

## Marine Biology and Ecology – BIOL 428 2024 15pts

### Staff:

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### Preamble | *Whakamahuki*

This course builds on the knowledge and skills acquired in undergraduate courses, particularly ecology, physiology and behaviour. The focus is on marine ecosystems, how they are maintained and what affects them. The course includes critical examination of the literature across a variety of topics and issues, and a practical exercise involving procedures and information required for marine resource consents. The topical issues traversed in this course combine theory and management, and offer a sound basis for greater understanding of sustainable management of the marine domain.

### Intended Learning Outcomes (*Hua Akoranga*) and Associated Assessment (*Aromatawai*)

*As a student in this course, I will acquire and enhance the ability to:*

- Access and critically evaluate scientific literature relating to particular topics
- Achieve a detailed understanding of the factors affecting marine habitats under stress
- Develop of communication skills in presenting analysis of topical issues
- Develop of skills in the verbal and written presentation of scientific literature
- Develop of skills in scientific analysis and report writing
- Integrate advanced theories to assess and manage current marine issues.

### Transferable Skills / *Pūkenga Ngaio*

*As a student in this course, I will develop the following skills:*

- Well-structured, logical and cohesive oral presentation. This will be important for any career in research or in an NGO, where you will need to communicate convincingly to convey relevant information and syntheses to achieve desirable outcomes. *We will work on this and provide feedback throughout the course.*
- Synthesising information. In everyday life and in many job situations you will be required to read information from different sources, construct your own understanding and shape your own viewpoint. *In tutorials we will discuss recent research papers in a group environment and this will develop your abilities to identify the essential elements of research outputs - you will then use in proposal writing and the exam.*
- Well-structured, logical and cohesive written presentations. Clear written communication is essential for most professional careers; communicating through well-structured, grammatically correct, and informative reports is a key element of most professions. *We will provide feedback and suggestions as we progress into written assignments.*

- Critically competent in the core academic discipline, Biculturally Competent and Confident (kaupapa 1,3,5,6), Employable, innovative and enterprising, Globally aware of marine issues, governance and management. *Oral and written feedback will be provided.*

### **Entry to the Course:**

The course is structured for students with a background in marine ecology, animal physiology and behaviour. An understanding of experimental design and statistical analysis will also be useful. Basic undergraduate-level knowledge of marine biology is essential. Entry to the course can be granted by the coordinator and the HOD and depends on a good academic record.

### **Tutorials / *Akoranga* (2 hr sessions)**

The course consists of an orientation meeting in week 1, and six weekly 2-hour sessions. The final exam will be in the June exam period.

**Seminar Programme - Every week 1100 - 1300, Friday, (except 23 Feb from 11-12 PM); Note: the order of talks may change. Topics are indicative only and could change**

<b>Seminar</b>	<b>Seminar date</b>	<b>Topic</b>	<b>Staff</b>
Initial meeting	23 Feb (Fri), 1100-1200 (Erskine 241)	Introduction to the course and first assignment (1 hour)	DRS/MT
1	1 Mar (Fri) 1100-1300 (A7)	Issues and topics in marine ecosystem processes (assignments given on 23 Feb)	DRS
2	8 Mar (Fri) 1100-1300 (A7)	A holistic view of the environment: Effects of terrestrial inputs on coastal processes	DRS
3	15 Mar (Fri) 1100-1300 (A7)	Heat waves, acidification and climate effects on nearshore ecosystems	MT
4	22 Mar (Fri) 1100-1300 (A7)	Cataclysmic events and changes to marine ecosystems	Orchard/DRS
5	26 April (Fri) (A7)	Thermal tolerances: local and biogeographic effects	SV
6	3 May	Ocean governance and management	Orchard/DRS

### **Reference Material**

Each topic will have a set of references that are relevant to the planned discussion. Because many of you will be starting “cold” on the topic, by necessity your reading may include a number of “review”-type articles to give a broad overview. Some of these may seem quite long but they have been chosen to provide you with an effective introduction to the topic. These will be supplemented with a small number of shorter papers based on experimental work - these are the basic unit in the scientific literature and are included to provide “case-studies” specific to the topic. In listing the reference material, where possible some attempt has been made to provide a logical reading order.

In some cases, additional reference material may be listed. The purpose of this is to provide further material for those interested in a particular topic, and they may also be of use in collecting information for your written work. I recognise that during the course of this year you will have a lot of reading to do. For this reason, your performance in this course will be assessed on the basis of your understanding of the listed reading material, not the additional material.

### **Marine Biology Assessment:**

Internal Assessment – 50%. This will consist of three components:

- a) A written research essay, worth 20% of total marks, which will be **due by 9am on Monday 22 April**;
- b) We will have a final session featuring talks and then a written report on ocean governance and management. The write-up of this or an equivalent exercise, including presentation, discussion and written report, will comprise 15% of total marks and will be due by **10am on Monday 27 May**; → Note that this may have to be changed, depending on the timing of Seminar 6
- c) Performance in seminars and written material for seminars 1-5. This will be worth 15% of total marks, and will be aided by student assessments of their work

End of course examination = 50%. The format for this year will be discussed.

## END OF SPECIFIC COURSE INFORMATION

### RULES, REGULATIONS, AND WHAT TO DO WHEN THINGS GO WRONG

[updated 12 June 2018]

**If in doubt:** ASK! The course coordinator is happy to answer questions at any time. All staff involved in the course are available for advice on specific issues.

#### **What do I do if I have to miss something or if my performance was impaired?**

If you feel that **illness, injury, bereavement or other extenuating circumstances beyond your control** prevented you from completing an item of assessment worth 10% or more of total course assessment or if these circumstances affected your performance in such assessments, you should apply for Special Consideration. Applications for Special Consideration should be submitted via the Special Consideration <http://www.canterbury.ac.nz/study/special-consideration/> and you need to notify the course coordinator *within five days* of the assessment or its due date. If you apply for Special Consideration, because of medical reasons, you should visit a doctor within 24 hours of the assessment (application form available on the website above or from the Student Health Centre).

The Special Consideration provisions are intended to assist students who have covered the work of a course but have been prevented by illness or other critical circumstances from demonstrating their mastery of the material or skills at the time of assessment – they do not excuse you from doing the assessment within a reasonable time agreed with the course coordinator. You should expect to be required to submit additional work if you miss a major assignment (e.g. a field trip for which a major write-up is required).

In rare cases you may not be able to complete an assessment or attend a field trip, because of **involvement in international or national representative sport or cultural groups**. In such cases you should also apply for Special Consideration. Please review the Special Considerations policy because very few kinds of activities will be eligible for consideration (e.g. holiday trips, birthday parties etc. are not given special status in the University policy).

**Students prevented by extenuating circumstances from completing the course** after the final date for withdrawing, may apply for Special Consideration for late discontinuation of the course. Applications *must* be submitted via <http://www.canterbury.ac.nz/study/special-consideration/> within five days of the end of the main examination period for the semester.

#### **Plagiarism**

It is essential that you are aware that plagiarism is considered a very serious offence by the academic community, the University and the School of Biological Sciences. Plagiarism is defined as taking content from another work or author and presenting it, without attribution, as if it is your own work. Content here includes text (sentences or major parts of sentences), display items (graphs and tables), and overall structure (the detailed sequence of ideas). Plagiarism includes:

- re-use of previous assignments (even if each individual sentence has been rephrased to say the same thing in different words, if the overall structure is re-used)
- copying of another student's work (with or without their consent)
- the unreferenced use of published material or material from the internet e.g. cutting and pasting of paragraphs or pages into an essay.

For most pieces of in-term assessment you will be given information concerning the use of direct and indirect quotes from previously published work. If you are in any doubt about appropriate use of published material, please speak with a member of academic staff. If you are still unsure what plagiarism is, then seek advice.

It is a School policy that courses may request you submit work electronically for subsequent analysis of originality using *Turnitin*. Students agree that by taking courses in BIOL, assessments may be submitted to Turnitin.com for textual similarity review. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Terms and Conditions of Use posted on the Turnitin.com site.

#### **Where do I hand in assignments and then collect them once marked?**

All assignments should be placed in the designated collection boxes in the foyer of the 2nd floor of the School of Biological Sciences (Julius von Haast building, at the top of the stairs), unless directed otherwise by the course coordinator. All assignments must be accompanied by a cover sheet signed by you stating that the submitted work is not plagiarised. Cover sheets are available on top of the collection boxes, or you can download one from the Biology website (<http://www.canterbury.ac.nz/media/documents/science-documents/assignment-coversheet.pdf>). In addition, you may also be asked to submit your work electronically (via Learn) for analysis in *Turnitin*.

Marked assignments can be collected from the School of Biological Sciences reception, unless directed otherwise by the course coordinator. Teaching staff will endeavour to return work as soon as possible, and should contact you if there are likely to be any delays that will prevent return within the maximum 4-week timeframe.

### **What if I can't get it finished in time?**

Reports and assignments should be handed in on time. Extensions may be granted if you have a valid reason. **If you require an extension, you should request one from the course coordinator** (or the lecturer responsible for marking the work), with as much notice as possible. Please do this **BEFORE** the deadline for the assignment. **If you have been given an extension you should hand the work DIRECTLY to the course coordinator** (do not put it in the drop box as it may not be cleared after the due date).

If an extension has not been granted:

- work must be handed in by the due date to gain full credit
- work handed in up to 7 days after the deadline will be marked, but the marks will be discounted 25% before they are recorded to the student's credit
- any work handed in more than 7 days after the deadline date will not be marked or earn credit.

### **What if I have written more than the word or page limit?**

If there is a word limit on an assignment, it is usually there to stop you doing too much work and to encourage you to write succinctly. It also makes things easier to assess. You can be up to 10% over without too much worry, but if the length increases beyond that your mark may suffer due to failure to follow the requirements. If you find yourself way over the word limit talk to the lecturer concerned about how to get your assignment to an acceptable length.

### **What if I fail part of the course?**

In Biological Sciences, we require a satisfactory level of achievement in both the theoretical aspects of the discipline and in practical activities. This means you must attend all class activities and submit all items of assessment unless you have a very good reason not to (e.g. medical reasons). **A student must attain an average score of at least 40% for in-course assessments (e.g. assignments, reports) and an average score of at least 40% in the exam and/or tests, AND score at least 50% overall for the course, to be awarded a passing grade. See the course outlines for clarification of the assessment items included in each category and ask the coordinator if you are still unsure.**

### **What's the best way to give feedback?**

We welcome constructive feedback at all times – help us to make this a valuable course for you. We endeavour to remain approachable at all times. If you would rather give feedback anonymously, please use the online course survey or talk to lab demonstrators, or your class rep (who will all report back to the staff-student liaison committee that includes a representative from each of the undergraduate classes). Class representatives will be selected from each class at the start of course.

### **What's the best way to complain?**

If you feel you have not been fairly treated during this course, please raise the issue with the lecturer or course coordinator in the first instance. Other avenues include your class rep., who can raise issues anonymously, or the UCSA education coordinator.

## **Grading**

A+	90% or above
A	85 – 90
A-	80 – 84
B+	75 – 79
B	70 – 74
B-	65 – 69
C+	60 – 64
C	55 – 59
C-	50 – 54

A restricted pass (R) **may** be awarded to those who are close to a pass (i.e. an overall score of 48-49.9%) AND who have achieved at least a 40% overall score in both in-course assessment and tests/exams. If an R grade is awarded you gain credit for the course but **cannot continue into papers that require this course as a pre-requisite**. NB. The R grade is only available at 100 and 200 level - it cannot be awarded for third year papers.

Failing grades: D 40-49      E 0-39