Local and weekend field trips may be required.

**PREREQUISITE:** Three hours of science

**TEXTBOOK:** Wright, R. 2008. *Environmental Science 11th edition*. Prentice Hall (or newer edition if available)

**OUTCOME COMPETENCIES:**

By completion of this course, students will demonstrate an understanding of:

1. principles of and patterns in human population growth

2. interactions between humans and the hydrologic cycle

3. principles of soil fertility and food production

4. effects of human activities on biodiversity and ways to mitigate those effects

5. renewable and non-renewable sources of energy used by human societies

6. patterns in industrial pollution and mitigation measures to prevent pollution

7. principles and implications of global climate change

**ATTENDANCE/CLASS PARTICIPATION POLICY**:

In accordance with university policy, attendance in this course will be documented through a student’s active engagement in weekly assignments, quizzes, or similar course elements requiring deliverables or direct communication between the student and the instructor through the course black board site. Instructions for completing these assignments will be posted by the instructor prior to or at the beginning of each week of the class. Failure to attend or participate in this class may result in administrative withdrawal from the course or grade reductions. Failure to meet posted deadlines will result in a grade of zero or point reductions for the assignments affected.

**ACADEMIC HONESTY:**

The university policy regarding academic honesty will be adhered to in this course. Cheating of any kind on any exam will result in a failing grade for this course. Plagiarism on any written assignment will result in a zero for that assignment. Violation of the university’s academic honesty policy will be reported to the school academic dean and to the university provost. University policy now stipulates severe consequences for students who violate the academic honesty policy a second time. Students are referred to the current university catalog for further explanation of this policy and available appeal processes.

**GRADING**:

Your course grade will be determined based on the number of points you earn on lecture exams; research paper; field assignments; and through class participation, as described below.

*Lecture Exams*: Lecture exam grades will be worth 60% of your final grade. There will be on-line quizzes

accompanying each chapter of material and periodic timed lecture exams. In addition, there will be 2 major PROCTORED lecture exams given as a midterm and a final covering the material from preceding chapters. Lecture exams will consist of a combination of multiple choice, T/F, matching, short answer and essay questions as appropriate for the material.

*Research Paper, Making It Personal Assignments, and Field Assignments*: Each student will prepare a research paper or alternative option as described in posted instructions and may be required to visit local state parks, municipal facilities (e.g., waste water treatment plant or landfill), or other facilities as appropriate for the assignment. There will also be “Making It Personal” assignments accompanying many topics which will require the student to examine the topic in greater detail. These assignments will be worth 30% of your final grade. Park/facility visits may require the student to produce a photo-journal or blog.

*Class Participation:* Class participation will contribute 10% to your final grade. This grade will be based on exercises posted on BB, reflective essays or similar assignments, and on participation in discussion board or blogging activities and other assignments as appropriate. Some Making It Personal assignments may apply to class participation grades.

*Final Grades*: Final grades will be assigned on the basis of the proportion of points earned from lecture and laboratory exams, etc., out of the total number of points possible. As stated earlier, points from lecture exams will be weighted to account for 60% of your final grade; lab points for 30%; and class participation for 10%. Final letter grades will be assigned as follows: A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; and F = 59% or less.

**TENTATIVE CLASS SCHEDULE:**

The attached class schedule is subject to modification by the instructor. Actual exam dates may change. These changes will be posted on Black Board to give students sufficient opportunity to adjust their schedules accordingly.

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| **ENVS 3301 - Environmental Science**  **Tentative Course Schedule Spring 2014 Term** | | |
| **Week** | **Topic** | **Chapter Readings** |
|  |  |  |
| **1** | **Introduction & Public Policy Issues** | **1 & 2** |
|  |  |  |
| **2** | **Needs of Life & Populations/Communities** | **3 & 4** |
|  |  |  |
| **3** | **Ecosystems & Biodiversity** | **5 & 6** |
|  |  |  |
| **4** | **Ecosystem Value & Human Populations** | **7 & 8** |
|  |  |  |
| **5** | **Population Development & Hydrologic Cycle** | **9 & 10** |
|  |  |  |
| **6** | **Soils & Food** | **11 & 12** |
|  |  |  |
| **7** | **Energy - Fossil Fuels & Nuclear** | **14 & 15** |
|  |  |  |
| **8** | **Renewable Energy & Human Health** | **16 & 17** |
|  |  |  |
| **9** | **Climate Change and Air Pollution** | **18 & 19** |
|  |  |  |
| **10** | **Water Pollution, Solid Wastes, & Hazardous Wastes** | **20, 21, 22** |
|  |  |  |
| **11** | **Stewardship & Sustainability** | **23** |

**\* NOTE 1: Lecture and exam schedules are subject to change (Changes in schedules will be**

**posted on Blackboard.)**

**\*\*NOTE 2: Reading assignments may include portions of certain chapters.**

**See Black Board announcements for specific reading assignments.**

**DISABILITY STATEMENT**:

In compliance with the Americans with Disabilities Act of 1990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university. The Coordinator of Counseling Services serves as the coordinator of students with a disability and should be contacted concerning accommodation requests at (806) 291- 3765. Documentation of a disability must accompany any request for accommodations. Students should inform the instructor of existing disabilities the first class meeting.