RENR 375 – FALL 2014 CONSERVATION OF NATURAL RESOURCES

INSTRUCTOR:

Kenneth E. Wallen Agriculture and Life Sciences Bldg. Office: #118 Email: wallen003@tamu.edu Office Hours: *TBD*

COURSE OBJECTIVES:

- 1. Provide an introduction to the basic principles of biological and ecological systems across spatial and temporal scales.
- 2. Outline past and present economic, legal, political, social, and ecological dynamics affecting natural resources and management.

EXPECTED OUTCOMES:

- 1. Demonstrate your ability to comprehend management strategies
- 2. Demonstrate your ability to apply these principles in the allocation, protection, and management of natural resources

COURSE TEXT:

Title: Sustaining the Earth Authors: G. Tyler *Miller* & Scott *Spoolman* Edition: 10th edition Publisher: Cengage Learning ©2011 ISBN-10: 143904984X ISBN-13: 978-1439049846

COURSE READER:

Available online through eCampus

Notice to Students: Purchases of course materials from the MSC Bookstore may benefit TAMU scholarships and student programs in some way, but you are not under any obligation to obtain the textbook or course packet from any university affiliated bookstore. The same materials may also be available from online or local independent retailers.

http://www.amazon.com/Cengage-Advantage-Books-Sustaining-Earth/dp/143904984X

ADDITIONAL READINGS & POWER POINTS:

A module for each week of the course will be located on eCampus. Each module will be a folder containing instructions and requirements for that section, and supplemental materials (powerpoints, pdfs, weblinks and additional materials). All materials needed to complete the module will either be provided in the module folder or referenced to the text and course reader.

CLASS ASSIGNMENTS

BONUS DISCUSSIONS:

Up to seven (7) bonus assignment discussion write-ups may be given during the semester. Each assignment will be in response to questions posed concerning topical issues related to course material and subject matter. A total of up to 15 bonus points (0-3 per assignment) may be earned from each of your responses to the discussion question(s) posed. Bonus points will be added to your total point accumulation at the end of the semester.

BONUS ASSIGNMENTS WILL BE POSTED ON ECAMPUS; YOU ARE STRONGLY ENCOURAGED TO COMPLETE BONUS ASSIGNMENTS

EXAMS:

Seven (7) exams values at 50 (fifty) points each are scheduled. Only your six (6) highest exams will be used to in determining your final grade for the semester. If you are satisfied with your first six (6) exams prior to the final exam (exam #7) you have the option of not taking the final exam. Alternatively, if you choose to take all seven (7) exams, your lowest exam score will be dropped.

*** EXAM #7 IS COMPREHENSIVE ***

All exams will be multiple choice and will be completed online. Exams will open on Fridays @12:01 am and close @11:59 pm. You will have 45 minutes to complete each exam. Given that this course is online you will have access to your book, readers, videos, and any other materials made available to you via eCampus while taking the exam. However, you are explicitly instructed **NOT** to collaborate with any other persons during exams.

*** ALL EXAMS WILL BE POSTED ON ECAMPUS ***

EXAM DATES:

Exams must be taken on the date assigned. You make take the exam at any time during the day assigned.

MISSING ASSIGNMENTS & EXAMS:

Absences from exams will be authorized for reasons deemed sufficient by the instructor or the University, based on their accordance with University regulations. You are responsible for providing, in a timely manner (24 hours prior, if possible), evidence to substantiate the reasons for the absence. When an absence is excused you will have the opportunity to make up the assignment and/or exam. Without exception, unexcused absence will not have an opportunity to make up assignments or exams.

*** IF YOU ARE AWARE THAT YOU WILL MISS AN EXAM OR ASSIGNMENT PLEASE CONTACT ME VIA EMAIL ***

GRADING

EXAMS:

Six (6) exams, totaling 300 points, will be used to calculate your final semester grade (along with accumulated bonus points added to you exam total)

The following scale will be used to determine your final semester grade:

A = 100 - 90%

B = 89 - 80%

C = 79 - 70%

D = 69 - 60%

 $\mathbf{F} = 59\% - \text{or less}$

OTHER COURSE TERMS

SCHOLASTIC DISHONESTY:

Students should consult the University regulations for the penalties and procedures in scholastic dishonesty cases. If you cheat on or plagiarize an assignment, you can expect an "F" for the assignment and referral to the Honor Board

"An Aggie does not lie, cheat, or steal or tolerate those who do."

Please see the Aggie Honor Code at http://www.tamu.edu/aggiehonor

INDIVIDUAL DISABLING CONDITIONS:

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring accommodation, please contact Disability Service Office in Cain Hall, Rm B118 or call (979) 845- 1637. For more information visit http://disability.tamu.edu

COURSE FORMAT

eCampus:

This is an eCampus online course. Communication of exam and assignment requirements and due dates will available on eCampus. You will need to take all exams and submit all assignments via eCampus. Your grades will be posted on eCampus throughout the semester. Thus, it is necessary for you to log onto eCampus. Please visit https://ecampus.tamu.edu. You will also find a link through the Howdy Portal. If you are new to eCampus we recommend that you complete the online tutorial "eCampus orientation for students" located at the above mentioned web page

*** Contact Help Desk Central (helpdesk@tamu.edu) Phone: 979.845.8300 for more information and instruction***

Communication with Instructor:

Communication will be most effective with instructor via email. Additionally, the instructor will hold office hours and you can schedule an appointment. All communications will students regarding course related details will be made via email and eCampus.

COURSE OUTLINE: FALL 2014

PART 1: BIOPHYSICAL AND SOCIO-ECONOMIC PRINCIPLES

WEEK 1 (September 1-5)

Introduction & Sustainability	Chapter 1
Historical Perspectives	Reader 1
Legal System & Natural Resources	Reader 2
Environmental Economics	Chapter 14, pg. 302-320
Environmental Economics	Reader 3

PART 2: POPULATION DYNAMICS

WEEK 2 (September 8-12)

Population Growth FactorsChapter 4, pg. 79-91Limiting Population GrowthChapter 4, pg. 79-91Texas Population Trends & ImpactsReader 4

EXAM 1 SEPTEMBER 12TH

PART 3: CLIMATE CHANGE & AIR QUALITY

WEEK 3 (September 15-19)

Climate Change: The Science_____Chapter 12, pg. 258-274 Climate Change: Biophysical Consequences____Chapter 12, pg. 258-274

WEEK 4 (September 22-26)

Air Pollution_____Chapter 12, pg. 243-257

EXAM 2 SEPTEMBER 26TH

PART 4: BIODIVERSITY, CONSERVATION, & EXTINCTION WEEK 5 (September 29-October 3)

Biodiversity & Evolution Chapter 3 & Chapter 4, pg. 67-78 Species Protection Chapter 5

WEEK 6 (October 6-10)

Sustaining Ecosystems_____Chapter 6 Regulation & Endangered Species Act_____Reader 5a & 5b

EXAM 3 OCTOBER 10TH

PART 5: WATER

WEEK 7 (October 13-17)

Water: Concepts & Issues	Chapter 8, pg. 155-170
	Chapter 8, pg. 155-170

WEEK 8 (October 20-24)

Water: Allocation Laws	Reader 6
	Chanter 8 na 171-183

EXAM 4 OCTOBER 24TH

WEEK 9 (October 27-31)

Texas: Water UsesReader 7a & 7bTexas: Water LawsReader 8

WEEK 10 (November 3-7)

Water Recreation & Texas Law_____Reader 9

EXAM 5 NOVEMBER 7TH

PART 6: ENERGY

WEEK 11 (November 10-14)

Sources & Uses of U.S. Energy Chapter 9 Non-Renewable Energy Options Chapter 9

WEEK 12 (November 17-21)

Renewable Energy Options Chapter 10 Texas Energy Reader 10

EXAM 6 NOVEMBER 21ST

PART 7: RISK, ENVIRONMENTAL HAZARDS, AND HUMAN HEALTH WEEK 13 (November 24-28) Risk Concepts_____Chapter 11 WEEK 14 (December 1-5)

Toxic Chemicals_____Chapter 13, pg. 285-301

EXAM 7 DECEMBER 5TH