



University of
Nebraska
Lincoln

Institute of Agriculture and Natural Resources
College of Agricultural Sciences and Natural Resources

Office of the Dean
103 Agricultural Hall
P.O. Box 830702
Lincoln, NE 68583-0702
(402) 472-2201
FAX (402) 472-7911



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**Summary of Actions
Curriculum Committee
College of Agricultural Sciences and Natural Resources**

To: CASNR Faculty

From: Beth Franz for the Curriculum Committee

I am furnishing information on recent approval actions of the CASNR Curriculum Committee. If you have any questions or concerns, please lodge them with Dean Donald Edwards **by August 11, 1993**. If no objections are heard, we will assume you approve and will forward the requests to the appropriate UNL approval bodies.

New Course Proposal

AgSci 103/NatRes 103. Food, Agriculture, and Natural Resource Systems (3 cr I,II) Lect 2 disc 1

Students will study agricultural and natural resource topics from the perspectives of the natural resource base, energy budget, the environment, and economic and societal aspects. Case studies will address food production and processing systems plus other selected agroecological systems for their economic viability, ecological soundness, social responsibility, and scientific appropriateness.

Your department head has a copy of the course proposal for your review.

Pre Natural Resources Major*

Integrated Natural Resources Management

The courses listed below compose a nondegree program entitled "Integrated Natural Resources Management." The program is designed for students who are interested in a Bachelor of Sciences Degree in Natural Resources but are uncertain about a specific major. This list of suggested courses should provide the student maximum flexibility while ensuring that courses contribute to the degree programs of any of the majors within natural resources. Students

FOOD, AGRICULTURE AND NATURAL RESOURCE SYSTEMS

Early in the deliberations of the Minimum Requirements Committee of the Curriculum Revitalization Task Force (CRTF), the committee members began to see the value of having a course that would make students aware of and comfortable with a conceptual model of the essence of agriculture and natural resources. For six months the Minimum Requirements Committee in particular, and the CRTF Steering Committee in general, continued to discuss developing a course to provide a logical framework of interrelationships among disciplines while developing students' analytical, logical, and problem-solving skills.

Following a CASNR Faculty Forum in November 1992, Rick Waldren, Jim King, and Jack Schinstock began the process of formally developing such a course. Many of the ideas put forward at the Faculty Forum were considered in preparing the first draft of a new course proposal. Sufficient faculty support for such a course was expressed at a CASNR Faculty Forum in December that the Minimum Requirements Committee decided to include such a course, in concept, in its proposal for a revised core curriculum. The General Education requirements for CASNR, including the concept of AgSci 103/NatRes 103, were approved in March, 1993.

Development of the course continued with the original group of three soliciting input from a broader group of faculty that had earlier expressed interest in the course. This group included Ed Peters, Randy Wehling, Liz Banset, and Dennis Conley. The original new course proposal that went to the CASNR Curriculum Committee resulted from the efforts of these seven individuals plus the earlier input from the CRTF Steering Committee and the Minimum Requirements Committee.

The Curriculum Committee provided additional input and suggested that input from the faculty also be solicited. After input from the faculty was incorporated, the new course proposal was approved by the Curriculum Committee. The new course proposal is attached.

Also, faculty were asked if they would be interested in assisting with the implementation of the course objectives. As of this date, 11 faculty members, in addition to those listed above, have expressed an interest in providing technical expertise for the lecture section, serving as a discussion group leader, and/or assisting with the development of the course syllabus for the first semester 1994-95,.

Rich Waldren, Associate Professor, Agronomy, has volunteered to be lead instructor for the course, and Jack Schinstock, Assistant Dean, CASNR, has agreed to be colead instructor. Following appropriate approvals, they will begin to assemble a faculty team to develop a course syllabus to implement the course objectives.

NEW COURSE PROPOSAL

DESCRIPTION

AgSci 103/NatRes 103) Food, Agriculture, and Natural Resource Systems (3 cr I, II) Lect 2 disc 1.

Students will study agriculture and natural resource topics from the perspectives of the natural resource base, energy budget, the environment, and economic and societal aspects. Case studies will address food production and processing systems plus other selected agroecological systems for their economic viability, ecological soundness, social responsibility, and scientific appropriateness.

INSTRUCTORS

Lead instructor(s) will be nominated by the CASNR Faculty Advisory Council in consultation with unit administrators and the Dean's Office, and approved by the CASNR Curriculum Committee. Lead instructors are responsible for securing the discussion section leaders from among the faculty, subject to approval by the CASNR Curriculum Committee, and providing orientation for the implementation of course objectives. Each faculty team (lead instructor(s) and discussion section leaders) will develop a course syllabus to meet the course objectives.

OBJECTIVES

Upon satisfactory completion of this course, students will be able to:

1. Describe the natural resource base upon which each person depends and identify economic and social forces affecting its stewardship.
2. Explain the energy budget from energy's original captured solar source via its conversion by plants and animals to consumer uses.
3. Identify the benefits and possible side effects on the environment of growing, harvesting, and processing plants and animals as nutrients/biomass enter and leave a landscape unit either supplementally or by natural recycling.
4. Discuss the economic relationship between profit-making by producers and processors of agricultural commodities and the energy and mass balance budgets of a system.
5. Recognize external influences on the social, ethical, and environmental responsibilities that should accompany changing processes, products, services, and systems.

6. Solve problems and make decisions more effectively by applying analytical, logical, and critical thinking skills.
7. Interpret diverse bodies of intellectual content to look for solutions to local, regional, and global concerns.
8. Discuss issues with other students, clientele groups, and field professionals.
9. Recognize interdependencies among disciplines as problems are addressed and conflicting values of people as they use resources in various ways.

JUSTIFICATION/PURPOSE

Employers of college of agriculture and natural resources graduates have expressed concern about the limited ability of new employees to identify and analyze problems, to suggest solutions, and to synthesize and integrate information across discipline lines. The knowledge explosion has led to development of more specialized courses, resulting in materials being presented in a manner which fails to make interdependencies apparent. Students seldom appear to know or understand the breadth and interdependencies of disciplines within the college by the time they graduate.

A course such as AgSci 103/NatRes 103 provides a logical framework, with real examples, of interrelationships among disciplines while developing the students' analytical, logical, and problem-solving skills. The continual application of these skills in a variety of situations during their college experience should make the students more effective problem solvers capable of arriving at meaningful solutions.

The purpose of AgSci 103/NatRes 103 is to broaden the scope of agricultural science and natural resource students so that they can develop an understanding of the concepts and vocabulary needed in future courses and careers. Students will be exposed to current problems and multidisciplinary approaches to address them.

RELATIONSHIPS TO OTHER COURSES

This is the first integrative problem-solving course for students pursuing degree programs in the College of Agricultural Sciences and Natural Resources (CASNR). Although a small amount of the technical content appears similar to that presented in the various ecology courses taught in the College of Arts and Sciences, this course is unique in that it is designed to make learners more aware of the interdependencies among disciplines and to recognize that many problems are solved by understanding these interrelationships.

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Also, this course is designed for students with no college background in biology.

AgSci103/NatRes 103 will relate to other courses in CASNR because when students recognize the interdependencies among disciplines and see how other courses relate to their own preferences, strengths, and objectives, they should become more highly motivated to do well in the courses they select.

COURSE PROSPECTUS

- I. Course Introduction/Getting Started
- II. Global Perspectives of the Food and Agricultural Industry
- III. Natural Resource Perspective
- IV. Energy Budget Perspective
- V. Environmental Perspective
- VI. Economic Perspective
- VII. Social Perspective

SELECTED REFERENCES/READINGS

To be determined by the team of faculty selected to teach the course before the beginning of each academic year.