

Week One

At Monday 22 July, my IISMA 2024 friends and I attended the campus orientation activities held in the NMIT campus area located on Hardy Street. In this orientation session, we learned many things, among others:

- NMIT Student Id Card
- Safety Briefing and Introduction about regulation in NMIT campus
- Introduction about college community in NMIT Campus

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- Learn about how to cultivate their eggs
- How to milk male sperm from male trout fish
- How to milk eggs from female trout fish

At Wednesday 24 July, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry which is discuss about "Water Quality" at Cawthron Institute and NMIT Campus.

At Thursday 25 July, IISMA 2024 students get a course about Health, Safety and Wellbeing which is discuss about "Basic Safety Knowledge" at NMIT Campus.

At Friday 26 July, IISMA 2024 students get a course about Health, Safety and Wellbeing and have presentation from Derren as Managing Director of Guard Safety which is discuss about "Safety at Work and Safety Mindset" at NMIT Campus.

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Week Two

At Monday 29 July, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry which is discuss about "Water Quality" and do an assessment about testing water quality and fill it on a spreadsheet for aquaponic system calculations at NMIT Campus.

At Tuesday 30 July, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry which is discuss about "Animal Welfare" and create an aquaponic system by adding gold fish, plants, and biofilter for aquaponic system calculations at NMIT Campus.

At Wednesday 31 July, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry which is discuss a recirculating system diagram (RAS). After that, we visited a research facility in Cawthron, where we saw the components used for the saltwater salmon recirculating system.

At Thursday 1 August, IISMA 2024 students get a course about Health, Safety and Wellbeing which is visit New Zealand King Salmon to learn about the occupational health and safety (HSW) system used in that industry. There, we underwent a safety induction, then entered the salmon packaging factory and learned about the operational system of the industry. Then we get back to NMIT to learn about "Safety and Health from NZKS" at NMIT Campus.

At Friday 2 August, students get a course about Aquatic Life Support Systems and Animal Husbandry which is discuss and dissected salmon fish to study and know about abnormalities that salmon fish might have at NMIT Campus.

Week Three

At Monday 05 August, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry which is discuss and watch presentation about “Monitoring and Control Fish Health” and do an assessment about draw Aquaponics Systems and measure water quality of 2 fishtank at NMIT Campus.

At Tuesday 06 August, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry which is visit salmon farm that located in Okiwi Bay and learn about RAS Facility for salmon hatchery. The owner also shared his experienced about salmon farm.

At Wednesday 07 August, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry which is discuss a large-scale recirculating system diagram (RAS).

At Thursday 08 August, IISMA 2024 students get a course about Health, Safety and Wellbeing which is visit New Zealand King Salmon in Takaka to learn about the occupational health and safety (HSW) system used in that industry. There, we underwent a safety induction, then entered the workplace where salmon egg gets sorted then get incubate for breeding and learned about the operational system of the industry.

At Friday 09 August, IISMA 2024 students get a course about Health, Safety and Wellbeing which is visit Port Company in Nelson to learn about the occupational health and safety (HSW) system used. We're also learn about employee wellbeing and learn about occupational health and safety in a tugboat.

Week Four

At Monday 12 August, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry. We have the opportunity to go fishing in a nearby lake, followed by a visit to a company in Port Nelson that specializes in designing and building ships for other companies. After these two activities, we're back to campus to have a presentation, which is about "fish welfare in New Zealand" at the NMIT Campus.

At Tuesday 13 August, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry. We have a quick recap of all the topics in the course, and after that, we have two assignments in which to draw an RAS based on a trout farm in H Block of the campus. While drawing the assignment, the lectures call one of us regularly, one by one, to explain the RAS in the trout farm in H Block at the NMIT Campus.

At Wednesday 14 August, IISMA 2024 students get a course about Health, Safety and Wellbeing. We have the opportunity to visit Greenshell Mussels Farm in Marlborough Sounds, which is the main place for aquaculture industries like greenshell mushrooms, king salmon, and clams. While on the way, we spotted dolphins and seals, but unfortunately, we were unable to locate the Greenshell Mussels Farm, leading our lecturer to conclude the day early.

At Thursday 15 August, IISMA 2024 students get a course about Health, Safety and Wellbeing. We have a presentation about health, safety and wellbeing in aquaculture industry and general at The NMIT Campus. This presentation was present by Michael McEntee who's a health and safety manager in New Zealand King Salmon.

At Friday 16 August, IISMA 2024 students get a course about Aquatic Life Support Systems and Animal Husbandry. The NMIT campus is the venue for our exam, which takes place at nine am. This exam served as the final assessment for this course, and the lecturer gave us permission to use open-book methods.

Week Five

On Monday 19 August, IISMA 2024 students get a new course about Environmental Management which introduction and discuss about the course and have first lecture about global blue economies at the NMIT Campus.

On Tuesday 20 August, IISMA 2024 students get a course about Environmental Management which is discuss about global marine industry stressors and have a group activity about biosecurity risks and management in global marine industry at the NMIT Campus.

On Wednesday 21 August, IISMA 2024 students get a course about Environmental Management which discuss about tools that used for managing environmental risks and we get lecture about Environmental Impact Assessment and report in detail. We also got introduction about biosecurity mapping in marine industry especially in aquaculture farm.

Week Six

On Monday 26 August, IISMA 2024 students get a course about Environmental Management with a presentation session on aquaculture feeding and wild stocks at the NMIT Campus.

On Tuesday 27 August, IISMA 2024 students get a course about Environmental Management which discuss about waste discharge and local environment and waste management. We are also having guest lecture from NZKS Aine O'Neill which discuss environmental sustainability at the NMIT Campus.

On Wednesday 28 August, IISMA 2024 students get a course about Environmental Management. We have the opportunity to visit Nelson Haven to do estuarine monitoring in that area. After gathering sample, we are heading back to campus to processing the sample of what we found in Nelson Haven.

Week Seven

On Monday 02 September, IISMA 2024 students get a course about Environmental Management which discuss about habitat change in aquaculture ecosystem. We are also having presentation support that held by our lecturer at the NMIT Campus.

On Tuesday 03 September, IISMA 2024 students get a course about Environmental Management which discuss about climate change stressors, marine heatwaves and industry impacts. We are also having assignment to mapping stressor based on Marlborough Sounds farming.

Week Eight

On Monday 09 September, IISMA 2024 students get a course about Environmental Management with a presentation session about Aquaculture novel technologies - IMTA and Aquaponics from Denise Hearn (TBC) guest lecture NMIT. In the afternoon we had Report support for our final assessment report.

On Tuesday 10 September, IISMA 2024 students get a course about Environmental Management which discuss and have presentation about Marine stressor presentations & feedback for our final assessment. In the afternoon we had guest lecture from Thalassa Kawachi Tasman Bay Guardians talked about Community engagement for environmental management.

On Tuesday 11 September, IISMA 2024 students get a course about Environmental Management which finish writing a report about Farm Environmental Impact in Marlborough Sounds.

Week 9 APR (17 September – 19 September)

Additional Class for IISMA Aquaculture

Tuesday (Industrial Visit: 180)

The IISMA Student got the chance to visit the MOANA Fisheries oyster processing plant. We had a look at how they run their oyster hatchery farm. They were guided by their head hatchery on how they raise the oyster from spawning, eggs, larvae, juvenile, and until they're ready to be released to the open sea. They would also explain how they manage their microalgae stock in that plant.

Week 10 APR (23 September – 27 September)

Additional Class for IISMA Aquaculture

Tuesday (Practicum Class: 180)

The IISMA Students would continue their additional class by visiting NMIT's Research Centre to learn more about New Zealand's green-lipped mussel. We would then count the required algae for their feed and look at some spats through the microscope.

Wednesday (Practicum Class: 360)

We would start the day by dissecting some mussels and bluff oysters to get a good look at it on the inside. In the afternoon, we would have a lecture about brine shrimp as one of aquaculture's live feeds and how to farm one ourselves.

Week 11 APR

Monday, September 30, 2024, IISMA 2024 students, my two friends, and i embarked on a three-day camping excursion to Elaine Bay with our host families. The journey to the campsite required a four-hour drive. The primary objectives of the trip were to immerse

the students in the bay's natural splendor and facilitate their study of the local aquaculture habitat. Fishing activities were also conducted, resulting in a successful catch.

Week 12 APR (7 October – 11 October)

Monday

We went to Miyazu Garden, which is not far from home, taking only a 10-minute walk. Miyazu Garden is a place to celebrate the relationship between Nelson City and Japan, so the area is filled with Sakura trees, which were in bloom when we arrived. It is also the best place to enjoy the sunset view.

Friday

We went to attend the Unite Church event. Although it's called a church, this event is more of a gathering place for internationals living here. At this event, we made new connections and learned more by meeting different people.

Week 13 APR (14 October – 16 October)

AMC503 Aronga Maori View and Aquaculture Principles

Monday (Regular Class: 360)

This marks the start of our new subject, AMC503 Aronga Maori View and Aquaculture Principles. We would get another explanation about what aquaculture is in New Zealand and the species and methods they have. The lecturer would also assign us a daily water quality check of our chosen tanks inside the lab.

Tuesday (Regular Class + Industrial Visit: 360)

We start the day by checking the water quality of our chosen tank. We would then present our assignment of aquaculture species. In the afternoon, we had a small tour of the

SpatNZ Mussel Hatchery Plant, where we would learn more about how a mussel hatchery works.

Wednesday (Regular Class: 180)

We start the day by checking the water quality of our chosen tank. On this day, we would only have regular classes in the morning. The material was about New Zealand's salmon, oysters, animal ethics, and environmental impacts.

Week 14 APR (21 October – 23 October)

AMC503 Aronga Maori View and Aquaculture Principles

Monday (Regular Class: 360)

We start the day by checking the water quality of our chosen tank. We would then learn a thorough material of live feeds and algae.

Tuesday (Industrial Visit: 360)

We start the day by checking the water quality of our chosen tank. We would then visit Fish & Game Trout and Crayfish Farm at Wairau Valley. Rob, the coordinator, would explain what Fish & Game does on its farm as it is one of the few freshwater farms.

Wednesday (Regular Class: 180)

We watched the local students' presentations about their two-week work placements in the industries they chose and specialized in, such as salmon farms, mussel hatcheries, conservation, and others.

Week 15 APR (29 October – 30 October)

Tuesday (Regular Class: 360)

We start the day by checking the water quality of our chosen tank. We would then continue our lesson with a biosecurity presentation by the lecturer. We got to learn more about some of the basics of biosecurity, such as footbaths. We would check on some of Cawthron Pest rope surveillance checks in the afternoon.

Wednesday (Industrial Visit: 180)

This marks the last day of our daily water quality check. We would have a tour of the Cawthron Aquaculture Park Tour. Today is also the deadline for our portfolio assessment.

Week 16 APR (4 November – 6 November)

Monday (Regular Class: 360)

Our regular class schedule today consists of lecturer presentations about whitebait, koura, macroalgae, kingfish, and the importance of farm location. We would have to design our farm activity by the end of the day, including biosecurity, movement, staffing, feeding, and infrastructure.

Tuesday (Industrial Visit: 360)

This day consists of a thorough tour of the Plant & Food Organization.

Wednesday (Exam: 180)

This almost marks the last meeting of this lecture, as we will have a closed-book exam session.

Week 17 APR (11 November – 14 November)

Monday (Regular Class + Practicum Class: 360)

We started the day by learning about Ki Uta Ki Tai - Mountains to Ocean: Microplastics in Our Lakes. In this lesson, we gained knowledge about the primary sources of microplastics in the ocean. After that, we went to Rabbit Island's main beach to collect plastics along the coast and sort the garbage.

Tuesday (Regular Class + Practicum Class: 360)

We began the day by learning about sea creatures, how to catch them, and discussing the pros and cons of doing so. Later, we visited the coral areas on Nelson's coast during low tide to observe sea creatures beneath the stones. We measured the distance from the land to the water surface at 6-meter intervals. We found many fascinating sea creatures there.

Wednesday (Industrial Visit: 360)

We traveled to Picton Harbour and took a cruise to Marlborough Sounds, where we visited a mussel farm, a salmon farm, and explored various bays. We also enjoyed eating mussels and salmon on the cruise. On our way back to Nelson, we made a brief stop at Pelorus Bridge to view the water.

Thursday (Regular Class: 180)

We started the day by watching Seaspiracy on Netflix and sharing our opinions about the documentary. Afterward, we learned about "Sustainable or Suss: Fisheries in Aotearoa." We were divided into two groups and participated in a debate on the topic.

Week 18 APR (18 November – 21 November)

Monday (Industrial Visit: 360)

We went to Mount Arthur with the aquaculture and horticulture groups, accompanied by lecturers, traveling by bus. It took 2 hours to hike from the parking area to the Mount Arthur Hut, where we took a break for lunch. We aimed to reach the top of the mountain, but unfortunately, we only made it halfway due to limited time. We captured many photos and videos before heading back to the parking area.

Tuesday (Industrial Visit: 360)

We visited the Motueka Ward to see a clear water source and a small waterfall. Afterward, we went to Kaiteriteri Beach to swim and enjoy the atmosphere. On the way back to Nelson, we stopped for some ice cream.

Wednesday (Industrial Visit: 360)

We had a farewell party with NMIT lecturers. The event included speeches, selecting the best memory photo, playing a video summarizing our activities, and receiving certificates for completing our studies at NMIT. We also shared food and took photos with our beloved lecturers.

Thursday (Regular Class & Industrial Visit: 300)

This marked our last day at NMIT. We started with a short lesson on how to use pipettes properly in the laboratory. After that, we visited Natureland Wildlife Trust to see some local animals and fed them. Then, we enjoyed fish and chips together near Tahunanui Beach. Alifah gave us a thoughtful farewell gift, including words, pictures, and chocolate bars for our aquaculture group. To end the day, we returned to campus for a short lesson on Māori nature and presented Indonesian merchandise to our dear lecturer, Veronica.