# Northern Marianas College CURRICULUM ACTION REQUEST

Effective Semester / Session: Fall 2018 Type of Action New Modification X Cancellation Course Alpha and Number: NR 290 (Previously BI 290) Course Title: Special Topics in Natural Resources Management Reason for initiating, modifying, or canceling; The course guide is being modified for periodic updates. Dr. Alfredo B. De Torres 3-28-19 Proposer Date Dr. Alfredo B. De Torres 3-28-19 Department Chair Date Adam Wals 05.20.19 Language & Format Reviéw Specialist Date Ajani Burrell Academic Council Chair Date 6/11/19 Charlotte Cepeda Dean, Learning and Student Success Date

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## 1. Department

Natural Resource Management

## 2. Purpose

This course is a three credit course for majors in the AS Natural Resource 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 the scientific method related to the study of specific topics in the agriculture, environmental, and natural resource sciences.

## 3. Description

# A. Required/Recommended Textbook(s) and Related Materials Required:

Texts and all related materials will depend on topic to be studied and instructor's determination as to relevance to that topic.

Recommended: N/A

#### B. Contact Hours

1. Lecture: 3 per week / 45 per semester

2. Lab: N/A
 3. Other: N/A

#### 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. English Placement Level: EN 101; Math Placement Level: MA 161

### E. Degree or Certificate Requirements Met by Course

This Course fulfills the requirements for AS degree in Natural Resource Management. This also serves as elective course for other program majors.

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## 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 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

Prerequisites: N/A

Concurrent Course Enrollment: N/A

## Required English/Mathematics Proficiency Level(s)

English Placement Level: EN101
Mathematics Placement Level: MA161

### 5. Estimated Cost of Course; Instructional Resources Needed

Cost to the Student: Tuition for a 3-credit course, cost of textbook, and instructional materials fee.

Cost to the College: Instructor's salary.

Instructional resources needed for this course will involve 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, 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, work with the instructor in the lab and/or field during assigned times, and 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. NMC's grading and attendance policies will be followed.

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### 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 referred scientific journal
- 7.0 Seminar presentation in a public forum

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## 8. Instructional Goals

The course will introduce students to:

- 1.0 Special studies not otherwise offered in the curriculum;
- 2.0 Practical applications of the principles and methodology in research and/or extension projects in agricultural, environmental, and natural resource sciences;
- 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 opportunities to explore careers in the sciences.

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## 9. Student Learning Outcomes

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

- 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;
  - 2.1 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;
  - 3.1 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 Resource disciplines.

#### 10. Assessment Measures of Student Learning Outcomes

Assessment of student learning may include, but not be limited to, the following:

- 1.0 Field Investigations;
- 2.0 Lab Reports;
- 3.0 Presentations; and
- 4.0 Class Participation