

Texas A&M University-Commerce
Department of Agricultural Sciences
Spring 2014

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214-454-2399 (Cell – call or text)

Course: AMC 423 *Natural Resources Management*

Time: This course is web-based and is divided into 8 modules. Students will have two weeks to complete each module. It is estimated that the average time of online access for the completion of each of these modules, not including reflection and research, is approximately 4-5 hours. The student should be willing to commit an equal amount of time to the review and reflection of concepts presented in each module.

No Text: No text required. However, students will have to access and print or download reports, bulletins, and other publications from the Internet. Students may have to download the latest version of some software including Adobe Acrobat Reader, Window Media Player, Microsoft Office and QuickTime in order to access course resources. If students experience difficulties with specific technology requirements, IT Support Services can be reached at 903-468-6000 or helpdesk@tamuc.edu.

Rationale: This course deals with a variety of issues related to the management of renewable natural resources and the impact of agricultural enterprises on the environment. Among the major concepts included are renewable natural resource conservation, water protection, and appropriate land use. The course will utilize ecological and sustainable perspectives, where applicable.

Course concepts will emphasize these themes:

- Perspectives of Ecology, Conservation, and Sustainability
- Soil and Water Conservation and Protection
- Livestock and Poultry Waste Management
- Wildlife, Timber, and Farm Pond Management
- Regulations, Permits, and Governmental Agencies

Each module will include: an overview, brief introductory notes/lecture, links to course elements for review (reading, if print or viewing, if multimedia). Modules will include a quiz, discussion, article critique, and assignment. A comprehensive final exam will also be included.

Course Objectives: Upon completion of this course the student will be able to:

1. Describe examples of how production agriculture impacts the environment.

2. Compare various perspectives of natural resources management
3. Describe the environmental, economic, social, and regulatory issues that influence NRM perspectives.
4. Recognize the interrelationships of organism within the ecosystem.
5. Understand the levels of ecological development.
6. Interpret illustrations of nutrient cycles.
7. Describe factors contributing to soil erosion.
8. Define components and characteristics of soils.
9. Recognize signs and types of soil erosion.
10. Identify erosion prevention practices.
11. Match land capability classes with appropriate production type or land use.
12. Identify factors contributing to watershed degradation.
13. Describe management practices used to prevent watershed degradation.
14. Utilize web-based resources to identify characteristics and conditions of an assigned watershed.
15. Explain the difference between sustainable agriculture, traditional or commercial agriculture, and organic farming.
16. Describe the factors contributing to the concept of sustainability in agricultural context.
17. Identify production practices and management strategies associated with sustainable agriculture.
18. Discuss the social and economic considerations related to sustainable agriculture.
19. Describe basic concepts of forest management.
20. Recognize relationships between forest management and wildlife habitat.
21. Discuss timber production methods in context of NRM perspectives.
22. Describe the basic concepts of Integrated Pest Management (IPM).
23. Recognize universal strategies applied to IPM decisions.
24. Discuss advantages and disadvantages of the IPM approach.
25. Explain the concept of stewardship as applied to soil management and watershed protection.
26. Discuss the potential and problems of using various types of livestock, poultry, and human waste for soil improvement.
27. Identify the major components of a Nutrient Management Plan
28. Discuss limitations and restrictions related to beneficial land use permits.
29. List government agencies involved in environment regulation and resource conservation.
30. Interpret research and agency bulletins related to conservation and environmental protection.
31. Locate sources of technical and financial assistance for implementing conservation practices.

Grade Determination:

Student Lounge Introduction	NG
Online discussion (at least two entries per module/topic)	80
Quizzes (8 at 20 points each)	160

Article Critiques (8 at 20 points each)	160
Module 1 Assignment - Viewing Both Sides of the Topic	100
Module 2 Assignment – Ecosystems	100
Module 3 Assignment – Web Soil Survey Report	100
Module 4 Assignment – Watershed Report	100
Module 5 Assignment – Perspectives Essay	100
Module 6 Assignment – Case Study	100
Module 7 Assignment – Presentation	100
Participation	100
Final Exam	100
<i>Total Possible Points</i>	1200

Final Grade = $\frac{\text{Your total points earned}}{\text{Total Possible Points}} = \frac{\quad}{1200}$

(A = 90 or above, B = 80-89, C = 70-79, D = 60-69, F = below 60)

Monitoring of Online Participation

Students are expected to log in and participate to the discussion and activities related to each module. The course software, *eCollege*, records the amount of active time students are logged in to the course. However, participation points are awarded primarily for active and useful engagement in discussion threads. Discussion threads are intended to be a safe environment for discussing often controversial topics. Disrespectful comments will be removed and appropriate action taken as needed.

Student Lounge Introduction

Each student is expected to provide a brief introduction of himself/herself before the closing of Module 1. The purpose of this introduction is to explore the varying experiences each student brings to the course.

Online Discussion

Each student is expected to participate in online discussions for each module. Participation is defined as the posing of, or responding to, questions or comments that offer meaningful contribution to the module topic or related prompt. Phrases such as, “I agree with Jim...” or “That’s not what I thought...” will have zero point value. The instructor will determine whether or not the each online discussion is a meaningful contribution to the topic. The student is expected to contribute to the discussion for each module. **One response to the initial post plus one response to another student’s response is required for full credit. The first post must be completed with the first week of the module to ensure ample opportunity for discussion to emerge. Failure to post at least twice, one being within the first week of the module, will result in a loss of points.**

Article Critiques

Each student will write a one page (single spaced, 12 point font, Times New Roman) critique over a current article that addresses the specific module topic. It is preferable if citations follow APA 6th edition guidelines, but at a minimum need to possess the necessary information to locate the article. Further explanation of this assignment can be found within each module. The rubric for this assignment is listed below:

Professionalism of submission (proper grammar, punctuation, etc.)	7 points
Citation of source	3 points
Content	10 points
Total	20 points

Module 1 Assignment – Viewing Both Sides of the Topic

Scenario: You have lived in Rural Town, Texas for all of your life. It is a traditional row-crop farming community that has recently begun to draw in a more urban crowd due to its relatively close proximity to new jobs only a short commute away. With this new influx of inhabitants also comes a new spectrum of ideals concerning the impact of farming on surrounding areas. Many of these new inhabitants hold the belief that farming, as it is currently practiced, is detrimental to the environment. They are so concerned about the way things are going that they decide to hold a city council meeting to discuss future solutions to the “issues” at hand.

Assignment: You are to compose a two page (double spaced, 12 point, Times New Roman) response detailing whether or not you would side with the traditional farming citizens or the new environmentally concerned citizens and justify your stance for doing so. Be sure to address the following:

1. Which of the two groups, or neither, would you side with and why?
2. What are some of the positive environmental impacts of row-crop production?
3. What are some potential negative environmental impacts of row-crop production?
4. What action could be taken to appease both groups?

In order to fully answer the questions, some outside research may be required. Feel free to explore the resource links provided at the end of the Module 1 Lecture page as well as resources available through the Texas A&M University – Commerce Library.

Professionalism of submission (proper grammar, punctuation, etc.)	15 points
Introduction that provides direction of paper	10 points
Content (answers the questions identified above)	60 points
Conclusion/Summary that ties in main points	10 points
Proper Citations	5 points
Total	100 Points

Module 2 Assignment - Ecosystems

Module 2 primarily deals with ecosystems and the interactions found within them. For this assignment you will create a visual display of an ecosystem and a one page (double-spaced, 12 point, Times New Roman) description of what you illustrated. From the module, you should now know that ecosystems can be as large as the earth or as small as a pond. You get the opportunity to select whatever size of an ecosystem you would like for this assignment. The specific requirements are as follows:

1. A one page, labeled illustration (created by you, not a copied image from the internet) of the ecosystem you select.
2. A one page written description of the illustration.
3. Identify the renewable resources in the ecosystem.
4. Identify the non-renewable resources in the ecosystem.

The manner in which you illustrate the ecosystem is up to you. You can create an image using PowerPoint, MS Word, Paint, etc. You can also hand draw the image and convert it into a PDF if you have the capability. You will not be graded on your artistic ability. However, the content is weighted heavily. The grade detail is as follows.

1. Illustration is labeled, neat, and adequate	40 points
2. Identified the renewable resources in the ecosystem	20 points
3. Identified the non-renewable resources in the ecosystem	20 points
4. One page description that further elaborates on the illustration	20 points
Total	100 Points

Module 3 Assignment – Web Soil Survey Report

The Web Soil Survey (WSS) is an invaluable resource that allows anyone to obtain soil characteristics of a specified land area. It can be somewhat difficult to navigate at first, but with a little work you should be able to figure it out. When it comes to identifying an Area of Interest (AOI), be specific. Do not simply obtain the information from an entire county. Access the WSS from the Internet link in the lecture (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>) and obtain the following information:

1. Soil map with land characteristics, ecological information, and other information of your choice for an Area of Interest (AOI) which you define. Ideally, this would be property of specific interest to you (like your home or a portion of the university farm).
2. Submit the completed print out to Dropbox. You may have to save as a PDF first.

Module 4 Assignment – Watershed Report

The student will review various sources of information related to a Texas watershed and complete a one page report regarding water quality and potential threats from point source and non-point source pollution. Further details outlining this assignment can be found online in the course module.

Module 5 Assignment – Internship Essay

Recently you decided to fill out an application for an internship at a local state park. You do not necessarily have an extensive background in natural resources; however, you are currently halfway through a natural resource management course and feel as if you have a better grasp on certain issues than before the semester began. This internship could bridge the gap between classroom instruction and the experiential learning aspect required to fully comprehend a topic. The last question on the application form asks you to compose a **2-3 page (double spaced, 12 point, Times New Roman) essay** about your knowledge of natural resource management. You believe this is an appropriate format to discuss your perspective of the critical issues, concerns, and practices discussed and presented during the first four modules.

Keep in mind that numerous individuals are applying for this internship and you must distinguish your application from the other applicants. You want your essay to clearly reflect the “pros” and “cons” associated with these issues, concerns, and practices, but at the same time you want to incorporate how they have been present in your personal experiences. How do these topics relate to you? You may decide to focus on a broad range of topics, briefly addressing each. You may decide to focus on a more narrowed topic, thoroughly addressing multiple aspects of it. The choice is yours. The key is to tie the topic to your personal experiences with an appropriate balance of technical information as to demonstrate your knowledge of natural resource management.

Professionalism of submission (proper grammar, punctuation, etc.)	20 points
Introduction that provides direction of paper	10 points
Content	60 points
Conclusion/Summary that ties in main points	10 points
Total	100 Points

Module 6 Assignment – Case Study

Students will be presented a scenario (actual or hypothetical) regarding an application for a *beneficial land use* permit to apply livestock, poultry, or human waste to farm land. A critical analysis of the application documents will be included as well as the potential impact on the environment. Each student will answer a series of questions and draft a letter to the appropriate agency in support or rejection of the application, based on the information provided.

Module 7 Assignment – Presentation

Create a PowerPoint presentation over a Best Management Practice for protection against non-point source pollution from agricultural enterprises, a technology/incentive program used to implement conservation of renewable natural resources, practical application of Integrated Pest Management, or an emerging issue in natural resources management/environmental protection. Develop a presentation from information obtained from two or more technical bulletins or reports from a governmental agency (AgriLife, NRCS, TCEQ, EPA, TPWD, etc.) or a research report from a university. A copy of the bulletins or reports must be presented to the instructor at least three days prior to the presentation. Presentations will be posted online and be available to class peers for questions and comments. The presentations should be at least 14 slides (do not copy and paste in paragraph form on the slides) including intro slide.

Final Exam

The final exam will be a comprehensive assessment of the student's understanding of the issues and practices associated with the management of renewable natural resources. It will consist of multiple-choice, true-false, matching, and limited (brief) response essay items.

Access and Navigation:

This course will be utilizing eCollege to enhance the learning experience, eCollege is the Learning Management System used by Texas A&M University-Commerce. To get started with the course, go to:

<https://leo.tamu-commerce.edu/login.aspx>.

You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or helpdesk@tamuccommerce.edu.

Communication and Support

Texas A&M University-Commerce provides students technical support in the use of eCollege. The student help desk may be reached by the following means 24 hours a day, seven days a week. If you experience issues while taking your exams or at any other point, feel free to contact the support desk.

- Chat Support: Click on 'Live Support' on the tool bar within your course to chat with an eCollege Representative.
- Phone: 1-866-656-5511 (Toll Free) to speak with eCollege Technical Support Representative.

- Email: helpdesk@online.tamuc.org to initiate a support request with eCollege Representative.
- Help: Click on the 'Help' button on the toolbar for information regarding working (i.e. How to submit to dropbox, How to post to discussions etc...).

Withdrawal Policy

Every student has the right to drop the course without penalty until the drop-date. Students dropping the course during this period will be given a DP (drop while passing). A grade of DP is GPA neutral, but a grade of DF counts as an F on your transcript. If you choose to stop attending class, you may be dropped from the course due to excessive absences. If you are not satisfied with your grade in the course and wish you to drop, it is YOUR responsibility to drop the course. Once a grade of DP or DF has been submitted, it cannot be changed. A student may drop a course by logging into their myLEO account and clicking on the hyperlink labeled 'Drop a class' from among the choices found under the myLEO section of the Web page.

Student Conduct

All students are expected to conduct themselves in a professional manner at all times. You are adults and will be treated as such. Discriminatory, rude, and inappropriate language will not be tolerated in this class and students will be asked to leave or drop the class (these same rules apply for online discussions). If a student continues to act in the same manner during future classes, the instructor reserves the right to drop the student from the course.

Academic Misconduct:

Academic integrity is the pursuit of scholarly work free from fraud and deception and is an educational objective of this institution. Texas A&M University-Commerce has explicit rules and regulations governing academic dishonesty and academic misconduct. As the University states, "All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." These policies are stated in detail in the Student's Guide Handbook. Each student is expected to read this document and abide by the contained policies. These university policies will be followed in this class. The minimum penalty for an act of academic dishonesty will be the assignment grade of 0 on the examination or homework assignment. The maximum penalty is expulsion from the University. Texas A&M University-Commerce further does not tolerate plagiarism and other forms of academic dishonesty. Conduct that violates generally accepted standards of academic honesty is defined as academic dishonesty. "Academic dishonesty" includes, but is not limited to, plagiarism (the appropriation or stealing of the ideas or words of another and passing them off as one's own), cheating on exams or other course assignments, collusion (the unauthorized collaboration with others in preparing course assignments), and abuse (destruction, defacing, or removal) of resource material.

If you are unsure what constitutes plagiarism and how to avoid it. Visit the following websites:

<http://www.plagiarism.org/>

<http://www.unc.edu/depts/wcweb/handouts/plagiarism.html>

<http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml>

Requests for Special Accommodations

Requests from students with disabilities for reasonable accommodations must go through the Academic Support Committee. An individual instructor cannot decide to make accommodations for you without that Committee's approval.

ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library 132

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

StudentDisabilityServices@tamu-commerce.edu

[Student Disability Resources & Services](#)

The instructor reserves the right to modify this syllabus during the semester, if needed. The instructor also reserves the right to extend credit for alternative assignments, projects, or presentations.

Important Dates:

Module Number	Open Date	Close Date
1	January 13, 2014 – 6:00 AM	January 26, 2014 – 11:59 PM
2	January 27, 2014 – 6:00 AM	February 9, 2014 – 11:59 PM
3	February 10, 2014 – 6:00 AM	February 23, 2014 – 11:59 PM
4	February 24, 2014 – 6:00 AM	March 9, 2014 – 11:59 PM
March 10 – 14, 2014 – Spring Break		
5	March 17, 2014 – 6:00 AM	March 30, 2014 – 11:59 PM

6	March 31, 2014 – 6:00 AM	April 13, 2014 – 11:59 PM
7	April 14, 2014 – 6:00 AM	April 27, 2014 – 11:59 PM
8	<i>April 28, 2014 – 6:00 AM</i>	<i>May 4, 2014 – 11:59 PM (1wk)</i>
Final Exam	May 5, 2014 – 6:00 AM	May 8, 2014 – 11:59 PM

Note: All assignments, articles, discussions and quizzes within each module will have the same due dates as the respective closing date of the module.