Northern Marianas College CURRICULUM ACTION REQUEST

Effective Semester / Session: Fall 2012
Type of Action: _ New Modification X Move to Inactive (Stop Out) Cancellation
Course Alpha and Number: NR 150 (Previously BI 150)
Course Title: Introduction to Natural Resources Management
Reason for initiating, revising, or canceling: This course guide is being modified for periodic updates.
Dr. Alfredo B. De Torres
Proposer Date
Dr. Alfredo B. De Torres
Department Chair Date
Ms. Barbara Merfalen Aguin
Dean of Academic Programs and Services Date

Northern Marianas College Course Guide

Course: NR 150 Introduction to Natural Resources Management

1. Department

Sciences, Mathematics, Health and Athletics

2. Purpose

NR 150 is the first core course in the Natural Resources Management, Associate in Science degree. Natural Resources Management is an interdisciplinary program that emphasizes a theoretical and applied approach to agriculture, environmental, and natural resources production, assessment, classification, problem or phenomena mitigation, policy, and related conservation issues. This science course provides academic training and on-the-job experience with a student focus on utilization, conservation, and protection of our land, sea, water, and air.

3. Description

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

Lobban, Christopher S., and Maria Schefter. *Tropical Pacific Island Environments*. Mangilao, GU: University of Guam Press, 1997. Readability level: Grade 12

Furey, John, et. al. *Island Ecology & Resource Management*. Saipan, MP: Northern Marianas College Press, 2006.

Readability level: Grade 10

Handouts on specific topics will also be distributed.

B. Contact Hours

- 1. Lecture: 3 hours per week / 45 per semester
- 2. Lab: Science lab, 3 hours per week / 45 per semester
- 3. Other:

C. Credits

- 1. Number: 4, including 1 credit of science lab
- 2. Type: Regular degree credits

D. Catalogue Course Description

NR 150 introduces students to the basic ecological and scientific principles required to understand resource and environmental issues. Natural resources are discussed with respect to their value to humans and other species, their use and degradation, restoration, and

Northern Marianas College Course Guide

Course: NR 150 Introduction to Natural Resources Management

sustainable management; three hours of lecture with field trips required. Prerequisite: None. English Placement Level: EN 093/094. Math Placement Level: MA 091; or consent of the instructor.

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

This course fulfills the core/program requirement in the A.S. degree program in Natural Resources Management; and as a science elective for non-majors in NRM and other related degree programs.

Course Activities and Design

This course incorporates lectures, guest speakers, audiovisual presentations, student oral presentations, take-home and web-based assignments, class project, laboratory exercises, field trips, periodic quizzes, exams, and a comprehensive final exam. Students will be required to participate fully in all class activities.

Course Prerequisite(s); Concurrent Course Enrollment; Required English/Mathematics Placement Level(s)

Prerequisite(s): None

English Placement Level: EN 093/094

Math Placement Level: MA 091

Estimated Cost of Course; Instructional Resources Needed 5.

Cost to the Student: Tuition for a 4-credit course; cost of textbook and

instructional materials fee.

Cost to the College: Instructor's salary.

Instructional resources needed for this course include classroom and laboratory space, chalkboard/whiteboard and supplies, TV/VCR, videotaped programs, digital camera, video flex camera attachment for microscopes. stereo and compound microscopes, microscope slides and cover slips, multimedia projector, basic laboratory/field supplies.

Northern Marianas College Course Guide

Course: NR 150 Introduction to Natural Resources Management

6. Method of Evaluation

Student learning will be evaluated on the basis of class participation, oral presentations, assignments, class project, laboratory/field trip reports, quizzes, exams, and comprehensive final exam.

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;
- C: Average grade points: 2.0;
- D: Below average grade points: 1.0;
- F: Failure grade points: 0.0.

NMC's grading and attendance policies will be followed.

7. Course Outline

This is a topical outline and does not necessarily indicate the sequence in which the material will be presented.

- 1.0 Introduction to Resource Management
 - 1.1 Historical perspective
 - 1.2 Information sources
 - 1.3 Science and reasoning
- 2.0 Conservation Concepts
 - 2.1 Cultural history and patterns of human settlement
 - 2.2 Resource use and development
 - 2.3 Ancient wisdom/modern rediscovery
- 3.0 Resource Management Statistics
 - 3.1 Field collection of data
 - 3.2 Data analysis
 - 3.3 Results reporting
- 4.0 Geographic Information Systems
 - 4.1 Scientific field equipment
 - 4.2 Monitoring and mapping
 - 4.3 Record keeping

Northern Marianas College Course Guide

Course: NR 150 Introduction to Natural Resources Management

8. Instructional Goals

This course will introduce students to:

- 1.0 The science of natural resource management;
- 2.0 The influence of human culture and settlement on the land, the water, the air, and the sea;
- 3.0 The basic concepts of environmental conservation; and
- 4.0 The methodology of field monitoring, data collection, mapping, data analysis, record keeping, and reporting.

9. Student Learning Outcomes

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

- 1.0 Explain the importance of the science of natural resource management;
- 2.0 Discuss the influence of human culture and settlement on the land, the water, the air, and the sea;
- 3.0 Identify and integrate the basic concepts of environmental conservation; and
- 4.0 Successfully apply the methodology of field monitoring, data collection, mapping, data analysis, record keeping, and reporting.

10. Assessment Measures

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

1.0 Class participation, oral presentations, assignments, class project, laboratory exercises, field trip reports, quizzes, exams, and comprehensive final exam.