VICTOR VALLEY COLLEGE SYLLABUS Semester TBD

Course No.: AGNR 74Course Title: Conservation and Sustainable PracticeUnits: 6 Section No.:Class Hours:Room No.: Building 60BInstructor Name: Neville Sladeoffice # 245-4271 ext 2698e-mail: neville.slade@vvc.edu

SPRING Term Begins

TBD

NOTE - CAMPUS IS CLOSED and CLASSES WILL NOT BE HELD ON CAMPUS THE FOLLOWING DATES: TBD

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)

Visit Victor Valley College online at <u>www.vvc.edu</u>

Prerequisite: None

<u>Required Text:</u> The Sustainability Revolution, Andres R. Edwards, New Society Publishers, ISBN #086571-531-9

Recommended text and Readings

Sustaining the Earth (sixth ed.), G. Tyler Miller Jr Brooks/Cole, Thomson Learning ISBN # 0-534-40086-8

AGNR 74 A (One unit): Sustainable Community Development

Course Description:

Students learn to plan and implement sustainable development practices; development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Students implement Community **Stewardship Projects.** It is also often described as development that considers multiple, sometimes competing, values grouped into three general categories; a) environmental, b) social and c) economic. Extensive use is made of case studies and practical on-site experiences.

The student will be able to:

Plan for and implement sustainable community development that balances environmental issues with a local community's social values and economic needs.

The student can then: (Learning Outcomes)

- Discuss the social and cultural factors that effect how a human community can manage its natural resources. Evaluate the effect of current and future political forces on the development of a community-wide sustainability ethic.
- Identify economic pressures and evaluate how they affect present and future human impacts on the environment.
- Understand their role in a team and basic team leadership principles

- Design and implement a community stewardship/social action project that demonstrates sustainability.
- Evaluate education's role and the need for public outreach.

AGNR 74 B (One unit): Biodiversity Management and Conservation Technology

The reduction of species diversity is a major indicator of the health of a complete ecosystem. This class explores the science, tools and practice of conserving species diversity.

Students learn to implement the exciting tools of Geographic Information Systems (GIS), Global Positioning Systems (GPS), Satellite Imaging and Database Management, along with an understanding of the unlimited career opportunities in these fields.

An example case study is on the viability of the Lucerne Valley Big Horn Sheep population

AGNR 74 C (One unit): Water and Soils Conservation

Students discover the tenuous nature of many of the world's water supplies. Tools like GIS are used to study watershed health. The fantastic chemistry of water and methods of water quality testing are presented. Students study the relationships between soil and water, soil mapping, soil analysis and soil erosion using real-world examples

AGNR 74 D (One unit): Ecological Restoration

Students learn to design an ecological restoration plan that effectively balances environmental mitigation with local community social and economic needs. The methodologies appropriate to a particular situation are presented. Topics include: native seed banking, Mycorrhizal relationships, seed stratification and scarification, nutrient requirements, water requirements, transplanting protocols, watershed restoration soil evaluation and rehabilitation

AGNR 74 E (One unit): Sustainable Agriculture Practices

Tremendous progress has been made towards farming with nature and restoring ranches to be part of the natural ecosystem. This "farming with the wild" is not only producing more food but enhancing the environment. Students study sustainable practices like rotational grazing, organic farming, hedgerows and natural pollination in the United States and overseas

AGNR 74 F (One unit): Sustainable Building and Energy Practices

The technology to reduce our reliance on fossil fuels by producing energy alternately and building in a sustainable manner is very well represented in the Western Mojave Desert. Students study the latest technology to produce energy from the sun, wind, animal waste and plant matter. The "smart" building practices of straw-bale, Super Adobe, Cob, grey-water and radiant heating are explored

Attendance Policy: (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.)

<u>Grading Policy:</u> 90 - 100% = A 80 - 89% = B 70 - 79% = C 60 - 69% = D <59% = Fail

Assignments/Points

- 1. Student SD Portfolio100 points2. Student Project100 points3. Final100 points4. Quizzes (2 @ 50 Pts)100 points
 - Total 400 points

Assignments

1. Sustainable Development Portfolio to include: (100pts)

Feb TBD	Personal Introductions	Lecture : Sustainability at VVC	
	Play SLC Video personal Introduction	Lecture : Intro to Environmental Science and	
	Walking Tour of Campus	Sustainability (not on quiz 1)	
	Read Intro and CH 1,2	Lecture; Intro and History of Sustainability	
	,	Revolution (Intro and Ch 1)	
		Revolution (intro and cir 1)	
Feb TBD	Holiday Washington's Birthday	No class	
Feb TBD	Prepare SD Sighting	Review Reading and last weeks lectures	
		Lastura : Dringinlag of SD in Community Ch 2	
		Lecture . Frinciples of SD in Community Cir 2	
March TBD	Read CH 3.4	Lecture: Principles of SD in Community Ch 2	
	Hond in Sustainability Definition	Lecture: Soil Sustainability	
	Hand –in Sustainability Definition	Lecture. Son Sustainability	
March TBD	Quiz 1: Review	Lecture 2: Principles of SD in Nat. Res. Ch. 4	Quiz 1
	Ch1-3 in 'Green Revolution"	Lecture 1: Principles of SD in Commerce Ch. 3	Ch. 1-3
	Lecture: Sustain at VVC	Lecture: Restoration	and
	Lecture: Intro and History of Sustainability	Hand out- Soil management	
	Devel the (later and Ch. 1)	Posteration Lab Socialsh	
	Revolution (Intro and Ch. 1)	Restoration Lab-Seed lab	
	Lecture : Prin of SD in Community Ch. 2		
	Lecture: Soil Sustainability		
	Lootare, bon Sustainaonity		
March TBD	Leah Gardner-OM10 –noon	Lecture: Ch. 5 and 6	
		Lecture: Leadership in Sustainability	
March TBD	Field Trip: Lewis Center Invasive weeds,		
	GPS. ChubDichotomous Kev		
	17500 Mana Road Annie Valley, California		
	02207 Dhoney 760 046 5414		
Marah TDD	92307 Phone. 760-946-5414		
March IBD	ABC's of Water at MWA-5-8PM		
March TBD			
Thurs	Green careers Workshop 8 am-3 PM		
April TBD	Neville Gone	No class	
April TBD	Easter Break	No class	
April TBD	John Davis- Solid Waste	Lecture: Intro to Environmental Science and	
		Sustainability-review from week 1	
		Lecture: Sustainability Future Pathways Ch. 7	
		Student Dresentations	
A 11TDD			
April TBD		Lecture : Biodiversity	
		Student Presentations	
May TBD	ZYZZX Mojave Watershed Tour	Student Presentations	
	ZYZZX Rd Baker rd		

April TBD		Lecture: Sustainable Building and Energy Student Presentations	Quiz 2 Ch. 4-7
May TBD	MWA Mini Tour and Lewis center		
May TBD		Lecture: Sustainable Agriculture Student Presentations	
May TBD	Field trip- US Forestry Discovery Center, Fawnskin/Big Bear		
May TBD	Memorial day	No class	
June TBD		Student Presentations	Final

- Definition of Sustainable Development/Sustainability- one paragraph in student's own words (20 pts) **Due TBD**
- Summarize and reflect all chapters from Text-Introduction, Chapter 1-7 two pages for each (20 pts)
- Describe 4-5 Principles of Sustainable Development (20 pts)
- Student Project-Sustainable Practice Case Study (20pts)
- Sustainability "sightings" in Media and life and any other stuff -resume, letters of recommendation, certificates, awards (20pts)

Student Project-Sustainable Practice Case Study

- 1. History-overview of problem
- 2. Leadership principles
- 3. Sustainability principles
- 4. Political/policy climate; social health; social infrastructure
- 5. Economic climate- Employment
- 6. Environmental issues/health

See Guidelines

Class Schedule: Sustain Prac Spring TBD

Date

Homework

Lecture / Lab

ZYZZX- The California State University, Desert Studies Center is located between Barstow and Las Vegas at Soda Springs in California (60 miles east of Barstow, eight miles southwest of Baker). To reach the Center, take I-15 (the Mojave Freeway) to Zzyzx Road. Drive south on Zzyzx Road four miles to the Center. Zzyzx Road is paved for most of its length and should be driven slowly. Watch for Big Horn Sheep.