

VICTOR VALLEY COLLEGE SYLLABUS

Course Number and Title: AGNR 170

Units: 4 Section: 58755 AAE

Class Hours: On-line, AAE 9.27- 10.20 Mon, Tues (Env Sci. Honors)

Instructor Name: Neville Slade Office No.: Building 60B Tel. Ext.: 7660 VVC Email: neville.slade@vvc.edu

WITHDRAWAL POLICY

STATEMENT OF ACCESS: Students with special needs are encouraged to meet with instructors to discuss the opportunity for academic accommodation and referral to Disabled Students Programs and Services (DSPS) and services per Administrative Procedure (AP 3440)

FALL Term Begins

Labor Day Holiday (college closed)

Last Day_DROP-w/o W

Last Day_DROP-with W

Veteran's Day Holiday (college closed)

Thanksgiving Holiday (college closed)

FALL Term Ends

Sixteen (16) week term

Off-Campus Twelve (12) week term

First Twelve (12) week term

Second Twelve (12) week term

August 29 (course begins)

September 5

September 11

October 15

November 11- 12

November 24-26

December 17

August 29 – December 17

August 29 – December 17 (Does not follow VVC calendar,
see that site's calendar for holidays)

August 29 - November 19

September 26 – December 17

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Prerequisite:

None

Textbook:

Sustaining the Earth, G Tyler Miller and Scott E. Spoolman, Cengage Learning, 11th Edition (Elephant on cover) ; ISBN # 1-285-76949-X 11th edition or e-Books version (see your AAE instructor for access)

Course Description:

Use and protection of the world's natural resources, including soil, water, forest, mineral, plant, and animal life, with particular attention to California conditions. Covers ecological principles, history of the conservation movement, modern problems in resource use, global environmental issues and the citizen's role in conservation. The unique nature of natural resource management and career opportunities in the Mojave Desert region are emphasized. UC, CSU

Course Objectives:

Upon completion of the course the student should be able to:

1. Inventory and balance the social, environmental and economic trade-offs needed to achieve sustainable development.
2. Discuss the role of science including chemistry, ecology, soil science and nutrient cycling in the understanding of global environmental problems
3. Assess the extent and viability of the world's biodiversity. Relate the health of an ecosystem to the ecological principles at work in that ecosystem
4. Discuss the extent of our natural resource reserves and propose sustainable natural resource management practices.
5. Interpret the effect of environmental quality on human health and climate change.
6. Evaluate Geographical Information Systems (GIS) and other technologies in making sound natural resource management decisions.
7. Demonstrate an understanding of ecological restoration, resource management and sustainability in the Mojave Desert and California.

Student Learning Outcomes:

Upon completion of the course the student can:

1. Evaluate the values and principles that enhance a community wide sustainability ethic.
2. Apply scientific knowledge, natural resource policy, sustainable practices, and technology to balance the economic, social, and environmental aspects of sustainable development.
3. Demonstrate the safe and appropriate use of natural resource management technology, tools and equipment.

Grading Policy:

90-100% = A

80- 89% = B

70- 79% = C → Remember the AAE has a "No-D Policy"

60- 69% = D → Remember, a D at VVC is not considered "passing" but an over all 2.00 GPA or above is.

<59% = Fail

Assignments/Points

Quizzes (5 total, 25 pts. each, drop the one lowest)	100
Exams: Mid-term	100
Final	100
Position paper(s) (2 papers).....	40
Discussion Board (3 topics, 30pts each)	90
Expanded Definition #1 (20 total, 3 pts. each).....	60
Expanded Definition #2 (20 total, 3 pts. each).....	60
Total Points	550

Extra Credit: 30 pts.

Class attendance is not a measure of performance or proficiency. Whether a student is just physically present in the class is not a valid basis for grading. Reference Title 5 Section 55002 of the California Code of Regulations: (A) Grading Policy. The course provides for measurement of student performance in terms of stated course objectives and culminates in a formal, permanently recorded grade based upon uniform standards in accordance with section 55758 of this Division. The grade is based on demonstrated proficiency in the subject matter and the ability to demonstrate that proficiency, at least in part, by means of written expression that may include essays,

or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students.

Class Management and Learning Notes

Conservation and Sustainability have rapidly taken center stage as American's struggle to adapt to our recent economic meltdown and a realization we have been living beyond our means. To keep pace with this "Green Revolution" we will all benefit from learning the language/vocabulary and "thinking" of environmental science and sustainability.

This class will have many new terms and principles and will most probably require more hours of study than many of you are accustomed to putting in. Experience indicates that most of you (other than the one or two with photographic memories) will need to study 12 - 16 hours per week (three to four hours for each unit) to keep up

You will get out of this class what you put in, because we add in a large local/Mojave Desert focus, you must do the assigned reading in the book (a moot point if you are taking this class On-line). This is an extremely diverse subject and you will automatically focus on your own areas of interest/experience...we are trying to develop a matrix of knowledge and the interconnections that will allow you to become a competent Environmental Scientist with a good "working" understanding of Sustainable Development.

Please read the **Course Schedule and Study Guide** found at the end of this course syllabus closely. It is also especially important to keep up with the class assignments- Discussion Boards, Expanded Definition's and assessments. Assignments are made available for very specific time frames and you will be unable to make up the work if you miss them.

Need Help You have three options:

1. For any Blackboard or computer compatibility questions, please call the Web Advisor-Help Desk at 760-245-4271 ext.4788 (4STU) or email at helpdesk@vvc.edu. This will include if you are having trouble accessing a quiz or completing an assignment on-line- I will refer your emails on these problems to them. Also make sure that you have checked that VVC/BlackBoard has your correct e-mail address, so that you get my weekly announcements/updates by e-mail. You can change it yourself on the first page when you log on to Blackboard under "Personal Information".
2. Please contact me (Neville Slade, your VVC instructor) by e-mail (I am able to answer my office phone only during office hours) with any questions about the class itself- the curriculum and what the assignments and expectations are. Please try to answer the question yourself by reading the syllabus, study guide or my weekly updates before emailing me- I receive a large # of e-mails and want to be sure I can handle the most pressing problems. Please specify your student number, class name and section number in each e-mail so that I can identify you.
3. Your last resort for help (tutoring, clarifications etc.) will be your high school instructor.

Tip: It is extremely important to read the Syllabus and Study Guide very carefully before you begin this class, I also recommend entering the assignment due dates in your personal calendar.

Quizzes, Exams and Extra Credit

a. Quizzes (5@25 pts. each, drop the one lowest- for a total of 100 points)

Open on Blackboard for two weeks- 14 days (Monday @ Eight AM until the designated Monday night 11 PM).

See "Course Schedule" at the end of this document for exact dates

I will drop the one lowest score at the end of the semester

You will only be given one attempt on most of the Quizzes, so please be prepared and take them in the allotted time frame.

Each quiz will cover material from the previous two weeks reading, lecture/PowerPoint and discussion.

Important Note: the PowerPoint lectures and Quizzes are available under "Assignments" in Blackboard, PowerPoint Lectures are adapted from the text ad include extra information (often the local Mojave perspective) and are part of the required study for this class.

b. Exams (100 pts. each)

The mid-term and the final will cover all homework, lecture during the preceding 8 weeks. They will be open for two weeks each. (See "Course Schedule" at the end of this document for exact dates)

c. Extra Credit Your Ecological Footprint (EF) Project (30 pts.)

Intended to begin in the first week and end in the final week of the semester

Implementation – You are assigned to a 16 week long exercise to calculate your EF at the beginning of the course and then make efforts to constantly reduce the EF during the remainder of the semester.

At the end of the course you must recalculate your EF and to compose a 3 page (Final Report) reflection on your experience. This Reflection could possibly be a letter to a policy/decision maker requesting clarification on current policies and/or a description of how you (and/or your community, state) can take action to better manage our Natural Resource use to reduce our “Footprint”. Please include your EF and data in your final report.

Submit to “Extra Credit Eco-Footprint” under “Assignments” in Blackboard. Due at end of semester **half grade boost**

Note: More information available and websites to assess EF, in the Study Guide for this class.

Also be aware that you can do an abbreviated version of this assignment if you start late for partial credit

Class Assignments (See Study Guide for more complete instructions)

The assignments for this class are intended to be diverse to ensure your engagement on-line and include Expanded Definitions and Discussion Boards that may be new to you and deserve special explanation.

a. Expanded Definitions (40 @ 3pts each, submitted in two assignments- 60 pts. each, 120 pts. total)

Each student is required to define and discuss 40 (forty) of the Key Questions and associated Concepts discussed in the text and listed on the first page of each chapter and listed in the attached Study Guide for this class.

What is an Expanded Definition? In this exercise the student will define and expand the discussion of the “Key Questions” that are listed for each chapter in the Study Guide. You are required to define, discuss these key questions, and relate them to other important concepts and ideas in the study of environmental science and sustainable development in your own words. . You must also add relevant personal opinions and make connections to sustainable practice in the Mojave Desert whenever possible and describe how/what/when technology is being used appropriately.

How do I pick the 40 Key Questions? Each of the 14 Chapters has 4- 8 Key Concepts and you may choose any or all from a particular Chapter the Study Guide, but I recommend you take 3 to 4 from each of the fourteen chapters.

How long should the discussion be? One long or two short paragraphs (four to six sentences) with minimum 100 words

When are they due? The first 20 (Expanded Definition #1) covering key questions in Ch 1-7 to be placed in the “Assignments” section of Blackboard under “Exp. Defn. #1” at Mid-Term- (see Schedule-**TBD**) -note you may submit any-time after the due date but will receive a reduced Grade. The final 20 (Expanded Definition # 2) covering key questions in Ch 8-14, to be placed in the Assignments section under Exp. Defn. #2 on Blackboard by the end of the semester- (see Schedule-**TBD**)

Note: I highly recommend that you do them weekly as you work through the Chapters assigned because this will help you be prepared for the Discussion Boards and the tests.

Directions for submitting: Submit in the “Assignments” section of Blackboard as described above.

They must be numbered individually 1 through 20 and 20-40.

Grading I will look for students to use their own “words” and establish the local/Mojave connection

b. Discussion Boards (3 @ 30pts-90 pts. total)

Students are required to do research and engage in a discussion with the class- a great place to test your ideas but please be kind and respectful to the opinions of others. This assignment is intended to hone your skills as a responsible citizen, so that you can make an impact on the sustainability of our world and your local community.

When are they due? The three topics will be **posted on Monday mornings by 8 AM and open for two weeks until the following -2 wks., Monday at 11 PM**

How many posts?

You will be required to make one post (your own discussion) and two replies/comments on the posts of other students per assignment.

How long should your post be? Long enough to thoroughly cover the subject- Two paragraphs (six to 10 sentences) with approximately 140 words...at least. The replies may be much shorter-2-3 sentences

Grading Twenty (20) pts. for your post, 5 pts. for each reply, based on the amount of thought applied, not on how long they are. Total of 30 points each

Note: Discussion Board question will be posted in “Discussions” section of Blackboard-see the Schedule at the end of this Syllabus for exact due dates; for more information available in the Study Guide for this class.

Position Papers (2 @ 20 pts. - total of 40 pts.)

- You will be asked to complete 2 position papers on key agricultural issues
- Paper will be 1-2 pages, single space, and 12 font

Definition: A position paper is an essay that presents an opinion about an issue, typically that of the author or another specified entity; such as a political party. Position papers are published in academia, in politics, in law and other domains. Position papers range from the simplest format of a [letter to the editor](#) through to the most complex in the form of an academic position paper. Position papers are also used by large organizations to make public the official beliefs and recommendations of the group

Course Schedule & Study Guide

Week Beginning	Homework	Video Lecture/PowerPoint (Think flipped Classroom)	Assessment
Mon Aug 29	Read Ch 1: Environmental Problems, Their Causes, and Sustainability CCC Confer-Vimeo? Begin Expanded Definitions and Ecological Footprint (EF) Project What is Sustainability – Why is it important	Personal Intro and Syllabus Lect. 1 Living Sustainably Lect. 2 Env. Prob.+ Connect Lect. 3 Science and Learning <i>Neville Focus Video</i> <i>Guest lecture</i> <i>Video: Known Universe...(Matt)</i> <i>Systems thinking Intro? PPT (Matt)</i>	<i>Pre-quiz on syllabus and sustainability</i>
Sept 5 Labor Day	Read Ch 14: Economics, Politics, Worldview and Sustainability Discussion Board #1, Posted for 2 weeks Sept 7-21 @ 11 PM What/How is Policy Implemented?- Dino How to read like scientist w/article "eco abstract"-Articles/papers (Matt)	Lect.1: Worldviews Lect. 2: Env. Economics Lect. 3: Politics and Policy	Quiz 1A
Sept 12	Read Ch 2: Science, Matter, Energy and Systems	Lecture 1 Ecology Lecture 2: Science	Quiz 1 (Ch 1, 14) Open 2 weeks TBD
Sept 19	Read Ch 3: Biodiversity and Evolution Position paper 1-presented Symbiosis –Local example-Cryptobiotic crust example of how to write summary (a good practice for writing an Exp Defn). and why study Ecology and the Biome of Desert (Matt)	Lect. 1: Evolution /Biodiversity (Ch. 3)	
Sept 26	Read Ch 4: Community Ecology, Population Ecology and the Human Population Discussion #2 Posted for 2 weeks TBD	Lecture 1: Community Ecology (Ch. 4) Lecture 2: Population Ecol. Lecture: 3: Human Pop. Upper Mojave FT	Quiz 2 (Ch. 2,3) Open 2 weeks TBD
Oct 3-4 <i>AAE</i> <i>Break</i>	Read Ch 5: Sustaining Biodiversity-Species Approach	Lecture: Biodiversity- Species Approach (Ch. 5)	
Oct 10-11 <i>AAE</i> <i>Break</i>	Read Ch 6: Sustaining Biodiversity-Ecosystem Approach	Lecture: Biodiversity-Ecosystem Approach, Forestry, Parks (Ch 6)	Quiz 3(Ch 4,5,6) Open 2 weeks TBD
Oct 17	Read Ch 7: Food, Soil, and Pest Management	Lecture 1: Food, Soil, Pest (Ch 7)	Mid Term Ch 1-7 and 14 Open 2 weeks TBD Systems thinking application (Primer on systems thinking; cheat sheet; using intro article about Owens river valley_ LA story

Oct 24	Read Ch 7: Food, Soil, and Pest Man. Cont. Read Ch 8: Water Discussion #3 posted for 3 TBD Expanded Definitions # 1–first 20 due-see Study Guide and Syllabus for details- 10% deduction if late	Lecture 2: Sustainable Agriculture (Ch 7) Lecture 1: Water supply (Ch 8)	
Oct 31	Read Ch 8: Water continued	Lecture 2: Water Pollution (Ch 8) Lecture 3: California Water, MWA and local story	Mid Term closes
Nov 7	Read Ch 9: Nonrenewable Energy Resources Is Renewable Energy Green?	Lecture : Non-Renewable Energy	Quiz 4 (Ch 8) Open 2 weeks TBD
Nov 14 Nov 15	Read Ch 10: Energy Efficiency and Renewable Energy Discussion #4- posted for 2 weeks, Natural Resource “Green’ Careers Summit 8.00 AM- 1PM	Lecture: Renewable Energy	
Nov 21	Read Ch 11: Environmental Hazards and Human Health	Lecture: Env hazards, Health	Quiz 5(Ch 9,10) Open 2 weeks TBD
Nov 28	Read Ch 12: Air Pollution, Climate Change, Ozone Depletion	Lecture 1 : Air Pollution, Lecture 2: Climate Change Overview	
Dec 5 Dec 6	Read Ch13: Urbanization and Solid and Hazardous Waste FT Lower Mojave (VVC-bus) 8.00 AM – 2PM	Lecture: Urbanization, Solid and Hazardous Waste	Final TBD TBD
Dec 12	Review Principles of Sustainability Ch 1, 14 – Study for and take Final		
Tuesday Dec 13	Semester Ends Expanded Definitions #2 due–last 20-see Study Guide and Syllabus for details Begin Expanded Ecological Footprint(EF) Project due TBD		Final closes TBD

Flipped Classroom Concept

1. Previous week read chapter and watch video lecture and/or HS Instructor give lectures using BlackBoard Power Points
2. Neville/Guest lecture give summary/focusing lecture-Monday and Tuesday or Tuesday Wednesday Excelsior-using the Key questions and Concepts for each section/chapter
3. Rest of week- classroom discussion- fill in the blanks and applications/labs