

PROGRAM NAME: Natural Resource Management Program

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No. 10

Protocol Route Slip	Name	Title	Initial	Date
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PROAC Form 1

NMC MISSION STATEMENT	CNMI Constitution. Amendment No. 38, Section 2: "The mission of Northern Marianas College shall be to provide the best quality and meaningful postsecondary and adult education opportunities for the purpose of improving the quality of life for the individual and for the Commonwealth as a whole. The College shall be responsible for providing education in the areas of adult and continuing education, postsecondary and adult vocational education and professional development for the people of the Commonwealth." NMC's New Mission Statement: Northern Marianas College, through its commitment to student learning, provides high quality, affordable and accessible educational programs and services for the individual and people of the Commonwealth(BOR Approved: 26 September 2013.
PROGRAM MISSION STATEMENT (Column 1)	The NRM program mission is to support local initiatives and priorities developed within the islands toward conserving and protecting its precious natural resources, and to promote the efficient use of human, institutional, and financial resources to meet local and regional goals and objectives. A key element within the program is effective capacity building and development at both the institutional and community level, reducing the reliance
	on external expertise and increasing the ability and capacity of local institutions and individuals to address the ever increasing environmental challenges faced by the islands. The NRM program curriculum encourages and follows a regional approach to solving problems and developing
	strategies through working in cooperation with the local agencies, organizations, and individuals toward producing effective management of the region's coral reefs, fisheries, marine biotechnology, and ocean resources.

INTENDED PROGRAM/SERVICE	MEANS OF ASSESSMENT AND	SUMMARY OF DATA COLLECTED	USE OF RESULTS
OUTCOMES	SUCCESS CRITERIA		
(Column 2)	(Column 3)	(Column 4)	Since (Column 5)
1. Students will be able to demonstrate an	All NRM students are required to take NR 150	The NR 150 Intro to NRM, NR 153 Environmental	The seven courses under review, namely, NR
understanding of the methodology of system	Intro to Natural Resource Management & NR	Conservation, NR 253 Species and Ecosyestem	150, NR 153, and the capstone courses, namely,
integration and best practices of conservation and	153 Environmental Conservation, two of the	Management, NR 255 Conservation Politics and	NR 253, NR 255, NR 290, NR 295 and NR 298

sustainable management and development	beginning program's courses requirements. These courses continue the study of hazardous waste and pollution management; and the human impact on the use, degradation, , restoration, and the long term conservation & sustainable	Economics, and NR 290 Special Topics have been taught for the past two to four semesters inclusive of (Fall 2010 & Spring 2011 & Fall 2011; and Spring 2012; 2014 & 2015-2016)	have been successful with respect to their SLOs requirements being met and their relatively higher rate of completion rates compared to the same courses undertaken during the previous years i.e. before the renewal of the NRM
	management of resources that include land, sea, water, and air. Students are assessed on their comprehension of the methodology of system integration and best practices of conservation	NR 150: Introduction to Natural Resources Management. This course was initially offered as one of the two beginning program courses for the NRM degree program in Fall 2010. Of the 15	Program (2010). Overall, the completion rates for NR 150 and NR 153 are significantly successful for the
	management. The modes of assessments are the Pre- and Post	students who enrolled, 14 students or 92 percent earned the completion rate. In the Fall 2011, 16 students enrolled with 12 students passing or 75	students to continue at the next level of advanced courses, particularly in the capstone courses.
	Modular Evaluation (written test and exams), Research/Case Reports, and students oral presentations of their research projects:	percent completion rates. This course was offered again during the Spring 2012 with 19 students enrolled, and 17 students passing or 89 percent	Generally, for the the capstone courses, the students both orally and in writing have
	1) Seventy (70) percent of students will effectively understand, demonstrate, and value the human impact on the use, degradation, restoration, and	completion rates. The information for the 2013; 2014 have been reported separately in the past Form 1. For the Fall 2015 & Spring 2016; the completion	presented their required output in curricular developments and in effectively conducting research/survey investigations on their emphasis areas of interest and in their on-the-job training
	conservation, as well as long term sustainable management of land, water, and air.	rates are 100% with 24 enrolled students & 93% with 17 students enrolled, respectively. The average grade are 83 & 86 % respectively.	or exposures and experiences with various environmental institutions in CNMI or in- campus; and in-off campus/ island i.e. outside of
		NR 153: Environmental Conservation-This course was also initially offered as one of the two introductory program courses during the NRM	the CNMI. It is worthy to note here that the NRM students have had the opportunities to be exposed and thus experienced various practicum and/or on the job training in different
		renewal period in Fall 2010 Of the ten students who enrolled, 90 percent earned the completion rate.	environmental network institutions not only here in CNMI but also in San Diego, Hawaii, Costa Rica, South Carolina, Guam and hopefully in the Philippines in the near future.
		Of the nine students who attended the Spring 2011 Semester, the average grade for all course requirements is 90 percent. Only three students were below average and one student got incomplete due to some emergency family problems. The student finally completed the course the following	Thus, by looking forward the NRM Proram is hoping to achieve a targeted 15-20 graduate students by Spring 2013 and a cohort of 80-100 NRM students (for the 2-3 year revival period).
		term thus the completion rate was 100 percent For the term under review, NR 153, for Fall 2015	These evaluative results and observations were used as part of a comprehensive, integrative and demonstrative aspects of student proficiency in
		& Spring 2016 has a completion rate of 100 % with an enrolment of 13 & 12 students respectively. The average grade earned was 86 % for both terms.	the NRM sciences and the environmental field of studies.
		Overall, both terms exceeded the desired 70 % success rate for the two beginning program courses and the rest of the capstone courses under review.	Recommendations: On the basis of this 8 th cycle Academic Program Review of the NRM program courses, the

		The capstone and/or advanced courses information are as follows:. NR 253 Species and Ecosystem Management was initially offered twice during Spring and Fall 2011.with five and four (with graduating) students enrolled for each term respectively Both terms have 100 percent completion rates. For the year under review, Fall 2015 & Spring 2016; the average grade are 88% with 15 students enrolled and 93% with 12 students enrolled, respectively, respectively. The completion rate for both terms is 100 percent. NR 255 Conservation Politics and Economics was also initially offered twice during Spring & Fall, 2011 and Spring 2012, with 13 (thirteen) students for 2011 and ten (with graduating) students for 2012, respectively. All three and succeeding terms have about 100 percent completion rates	 NRMP supports and reiterates the previous cycles recommendations, as well as that of the PAC Meeting of May 2016 and reiterate the following five-point agenda for considerations: Coordinatorship and teaching facultyRecruit qualified personnel (at least one FTE position for NR and/or Environmental Science) and stabilize the listings of adjunct faculty members given the experienced fast turnover; and further enhance/facilitate the recruitment of the adjunct and/or team teaching staff in view of the observed inadequacy, if not lack of NRM or over all course teaching staff; Specifically, appoint one more core faculty for NRM (that is long time needed) under Science/NRM Division. This is to anticipate the transformation of ASc of NRM into BSc in NRM degree requiring 4 more core faculty to initiate the BSc program, as endorsed by the PAC and the DLNR. Coffers and/or Allocated FundingAllocate substantive permanent budget apart from the uncertain 3-4 network grants/funding for personnel and operational items given the observed inadequacy, if not lack of stable funding for such items;
2.Students will be able to demonstrate an understanding of the roles of politics and economic development on natural management .and ecosystem management.	All NRM students are required to take NR 253 Species and Ecosystem Management and NR 255 Conservation Politics and Economics, two of theadvanced program's course requirements . Assessment measures include the following: the Pre- and Post Evaluation (including quizzes and exams); research/case reports and other	The NR 255 Conservation Politics and Economics, had been team taught (by faculty from DEQ/BECQ & NMC) initially for the last two semesters (Spring 2011 and Fall 2011). It has been revived with the recruitment of Environmental Lawyer, a PhD from Yale University Of the initial four students (one graduating), who	efforts both locally and internationally; 4) Cooperative Participant/Student Recruitment CampaignA more focus and vigorous marketing, recruitment and admission campaign for both the traditional and non-traditional students especially for the government employees for both the the academic
	performance indicators such as project(research/field investigations, presentations and recitations.	attended during the Spring Semester 2011, the average grade for the course is 91 percent. And of the nine students who attended (three graduating)	degree and non-degree/certificate programs for NRM, using the students ENRO Club and other concerned

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		during the Fall Semester 2011, the average grade	institutions/stakeholders;
	Seventy (70) percent of students will effectively	for the course is 93 percent. Of the ten students	5) Curricular and Materials Development
	understand, demonstrate, and value biodiversity	who attended during the Spring 2012, three were	-Validating, Updating and/or Modifying
	and ecosystem management or care for the role of	graduating; all passed the course.	existing NRM curricula and introducing
	government interventions, policies and economics		new NRM Courses along with checklistings
	in bioconservation issues.	For the year under review, Fall 2015 & Spring	and procurement/ordering of new edition
		2016, the average grade are 89 % with 11 students	textbooks/materials that match the NRM-
		enrolled; and 86 % with 9 students enrolled,	course related offerings of other
		respectively. The completion rate was recorded to	Colleges/Universities in the Region and in
		be 91 % and 100 %, respectively.	the USA; the production of localized
			textbooks and related materials/modules for
		Overall, both courses exceeded the desired 70	NRM and related courses should also be
		percent success rate for the two major capstone	introduced; and articulation agreements
		courses.	with existing and other Colleges/Universities
3. Students will be able to demonstrate an	All NRM students are required to take NR 290	NR 290 Special Topics had been initially taught	should be explored for our career
understanding of the CNMI, federal and	Special Topics in NRM, NR 295 NRM Seminar,	for the past two terms: Fall 2010 and Spring 2012	advancing students both covering the non
international environmental laws and regulatory	and NR 298 NRM Internships, capstone courses	Semesters, with a total of 16 students and with the	traditional and traditional students.
enforcement procedures. They will also be able to	for the program. These courses provide	average grade for all course requirement of 95	
demonstrate special topics on their emphasis	experience and exposures on specialized directed	percent.	
areas including their experiences and exposures	study, professional and/or public seminar and on-		
as career professionals in selected environmental	the-job/professional exposures and training in the	For the year under review, Fall 2015 & Spring	
institutions	student's emphasis area or in a topic chosen by	2016, the average grade are 88 % with 12 students	
	the student and the instructor/supervising mentor	enrolled, & 90% with 10 students enrolled. The	
		completion rate recorded are 100 % and 89 %,	
	. One of these special topics relate to	respectively.	
	environmental and natural resources laws&		
	economics (which are not in the course curricula	NR 295 NRM Seminar was taught initially starting	
	proper of NRM) with reference to CNMI, federal,	Fall Term 2010, with eight students and a	
	and international aspects.	completion rates of 100 percent.	
	Another related course has reference to a soon-to-		
	be-regularized series of the "Island Ecology	For the year under review, Fall 2015 & Spring	
	Course" conducted by two Professors from UOG	2016, the average grade are 84 % with 7 students	
	and one Professor from NMC.	enrolled, and 86 % with another 7 students	
	The Seminar is conducted as much as possible as	enrolled, respectively. The completion rate	
	a brown bag seminar or a class scheduled seminar	recorded are 86 %, & 100 %, respectively.	
	with invited speakers apart from instructor and		
	group conducted seminar.	NR 298 NRM internship were initially offered in,	
	The internship is being held in or off campus as	Fall 2011 with students and a completion rate of	
	pre- arranged with host supervising institutions.	100 percent.	
	Assessment measures include Pre- and Post	For the year under review, NR 298 was only	
	evaluation of the active engagement of students in	conducted in Fall 2015 with 18 students enrolled.	
	coming out with a final written output of the	And with the average grade of 91 %. The	
	assigned special topics including its public	completion rate was recorded to be 100 %.	
	presentation at the UOG & NMC. Seminar topics		
	and special topical emphasis areas selected or	Overall, the three courses exceeded the desired 70	
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agreed upon by the students and coordinator/host mentor.Student stipends have also been provided to students for their research works,both with scholarly and creative activities.	percent success rate for the course.	
Seventy (70) percent of the students will effectively understand, demonstrate and value the environmental and natural resources laws and economics covering the CNMI, federal and international jurisdictions; the scheduled seminar and internship topics/areas of emphasis.		