Yr 11 Marine Environment Studies Course Outline

TERM	WEEK	CONTENT	SKILLS REQUIRED	ASSESSMENT	
1	Marine Issues				
	1	Course Objectives, Rationale and Overview Expectations	Thinking skills		
	2	Marine Issues in the Bay of Islands GUEST SPEAKER: Alan Fleming Marine Mammal Officer, DoC	Listening skills		
	3	Powerpoint Presentations of your local Marine Issue	Oral communication skills	Presentation (formative)	
	Marine Diversity				
	4	Marine Diversity of Northland Classification GUEST SPEAKER: Wade Doak Underwater photographer Author of 18 marine books!	Written skills		
	5	Influences on the Marine Environment Sampling Techniques Practise sampling in pool using snorkel NCEA – how it works; how it doesn't work.! LEARNING Achievement Standard Bio 1.4	Snorkelling skills	Biology 1.4 (formative)	

	6	REAL Achievement Standard Bio 1.4 Field Trip to Matauri Bay	Numeracy skills	Biology 1.4 (summative)	
2	Fisheries				
	7	World Wide Fisheries – history and present status	Written communication skills		
	8	NZ fisheries – history and present status	Research skills		
	9	What determines a fishery?	Listening skills		
	10	Different types of fisheries – finfish, shellfish How they manage various fisheries (expert grps) Effects of technology advantages on fish stocks	Research skills		
	11	Case Studies of various species - are they sustainable?	Co-operative learning skills		
	1	Review Case Studies	Oral communication skills		
	2	LEARNING Achieved Standard Sci 1.2	Time management skills	Science 1.2 (formative)	
	3	REAL Achieved Standard Sci 1.2	Research skills	Science 1.2 (summative)	
	Aquaculture				
	4	What is aquaculture? World Aquaculture Aquaculture in NZ	Thinking skills		
	5	EXAMS	Research skills		

	6	Advantages and disadvantages of aquaculture How you value aquaculture <i>Field Trip to Oyster factory and farm</i>	Co-operative learning skills			
	7	Values – yours and others Value consequences	Thinking skills			
	8	Concepts	Thinking skills			
	9	Perspectives	Listening skills			
	10	LEARNING Achievement Standard SS 1.4 REAL Achievement Standard SS 1.4	Reading skills	Social Studies 1.4(formative) Social Studies 1.4(summative)		
3	Marine Reserves					
	1	What are Marine Reserves? Where are they? What do they do?	Written skills			
	2	What are the consequences of Marine Reserves? Are they good for the fish? Are they good for the people?	Research skills			
	3	Social Action - consequences of social action Social Decision Making Optional Field Trip to Fish Hatchery & Leigh M. Reserve	Thinking skills			
	4	Case Study: A Marine Reserve in the Bay? Aquaculture revisited	Co-operative learning skills			

	5	LEARNING Achievement Standard SS 1.5 REAL Achievement Standard SS 1.5	Reading skills	SS 1.5 (formative) SS 1.5 (summative)	
	Field Skills				
	6	Review of skills used so far Introduce transects, tag and release, fish counts	Recall skills		
	7	Review of snorkelling equipment Care of snorkel equipment	Listening skills		
	8	The science of snorkelling Safety while snorkelling	Reading skills		
4	9	Unit Standard Diving 4383 Snorkel dive with safety	Snorkelling skills		
	1	EXAMS	Self discipline skills!		
	2	Coastal Marine Invertebrates	Time management skills		
	3	Coastal Marine Vertebrates	Thinking skills		
	4	Assignment for assessment (US 4400)	Oral communication skills		
	5	Unit Standard Diving 4400 Identify marine species common to dive site	Written communication skills		
	6 - 9	NCEA Exams!	Self discipline!		