



WHAKATĀNE HIGH SCHOOL

Marine Studies



Ko te wai te orangā mea katoa – Water is the life giver of all things





My Why 😊

I want to teach students to explore our waters, and protect the oceans to sustain them for future generations.

I want to make them aware of what is out there, what is happening to it, and make them care by getting them to loving our oceans & all its diversity.

- Inspired by Pete & my promise to him → to grow & evolve marine studies @whs!





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Y13 – Full year course: UE & Level 3

Y12 – Full year course: Level 2

Y11 ???

Y10 (2017) – 13 week option, run 3 x a year

Y9 (2017) – 13 week option, run 3 x a year

Y12 Marine Studies

- Zonation at Rocky Shore
- Greenshell mussels
- Deep Ocean adaptations
- Phyto & Zoo plankton
- Shrimp experiments
- Crayfish
- Fishing Sustainability
- Adaptations – digestion, sensory, or reproduction



Y13 Marine Studies – U.E & Level 3

- U.E (14credits from the same domain) → Education for sustainability
 - Policies,
 - Own projects
 - Impact project
 - Commercial project
- Snapper, paua, oysters, or kina
- Marine experiments – Bio, or ESS
- Maori culture & collecting kiamoana
- Marine Reserves



Y13 Heron Island, Great Barrier Reef – Annual Trip



Y9 Marine Studies

Why Marine Studies & Mission Blue? – ‘the big picture’

Why is the ocean important to us

- Food chains/webs & O₂
- Past & Present

Fishing Sustainability

- Ways of catching fish – commercial/recreational, past/present
- Fishing quota management system
- Fishing lures, knots & Nets → Fishing at the wharf
- Caring for your catch – filleting fish & the use of the whole fish → cooking lesson
- NZ fish species, adaptations, & reproduction strategies

Assessments:

- Knots & Fishing lures (2cr)
- Snorkelling, NZ Fish species identification, reproduction strategies (2cr)
- Importance of Quota management system (2cr)



Y10 Marine Studies

Mission Blue: What is Marine Studies & Why? – ‘the big picture’

Oceanography

- Currents/Nutrients
- Waves/Tides
- Ocean acidification

Life in the Sea

- Invertebrate species & structure (shells)
- Mussels
- MM² Biodiversity of Invertebrate → Rocky shore trip

Human Impact – Importance, problems, & managing impact

- Trashing the Oceans – Coast care → Sand dunes planting

Assessments:

- Shells, Invertebrate Structure MM² Rocky Shore diversity (2cr)
- NZ Invertebrate species identification, adaptations (2cr)
- Marine Guru's (2cr)



Scuba Diving with Dive Zone Whitianga



The future? Dreams.....

- Y11
- Local student lead projects
- Strong links with the community
- Cross curricular links
- Create a local accessible marine reserve



Barriers/Challenges

- Y12/Y13 guided by credits & school structure
- Y9/Y10 – time (only 13 weeks – 3 hours a week)
- Driven by one teacher
 - Surface teaching, what do we go deeper in? PD
 - No one to collaborate with & grow ideas
- Trips – time out of school, cost, equipment, funding?
- So many directions we could go in 😊



Facebook = Marine Studies – Whakatane High School

