Northern Marianas College
CURRICULUM ACTION REQUEST

Effective Semester / Session: Spring 2012

Type of Action:

- New
- Modification □
- Move to Inactive (Stop Out)
- Cancellation

Course Alpha and Number: NR 290 (Previously BI 290)

Course Title: Special Topics in Natural Resources Management

Reason for initiating, revising, or canceling:
This course guide is being modified for periodic updates and to include modification of course credits.

Dr. Alfredo B. De Torres
Proposer

Date

Dr. Alfredo B. De Torres
Department Chair

Date

Barbara Merfaelen
Dean of Academic Programs and Services

Date
1. **Department**  
   Sciences, Mathematics, Health and Athletics

2. **Purpose**  
   This course is a three-credit course for majors in the A.S. Natural Resources Management degree program. The purpose of this course is to provide directed study and work experience for students in fundamental research/extension methodology. The course will focus on the aspects of field observations, data collection and analysis, and scientific method related to the study of specific topics in the agriculture, environmental, and natural resources sciences.

3. **Description**

   A. **Required/Recommended Textbook(s) and Related Materials**  
      Texts and all related materials will depend on topic to be studied and instructor’s determination as to relevance to that topic.

   B. **Contact Hours**  
      1. **Lecture:** *Not to exceed a total of 45 hours per semester*  
      2. **Lab:** None  
      3. **Other:**

   C. **Credits**  
      1. **Number:** 3  
      2. **Type:** Regular degree credits

   D. **Catalogue Course Description**  
      This course provides specialized, directed study in a topic to be chosen by the student and the instructor. Course content will be varied; provided that a different topic is studied. Prerequisite: None. English Placement Level: EN 101. Math Placement Level: MA 161; or consent of instructor (COI).

   E. **Degree or Certificate Requirements Met by Course**  
      This course fulfills the requirement for the A.S. degree in Natural Resources Management. This also serves as an elective course for other program majors.
F. Course Activities and Design
Specific course activities to be determined by the instructor and the student, based upon the student’s area of interest and focus. These activities will include, but are not limited to: Topical readings, discussions with professionals in the discipline, field sampling, data collection, processing of samples, laboratory investigations, data entry and analysis, report writing, and public speaking.

4. Course Prerequisite(s); Concurrent Course Enrollment; Required English/Mathematics Placement Level(s)
Prerequisite(s): None
English Placement Level: EN 101
Math Placement Level: MA 161; or consent of instructor (COI)

5. Estimated Cost of Course; Instructional Resources Needed
Cost to the Student: Tuition for the total credits taken and all applicable instructional materials and other related fees.

Cost to the College: Instructor’s salary.

Instructional resources needed for this course include field, laboratory, and nursery supplies and equipment; computer and software for statistical analysis of data, graphing, and multimedia presentation.

6. Method of Evaluation
Student learning will be evaluated for this course through discussions between the instructor and student, and by the demonstration of the student’s commitment through satisfactory completion of planned project tasks and assignments. Students will keep a detailed laboratory/field investigation notebook and time logbook, must work with the instructor in the lab and/or field during assigned times, and must present the results of the study in a public forum such as a student seminar or similar presentation. A final project report is required, written in the format for possible publication in a scientific journal. A “C” or above is required for successful completion of this course.

Student grades will be based on the regular letter grade system as described below:

A: Excellent – grade points: 4.0;
B: Above average – grade points: 3.0;
7. Course Outline
This is a topical outline and does not necessarily indicate the sequence in which the material will be presented.

The topical outline for this course will vary by instructor in order to provide supervised training of practical laboratory or field experience with emphasis on expanding and improving student competencies related to the classroom, discipline, career opportunities, and interests of the student. All special topic studies will include, but are not limited, to the following:

1.0 Identification or Determination of a Specific Topic to be Studied by the Student Using Scientific Methodology

2.0 Forming a Hypothesis

3.0 Developing an Experimental/Field Investigation Plan

4.0 Observations, Data Collection, Sampling, and Recording Information

5.0 Data Analysis

6.0 Report Writing in the Format for Publication in a Refereed Scientific Journal

7.0 Seminar Presentation in a Public Forum

8. Instructional Goals
This course will introduce students to:

1.0 Special studies not otherwise offered in the curriculum;

2.0 The practical application of the principles and methodology of research and/or extension projects in the agriculture, environmental, and natural resources sciences;
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3.0 A mentored and focused effort to develop, expand, and improve competencies with experiences related to the classroom, laboratory, or field within the discipline; and

4.0 Professionals in the discipline and provides the opportunity to explore careers in the sciences.

9. **Student Learning Outcomes**
   Upon successful completion of this course, students will be able to:

1.0 Demonstrate knowledge and skills in special studies not otherwise offered in the curriculum;

2.0 Explain, demonstrate, and discuss how research is conducted in the life/natural resource sciences; demonstrate acquired skills in field observation, collecting data from the field or laboratory; sampling; processing of samples; and record keeping;

3.0 Discuss the basics of data entry, statistical analysis of data, graphing of data into charts or other visual means of data interpretation; present results of study in a public scientific forum; and

4.0 Interact with professionals in the discipline and pursue career opportunities in the Sciences/Natural Resources disciplines.

10. **Assessment Measures**
   Assessment of student learning may include, but not be limited to, the following:

1.0 Field investigation and/or lab reports on student’s area of interest;

2.0 Presentation of research investigation/lab reports; and

3.0 Class participation in generating the reports.