Course Syllabus

AGEC 5301

1. Course Information
   a. Course Title
      Environmental Issues and Agricultural Policy
   b. Course Number
      AGEC 501
   c. Credit Hours
      (3-0)
   d. Prerequisites
      ECO 201 and 302, or approval of instructor of record
   e. Permission of Instructor Required
      Yes
   f. Location of Classroom
      Online Course
   g. Days and Hours of Class
      NA

2. Instructor Information
   a. Name Title
      Frank Ewell, Professor
   b. Office Location
      Joe W. Autry Agriculture Building – Room 204B
   c. Office Phone Number
      254-968-9440
   d. Office Hours
      12:00 Noon – 1:30 PM MTWTR
   e. Department Phone Number
      254- 968-9200
   f. Teaching Assistants
      i. Teaching Assistants Office Number
         254-969-9296
      ii. Teaching Assistant Phone Number
         NA

3. Course Materials
   a. Textbooks
      i. Title
         NA
      ii. Author
         NA
iii. Publication Date
NA

iv. Publisher
NA

v. Cost
NA

vi. Where Are Available
Campus Bookstore, Amazon.com

b. Readings
Posted on Blackboard

c. Supplementary Readings
Posted on Blackboard

d. Other Materials
Posted on Blackboard

4. Course Descriptions/Objectives

a. Description and College Catalog
Current and emerging problems in economics of environmental issues relating to agriculture and agribusiness firms. Examination of policy issues, institutions, and legal and political constraints in relation to environmental quality and agricultural resources. Prerequisites ECO 201 and 302, or approval of instructor of record.

b. General Content of the Course
Environmental Issues and Agricultural Policy is a directed reading course that covers environmental issues that are related to agriculture and the current policy setting pertaining to those issues. Students will read a variety of peer-reviewed research articles, news articles, opinion articles over each environmental issue. Students will write a short report over each issue covered in class.

c. Instructional Methods
This is an online class. All class materials are posted online in Blackboard. Students will find one article over each topic covered in class. Students will write a brief report over each article describing its relevance to agriculture. There will be a weekly collaborative session in which students can discuss the issues and articles with other students and the professor.

d. General Course Goals
   i. Provide students with the basic understanding of environmental issues that are relevant to agriculture and agribusiness.
   ii. Provide students with a basic understanding of the policy background and limitations related to each specific environmental issue.
   iii. Provide students with an understanding of the interrelationships of some environmental issues.
iv. Provide students with an understanding of which environmental issues negatively affect agriculture as well as which environmental issues may be at least in part due to agricultural activities.

e. Detailed Course Goals and Learning Objectives

1 - Introduction

Upon completion of this section student should be familiar with the expectations for the successful completion of this class, the location of course materials and the course calendar. Students will learn to distinguish between peer-reviewed articles, opinion or op-ed articles and news articles.

2 - The Policy Process

This unit is an overview of the policy process in the United States. Upon completion of this unit students understand how interest groups, working through the political system, create policies and laws.

3 - Climate Change

This unit includes a discussion of the issues pertaining to climate change. Upon completion of this unit students should have an understanding of the scientific understanding of global warming and its causes and consequences. Topics included or the relationship of fossil fuels in agriculture, the consequences of rising sea levels and greenhouse gases.

4 - Conservation

This unit covers several diverse issues including species extinction, biodiversity, pollinator decline, invasive species, poaching and endangered species. Upon completion of this unit students will understand these issues and their relationship to agriculture.

5 - Disease

After completion of this unit students will understand the potential magnitude and importance of disease related issues in agriculture and the importance of the implementation of policies that protect the public and producers from the consequences of the outbreak of diseases. This will include diseases that can be transmitted to humans as well as diseases that kill crops and livestock.

6 - Ecotourism

After completion of this unit students will understand the connection between ecotourism and agriculture as well as potential future expansion of ecotourism related to agriculture.
7 - Energy

This unit includes the topics of fossil fuel dependence, globalization of agriculture and renewable energy. Upon completion of this unit students will have an understanding of global agriculture's dependence upon fossil fuels to produce nitrogen fertilizer and to provide the fuel that is needed for globalized trade. Students will gain an understanding of the potential for the production and consumption of renewable energy in agriculture.

8 - Environmental Degradation

This unit includes the issues of eutrophication, habitat destruction and invasive species. Understand the connection between agricultural activities and eutrophication and habitat destruction. Students will also gain an understanding of invasive species and the regulations that are used to combat or prevent these problems.

9 - Genetic Modification (Engineering)

Upon completion of this unit students will have a working knowledge of the amount of genetic engineering that is currently involved in production agriculture as well as potential future uses of genetically modified organisms. Students will also learn about the connection between genetically modified food products in ongoing discussions of food labeling policies.

10 - Humanities Connection to Nature

In this unit students will learn that as a consequence of declining percentage of the population having any connection to farming, ranching, rural life and nature in general, that the majority of people no longer understand or feel any connection between humans and nature. Students will learn about the potential consequences of this disassociation as it relates to future agricultural policy.

11 - Intensive Farming

This unit includes the topics of overgrazing, irrigation, monoculture, environmental effects of meat production slash and burn agriculture, stewardship of resources and pesticide drift. After completing this unit students will understand the actual and potential consequences of each of these issues as well as the policy implications.

12 - Land Degradation

This unit includes the topics of land pollution and desertification. Upon completion of this unit students will have an understanding of the short-term and long-term consequences of land degradation on both a small and large-scale. Students will also gain a general understanding of the policy implications of these issues.

13 - Soil Degradation
This unit includes the issues of soil conservation, soil erosion, soil contamination, soil salinization and alkali soils. Upon completion of this unit students will have a general working knowledge of these issues and the success and failure of policies that have been used in attempt to prevent these problems.

14 - Land-Use

This unit includes the issues of urban sprawl, habitat fragmentation and habitat destruction. Upon completion of this unit students will have a working knowledge of these issues in the policies that are in place or being contemplated to prevent them.

15 - Population Growth

This unit includes the issues of burial, water crisis, over population and companion animals, tragedy of the commons, gender imbalance in developing countries and sub replacement fertility levels in developing countries. Upon completion of this unit students should have a general knowledge of these issues and their connection to agriculture.

16 – Pollution

This unit includes the issues of non-point source pollution and point source pollution. Upon completion of this unit student will have a general understanding of the issues and their connection to agriculture.

17 - Religious Practices

Upon completion of this unit students will have an understanding of the connection between various religions and their impact on agricultural policies and practices.

18 – Reservoirs

Upon completion of this unit students will understand the connection between the public demand for reservoirs for recreational and urban use and agriculture.

19 - Resource Depletion (Misuse)

This unit includes the topics of consumerism, market failure, mining, agricultural subsidies and sustainability. Upon completion of this unit students will have an understanding of these issues and their relationship to agricultural policies that have been or may be used to prevent these problems.

20 – Toxins

This unit includes the topics of agricultural chemicals, toxic waste and bioaccumulation. Upon completion of this unit students will have a general knowledge of these issues and the policies that have been or may be used to prevent these problems.
21 - Unforeseen Events

Upon completion of this unit students will understand that things can and will happen that have not been foreseen such as 9/11, the potato blight of the mid-1800s, etc., that could have dramatic effects on agriculture. Likewise, students will learn that some agricultural policies may be in place or contemplated to deal with such potentialities.

22 – Waste

This unit includes the topics of recycling and water lost to the water cycle by contamination. Upon completion of this unit students will understand the growing importance of recycling as it relates to agriculture and the potential consequences for agriculture of water that may be lost to the water cycle by contamination from industrial, agricultural, mining or fracking activities.

5. Course Calendar/Schedule
   a. Weekly Schedule of Topics
      Posted as a file in the course content section of blackboard each semester.
   b. Academic Calendar
      [Link to academic calendar]
   c. Exam Schedule
      Posted as a file in the course content section of blackboard each semester.
   d. Quizzes
      NA
   e. Schedule for Other Means Of Assessment
      Posted on blackboard. Students will be assessed in accordance to the quality and quantity of the topic reports that are completed.
   f. Due Dates For Major Assignments
      Posted under announcements on blackboard.
   g. Required Special Events
      Posted under announcements on blackboard when appropriate.

6. Course Policies
   a. Attendance, lateness
      You are expected to attend collaborations and not be late.
   b. Class Participation
      Due to the nature this class I would expect that some students may have expertise in some of the topics that we will be discussing. I encourage and appreciate comments and questions in our collaborative sessions.
   c. Missed Exams Or Assignments
      Students are expected to complete and turn in their written assignments by deadline.
   d. Lab Safety/Health
e. **Academic Dishonesty**
Tarleton State University expects its students to maintain high standards of personal and scholarly conduct. Students guilty of academic dishonesty are subject to disciplinary action. Academic dishonesty includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials. The faculty member is responsible for initiating action for each case of academic dishonesty that occurs in his/her class. (Tarleton Catalog)

f. **Grading**
Each exam including the final exam is worth 100 points each. Each short quiz is worth five points each. Your final course grade is calculated by dividing the sum of the scores that you make on all exams and short tests and dividing that number by the total number of points possible on all exams and short tests, then multiplying this fraction by 100.

<table>
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<tr>
<th>Final Average</th>
<th>Grade</th>
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<tbody>
<tr>
<td>&gt; 89.5</td>
<td>A</td>
</tr>
<tr>
<td>89.5 &gt; Final Average &gt; 79.5</td>
<td>B</td>
</tr>
<tr>
<td>79.5 &gt; Final Average &gt; 69.5</td>
<td>C</td>
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<tr>
<td>69.5 &gt; Final Average &gt; 59.5</td>
<td>D</td>
</tr>
<tr>
<td>Final Average &lt; 59.5</td>
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7. **Available Support Services**
   a. Library Dick Smith Library  [http://www.tarleton.edu/library/] 254-968-9937
   c. Division of Student Success  [http://www.tarleton.edu/success/staff.html] 254-968-9480
   d. Student Disability Services  [http://www.tarleton.edu//sds/] 254-968-9400
   e. Computer Help Desk  [http://www.tarleton.edu/technology/] 254-968-9885
   f. Computer Online Support (CITDE)  [http://online.tarleton.edu/] 254-968-1960

8. **Students with Disabilities**
It is the policy of Tarleton State University to comply with the Americans with Disabilities Act and other applicable laws. If you are a student with a disability seeking accommodations for this course, please contact Trina Geye, Director of Student Disability Services, at 254.968.9400 or geye@tarleton.edu. Student Disability Services is located in Math 201. More information can be found at [www.tarleton.edu/sds](http://www.tarleton.edu/sds) or in the University Catalog.