

## **Range Planning**

Course Director: Professor Robert A. Nicholson

E-mail: [rnicholson@fhsu.edu](mailto:rnicholson@fhsu.edu)

Work phone: 785-628-4269

Office Location: Albertson Hall, 311

Personal Link: <http://www.fhsu.edu/biology/ranpers/nicholson.htm>

This is a Blackboard only course. If you are enrolled in this course, go to this link now and login: <http://blackboard.fhsu.edu> Click on Range Planning

1. Read all the announcements. Click on "View All"
2. Familiarize yourself a bit with Blackboard if you've not used it before. Don't be afraid to explore. Also you don't need to know everything about it before you start.
3. Read all the items under "Information" proceed accordingly.
4. If you have questions, post under "Discussion Board".
5. Expect to receive an Email from instructor.

All necessary information can be found there and you need not read further.

### **Synopsis**

- This is primarily a course in Range Economics. The following topics will be covered.  
Range Economics vs. Range Management  
Economics in a Rangeland Setting  
Supply and Demand-The Basic Tools  
The Production Function  
Optimum Levels of Production  
Input - Input Relationships  
Economics of Multiple Use  
Discounting and Compounding  
Investment Analysis of Range Practices - Private Enterprise  
Cost: Benefit of Range Practices - Public Lands  
Legal aspects of Land Management and Ranching
- Students will be given reading assignments and required to prepare written summaries of each assignments to the instructor.
- Students will write research papers on their choice of 3 topics. All papers will be posted online and all students will be accountable for content.
- The principal source for the course will be the textbook Range Economics by John Workman.
- There will be a comprehensive final exam.

### **Costs and other Fiscal Matters**

Current tuition and fees can be found at:

<http://www.fhsu.edu/sfs/>

Reading Materials

**Workman Chapters**

Chapter 01 ( 1026319 Bytes )

Chapter 02 ( 1484356 Bytes )  
Chapter 03 ( 1302573 Bytes )  
Chapter 04 ( 906918 Bytes )  
Chapter 05 ( 3466732 Bytes )  
Chapter 06 ( 1615716 Bytes )  
Chapter 07 ( 1615341 Bytes )  
Chapter 08 (new) ( 2161199 Bytes )  
Chapter 09 ( 4565284 Bytes )  
Chapter 10 ( 3620154 Bytes )  
Index ( 527136 Bytes )  
Introduction ( 629040 Bytes )

Ranch Planning

Legal Aspects of Ranching and Rangelands ( 2850266 Bytes )

### **Reading Assignments**

You are required to read:

1. All the chapters in Workman.
2. Chapter on Legal Aspects.
3. All research papers presented by fellow students this semester.

All reading materials are provided in this and are found under "Course Documents"

### **Assignments**

#### *Chapter Summaries*

You are required to read and write a summary of each assigned chapter from Workman. The length of the summary depends on the length and difficulty of the material in the Chapter -- typically 3-6 pages.

You may submit your papers via the Digital Dropbox or by mail or in person to the Biology Office.

#### *Research Reports*

You are assigned to write research papers on 3 of the following topics.

You may use as many citations from the open literature (journals) as you wish, but they must be properly cited in the paper.

You may (or may not) use internet sources, but must have at least 3 journal references for each internet source. One suggested source is *Journal of Range Management* available in Forsyth Library. It's also available online from the Univeristy of Arizona

The typical length of this type of paper is 5-10 pages, not including illustrations, citations, etc.

You will submit your paper to Blackboard and are required to read all others submitted.

If you have another topic that you would like to research that is not listed here, please contact your instructor.

List of topics:

Characteristics of superior planning for efficient calf production  
Conflict resolution in a livestock vs. wildlife context  
Economic comparison of leasing vs. ownership of grazing land  
Economic evaluation of burning vs. herbicide use  
Economic evaluation of control of invasive plant species  
Economic evaluation of different stocking rates  
Economic evaluation of habitat improvement for wildlife  
Economic evaluation of leasing rangeland for hunting  
Economic evaluation of predator control  
Economic evaluation of rodent control  
Economic impact of federal grazing land management policies on ranching enterprises  
Economic impact of the clean water act  
Economic impact of the endangered species act  
Economic impact of the mined land reclamation act  
Economics of carbon sequestration  
Economics of rangeland management in developing countries  
Grazing land Alternative Analysis Tool (GAAT)  
Hay management on rangeland  
Integrating rangeland and ranch planning with societal demands  
Integration of both economic and ecologic considerations into analyses of grazing land use planning  
Legal aspects of the ranching enterprise  
Linear programming as a tool for planning natural resource management  
Methods of leasing land for grazing  
Planning for drought  
Prepare a whole ranch plan  
Ranch financial statements  
Setting and adjusting stocking rates  
Stocking rate calculations  
Techniques of rangeland/wildland appraisal  
The sagebrush rebellion and other privatization movements  
Theory and concepts of carrying capacity  
Use of complementary forages in a reproductive beef cattle operation  
Use of rangeland for livestock grazing in a social and regulatory context  
Use of spreadsheet to evaluate profitability of a range management project  
Using geographic information systems for planning resource management