



TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI



VICTORIA
UNIVERSITY OF WELLINGTON

Te Kawa a Māui

MAOR 124

**Te Pūtaiao Māori
Māori Science**

Trimester 2, 2011 dates

Lectures begin Monday, 11 July

Lectures end Friday, 14 October

Mid-trimester break 22 August-4 September

Study week 17-21 October

Assessment/examination period 21 October-12 November

Tēnā koutou e ngā tauira e whai ake nei i te mātauranga a ō tātou tūpuna. Ko tēnei te mihi nui ki a rātou mā, ki a koutou katoa hoki. Koinei ngā kōrero whakamārama mō tēnei karaihe, Te Pūtaiao o Te Māori, i te wāhanga tuarua o te tau 2011.

E tipu, e rea mō nga rā o tōu ao

1 KO NGĀ WHAKAHAERE Course Administration

**Ko te Pūkenga
Course Coordinator**

Dr Ocean Mercier
Room 207, 50 Kelburn Parade
Telephone 463 7457
Email ocean.mercier@vuw.ac.nz

Office Hours

By appointment

Class Representative

A class representative will be elected at the start of the course. Contact details will be made available through Blackboard. The class representative will liaise between the students and the Course Coordinator as necessary.

Notices and additional course information will be posted on Blackboard.

2 KO NGĀ WHĀINGA ME NGĀ HUA Course Prescription, Content and Learning Objectives

2.1 Course Prescription

This course examines tikanga and mātauranga Māori (Māori knowledge and science) in both traditional and contemporary contexts. It examines the differences and similarities between Western and Māori ways of knowing. Fortnightly two-hour laboratories / field trips / tutorials allow students to engage with Māori science in practical ways.

2.2 Course Content

This course examines the involvement and engagement of Māori in scientific endeavours, historically, in the present day, and in the future. It seeks to give students an understanding of the philosophical differences between Western and Indigenous knowledge and science. From this, students will become better equipped to debate contemporary issues, particularly regarding new technologies, at this cultural interface.

2.3 Learning Objectives

Students who pass this course will be able to:

- justify the use of the term “Māori science”
- analyse and understand the philosophical differences between Māori, indigenous and “Western” ideologies
- give examples of scientific methodology used by Māori and indigenous peoples in their traditional knowledge

- describe “Māori” viewpoints on contentious scientific issues
- understand the challenges facing Māori people who wish to engage in “Western” science and technologies
- feel confident in te ao Māori, having explored key Māori values and concepts, and
- through critique and analysis of the prevailing Western scientific worldview from a Māori worldview, gain cultural credibility in the eyes of Māori communities.

3 KO NGĀ KAUPAPA MATUA **Course Content**

The main themes of the course are:

- What is Science?
- What is Māori Science?
- Traditional Māori Knowledge / Mātauranga Māori
- Māori positions on contentious issues and new technologies
- Māori Science and the international context
- Māori engagement with science: past, present and future.

At the end of this course the students will be expected to:

- justify the use of the term “Māori science”, in order to critically inform development strategies and policies at both national and international levels
- know how different knowledge systems, sciences and worldviews have influenced the management of the natural world, and be able to critically evaluate the influence of the Western scientific worldview on global policies, procedures and legislation and their impact on Māori and indigenous self-development
- recall recent case studies of Māori people engaged in and with science, and from this be able to critically examine which strategies best promote Māori leadership in science
- through engagement with indigenous scholarship at the cutting edge of the emerging field of “interface” research, be empowered to contribute to discussions regarding Māori development in today’s world
- show an understanding of Māori views and key Māori concepts on environmental management, and be able to apply these concepts to the identifying of Māori positions on contentious issues in science, such as xenotransplantation, and
- have developed a creative yet critical writing style that addresses a range of Māori and indigenous issues arising from global and national policies, frameworks, procedures and legislation.

4 KO NGĀ PUKAPUKA **Essential Texts**

4.1 Required Text

Students are required to purchase the Course Reader, *MAOR 124 Te Pūtaiao Māori/Māori Science*, available from the Student Union Building, for a cost of \$20.40 (see 4.2 below). You should purchase these early in order to get a head start on your readings.

4.2 Obtaining Student Notes

All undergraduate textbooks and student notes will be sold from the Memorial Theatre foyer from 4 to 22 July 2011, while postgraduate textbooks and student notes will be available from the top floor of vicbooks in the Student Union Building, Kelburn Campus. After week two of the trimester, all undergraduate textbooks and student notes will be sold from vicbooks on Level 3 of the Student Union Building.

Students can order textbooks and student notes online at www.vicbooks.co.nz or can email an order or enquiry to enquiries@vicbooks.co.nz. Books can be couriered to students or they can be picked up from nominated collection points at each campus. Students will be contacted when they are available.

Opening hours are 8:00am - 6:00pm, Monday - Friday during term time (closing at 5:00pm in the holidays). Telephone 463 5515.

At the start of the trimester please refer to the noticeboards at 48 and 50 Kelburn Parade for an updated list of Course Readers available for purchase.

4.3 Recommended Dictionary

Thompson, Della (ed), 1995. *The Concise Oxford Dictionary of Current English*. Oxford: Clarendon Press. Also available Internet: <http://dictionary.oed.com/>

4.4 Academic Writing Guide

The *Te Kawa a Māui Academic Writing Guide 2007 or 2011 edition**, is available for purchase from vicbooks in the Student Union Building.

*Note that the Writing Guide is being updated in June/July this year. While there are expected to be only minor differences between the 2011 edition and the previous (2007) edition, the transitional arrangement is that students who began their studies with Te Kawa a Māui prior to June 2011 may continue using the 2007 version, although they may use the newer version if they wish. All students who began their studies after June 2011 will be expected to follow the updated version as soon as it is available.

4.5 Blackboard Internet Support

Students will be expected to keep a thorough record of all lecture notes. However, notices and class material, including lecture outlines, will be posted on Blackboard. You will be expected to familiarise yourself with Blackboard, although some tuition may be given within the framework of the course. You should check this site regularly, i.e. at least twice a week.

5 KO NGĀ MAHI Course Work

5.1 Lectures

MAOR 124 is a half year, second trimester course, and lectures are held three times a week. You should attend a minimum 30 of 36 lectures to keep up with

the ideas we cover in lectures. An attendance roll will be taken during each lecture.

Lectures are held:

Monday	12:00-12:50pm	LBLT118 (Laby Building)
Wednesday	12:00-12:50pm	Te Tumu Herenga Waka (MR101)
Thursday	12:00-12:50pm	LBLT118 (Laby Building)

It is highly important that students attend all lectures, especially when guest lecturers are scheduled to speak.

Students are also encouraged to register with the Te Pūtahi Atawhai Tuakana-Teina mentoring programme which provides an informal forum for small groups to meet to discuss course-specific work.

5.2 Fortnightly Workshops and Field Trip

In addition to lectures, students will attend a fortnightly two-hour workshop / tutorial (held in even numbered weeks). Activities and field trips to supplement classroom learning will be planned for each workshop (see 9 Course Programme). Students will work on assignments during each session. Workshops will be held at two different times during the week, and students will sign up for the time that best suits. Workshop times and venues are as follows:

Wednesday	4:10-6:00pm	KK203 (Kirk Building)
Thursday	5:10-7:00pm	KK203 (Kirk Building)

At 7:00-9:00pm on Tuesday, 2 August, the whole class will go on a field trip in lieu of a workshop. We will visit the Carter Observatory, Botanical Gardens, signposted from the top of the Cable Car. The cost of this field trip is \$13 to be paid to the Māori Studies Office, 50 Kelburn Parade, prior to the field trip. You should arrive by 6:50pm to ensure a timely start of the planetarium show. Weather allowing, we will also observe the skies through the telescope.

5.3 Expected Workload

The standard Faculty workload for a 20 point course applies - ie, 200 hours in total, or 13-14 hours per week (inclusive of lectures and workshops).

Each week, the remaining 9 hours should be spent on:

- reading the material scheduled for lectures and workshops
- revising material from lectures
- background reading including reading for assignments, and
- preparing for the final examination and writing of assignments.

The division of time between reading for assignments and writing assignments will clearly vary from week to week.

6 KO NGĀ TATAURANGA Assessment Requirements

6.1 Submission of Course Work

All work submitted for this course MUST be posted in the Assignment Box, Māori Studies Office, 50 Kelburn Parade. All assignments are registered in the Māori Studies Office. DO NOT hand work to the Course Coordinator, or leave assignments under the Course Coordinator's door. Please keep a copy of your work.

You are required to use the standard cover sheet for Te Kawa a Māui assignments. Hard copies of this are available by the Assignment Box.

6.2 Assessment Tasks

Coursework will account for 60% of the total assessment for this course. The other 40% will be a final examination at the end of the course. You must also attain a minimum combined mark of 50%.

6.3 Internal Course Work	60%	Due Date
5 Workshop Assignments	20%	27 July-12 October (Week 3-11)
In-class Test	10%	18 August (Week 6)
Cultural Atlas Exercise	10%	15 September (Week 9)
Essay (1500 words)	20%	29 September (Week 10)

6.4 Workshop Assignments **5 at 4% each (20% in total)**

An assignment will be given out during the fortnightly workshop, and is due by 5:00pm one week later. You are required to complete 4 of the 5 total assignments, but it is in your best interests to complete all 5, as each counts up to 4% towards your final mark. Each assignment will also be posted on Blackboard so that students who are unable to attend their workshop can work on the assignment in their own time. The assignments will consolidate the practical knowledge you gain during the workshops, and help you meet the learning objectives of the course.

6.5 In-class Test **10%**

A 50 minute test is scheduled for 18 August (Week 6) during the normal lecture hour. This will examine all lecture and workshop material covered up to and including 18 August. The in-class test gives you the opportunity to consolidate what you have learnt, and identify areas of weakness that may be corrected in time for the final exam.

6.6 Cultural Atlas Exercise **10%**

In 2010, Te Kawa a Māui instigated a School-wide research project that enables student contributions to an electronic 'cultural atlas'. In this exercise, students will choose or be allocated one of the Elsdon Best references on astronomy, time, medicine or games. Students will geographically locate the

Māori knowledge in their allocated reading, and ultimately contribute their research to the Cultural Atlas database. This assessment will constitute 500-1000 words. Work for this assessment is due by 5:00pm on 15 September. More detail will be given in class and posted on Blackboard.

6.7 Essay 20%

On or before 5:00pm on 29 September you will submit a 1500 word essay. The essay topics will be distributed in lectures and posted on Blackboard. Essays are expected to adhere to the JPS (a variant of Harvard) style of formatting and referencing. Essay topics are designed to allow you the opportunity to investigate more closely an area of interest to you within the confines of the course learning objectives.

6.8 Final Examination 40%

The Final Examination is a three-hour closed book examination held during the **Trimester 2 Examination Period (21 October-12 November inclusive)**. For courses with a final examination, students must be available to attend the examination at any time during this period. The date, time and venue will be announced on Blackboard as soon as this information becomes available.

7 KO NGĀ WHIUNGA Penalties

Extensions will only be granted for extenuating circumstances. You should contact the Course Coordinator as soon as you are aware of any issues that may impinge on timely submission of your work. Work submitted late will be penalised by 5% for each day. Work emailed to the Course Coordinator will automatically attract a 5% penalty. Where students have not informed the Course Coordinator, more severe penalties may be imposed.

8 KO NGĀ MAHI ME MATUA TUTUKI Mandatory Course Requirements

In order to complete this course, students must:

- attend at least 30 of the 36 lectures in total
- complete all internal assessments, and
- attempt the final examination.

9 KO TE MAHERE MAHI Course Programme

This programme provides a **guide** to lecture content. The programme is flexible and may be changed at the discretion of the Course Coordinator, and depending on the needs of the class.

Week	Date	Lecture	Assessment Due
1	11 July 13 July 14 July	Introduction, Course Overview Science "Western Science"	

Week	Date	Lecture	Assessment Due
2	18 July 20 July 21 July	Pūtaiao Mātauranga Māori “Māori Science”	
Workshop 1: Aotearoa flora and fauna around Kelburn Parade/Glasgow Terrace			
3	25 July 27 July 28 July	Mate Māori and Traditional Medicine Rongoā Māori – Video Māori Medicine – New Research	Assignment 1
4	1 Aug 3 Aug 4 Aug	Tātai Arorangi – Māori Astronomy Tātai Arorangi – Māori Astronomy Polynesian Navigation	
Workshop 2: Carter Observatory field trip on Tuesday, 2 August			
5	8 Aug 10 Aug 11 Aug	Time Māori Mathematics/Measurement Ancestry and Genetic Navigation	Assignment 2
6	15 Aug 17 Aug 18 Aug	Science in Te Reo Māori Revision In-class Test	
Workshop 3: GPS, Google Earth and whenua			
Mid-trimester break: 22 August to 4 September			
7	5 Sep 7 Sep 8 Sep	Measurement Theory Indigenous Science The Interface – IK and Science	Assignment 3
8	12 Sep 14 Sep 15 Sep	Māori AND Science – the Exclusivity of Science Te Taiao – Māori Resource Management Biodiversity and Māori	Cultural Atlas Exercise 15 Sep
Workshop 4: Mātauranga Māori and science (tbc)			
9	19 Sep 21 Sep 22 Sep	Wai 262 Protecting Indigenous Knowledge Intellectual Property Issues	Assignment 4
10	26 Sep 28 Sep 29 Sep	Contentious Science Issues – Xenotransplantation Genetic Modification Stem Cell Research	Essay 29 Sep
Workshop 5: Gaming, Sport and Science			
11	3 Oct 5 Oct 6 Oct	Māori and Science Education Māori in Science Guest Lecture (tba)	Assignment 5
12	10 Oct 12 Oct 13 Oct	Science at Play – Mu Torere Māui the Scientific Inquirer Course Revision	
Workshop 6: Oral Mnemonics and Exam Preparation			

10 MO TE HUNGA HAUĀ
Students with a Disability

The University has policies for supporting students with disabilities, particularly with regards to examinations and assessments. Contact the Course Coordinator if you feel this applies to you.

11 KO NGĀ PUKAPUKA
Reference Texts

A variety of texts have been placed on Closed Reserve and 3-day Loan at Te Pātaka Kōrero/The University Library (Levels 2 and 3 respectively) to assist you with your study and essay writing. Students should return Library books by the due date to avoid Library fines.

The following list gives references that may be useful for the essay topics in the course. Note that the full text of the Elsdon Best monographs is available via MyGateway.info. More details on how to access these are available on Blackboard.

Best, Elsdon, 1955. *The Astronomical Knowledge of the Maori*. Dominion Museum Monograph no. 3 Wellington: Government Printer.

Best, Elsdon, 1959. *The Maori Division of Time*. Dominion Museum Monograph no. 4 Wellington: Government Printer.

Best, Elsdon, 1923. *Polynesian Voyagers. The Maori as a Deep-sea Navigator, Explorer, and Colonizer*. Dominion Museum Monograph no. 5 Wellington: Government Printer.

Goldie, W. H, 1904. *Maori Medical Lore*. Papakura: Southern Reprints (1998).

Ladyman, James, 2002. *Understanding Philosophy of Science*. London: Routledge.

Lewis, David, 1972, 1994 (2nd ed.). *We, the Navigators*. Honolulu: University of Hawaii Press.

McLean, Robert and Smith, Tricia, 2001. *The Crown and Flora and Fauna: Legislation, Policies and Practices 1983-98*. Waitangi Tribunal Research Series Wai 262 (1997). Wellington: Waitangi Tribunal.

Riley, Murdoch, 1994. *Māori Healing and Herbal*. New Zealand Ethnobotanical Sourcebook. Paraparaumu: Viking Sevenses N.Z. Ltd.

Williams, David, 2001. *Matauranga Maori and Taonga*. Waitangi Tribunal Research Series Wai 262 (1997). Wellington: Waitangi Tribunal.

Williams, P. M. E. 1996. *Te Rongoa Maori. Maori Medicine*. Auckland: Reed.

12 ACADEMIC INTEGRITY AND PLAGIARISM

Academic integrity means that University staff and students, in their teaching and learning are expected to treat others honestly, fairly and with respect at all times. It is not acceptable to mistreat academic, intellectual or creative work that has been done by other people by representing it as your own original work.

Academic integrity is important because it is the core value on which the University's learning, teaching and research activities are based. Victoria University's reputation for academic integrity adds value to your qualification.

The University defines plagiarism as presenting someone else's work as if it were your own, whether you mean to or not. 'Someone else's work' means anything that is not your own idea. Even if it is presented in your own style, you must acknowledge your sources fully and appropriately. This includes:

- material from books, journals or any other printed source
- the work of other students or staff
- information from the internet
- software programmes and other electronic material
- designs and ideas, and
- the organisation or structuring of any such material.

Find out more about plagiarism, how to avoid it and penalties, on the University's website: www.victoria.ac.nz/home/study/plagiarism.aspx

13 WHERE TO FIND MORE DETAILED INFORMATION

- Find key dates, explanations of grades and other useful information at:
www.victoria.ac.nz/home/study
- Find out how academic progress is monitored and how enrolment can be restricted at:
www.victoria.ac.nz/home/study/academic-progress
- Most statutes and policies are available at:
www.victoria.ac.nz/home/about/policy
- However, qualification statutes are available via the Calendar webpage at:
www.victoria.ac.nz/home/study/calendar.aspx (See Section C).
- Other useful information for students may be found at the website of the Assistant Vice-Chancellor (Academic) at:
www.victoria.ac.nz/home/about_victoria/avcacademic

14 WITHDRAWAL DATES

Have you changed your mind about the courses you want to do this trimester? If you do not withdraw from a course in time, you will receive a fail grade. A fail grade stays permanently on your academic record. You can avoid the fail grade by withdrawing properly from courses before it is too late!

It is not enough just to stop attending lectures and tutorials, or to tell your lecturer or school administrator. You must complete a course/add drop form, available from your Faculty, Student and Academic Services Office, and submit it by the due dates specified at:

www.victoria.ac.nz/home/admisenrol/payments/withdrawlsrefunds.aspx

Information about refunds may also be found here.

You are also advised to carefully consider how 'late' withdrawals might impact on your StudyLink eligibility. This information can be found at:

www.victoria.ac.nz/home/admisenrol/payments/performance-criteria.aspx