

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI



Te Kawa a Māui

# MAOR 317

**Special Topic: Science  
and Indigenous  
Knowledge**

**Trimester 1, 2011 dates**

Lectures begin Monday, 28 February

Lectures end Friday, 3 June

Mid-trimester break 18 April - 1 May

Study week 6 - 10 June

Assessment/examination period 10 June - 2 July





Tēnā koutou. Greetings, and welcome to MAOR 317, Science and Indigenous Knowledge. This outline contains important information for your journey through the issues that will be canvassed in MAOR 317.

*E tipu, e rea mō nga rā o tōu ao*

**1 KO NGĀ WHAKAHAERE**  
**Course Administration**

- |     |  |  |
|-----|--|--|
| 1.1 | <b>Ko te Pūkenga<br/>Course Coordinator</b>        | Dr Ocean Mercier<br>Room 207, 50 Kelburn Parade<br>Telephone 463 7457<br>Email ocean.mercier@vuw.ac.nz   |
|     | <b>Office Hours</b>                                | Friday 12:00pm - 1:00pm or by<br>appointment   |
| 1.2 | <b>Class Times<br/>Lectures</b>                    | Tuesday, Friday<br>10:00am - 11:50am<br>AM104 (Alan MacDiarmid Building)   |
| 1.3 | <b>Communication of Additional<br/>Information</b> | Notices and course information will<br>be posted on the MAOR 317<br>Blackboard site. Please check the<br>site regularly for notices and lecture<br>and reading material.   |
| 1.4 | <b>Class Representative</b>                        | A class representative will be elected<br>at the start of the course. Contact<br>details will be made available<br>through Blackboard. The class<br>representative will liaise between the<br>students and the Course Coordinator<br>as necessary. |

**2 KO NGĀ WHĀINGA ME NGĀ HUA**  
**Course Aims and Learning Objectives**

This course examines the involvement and engagement of Indigenous peoples in scientific endeavours (whether these be labelled Indigenous science or Western science), historically, in the present day, and in the future. Students will acquire an understanding of the philosophical differences between Western science (WS) and Indigenous knowledge (IK). From this, students will become better equipped to debate contemporary issues, particularly regarding new technologies, at the interface of various cultures' ways of thinking.

By the end of this course students should be able to:

- justify the use of the term "Indigenous science" or "Native science"
- analyse and understand the philosophical differences between Indigenous peoples' (particularly Māori) and "Western" ideologies

- give examples and discuss case studies of Indigenous scientific methodologies
- describe and articulate some Indigenous viewpoints on contentious scientific issues
- understand the challenges facing Indigenous people who wish to engage in “Western” science and technologies, and
- discuss some of the benefits and challenges that await Indigenous nations who wish to work together on research projects and educational initiatives.

### **3 KO NGĀ KAUPAPA MATUA**

#### **Course Content**

The main themes of the course are:

- what is Science?
- what is Indigenous knowledge?
- what is the “Interface”?
- intersections between Global and Local knowledge
- Indigenous knowledge in an international context, and
- Indigenous peoples’ engagement with science.

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

- analyse and critique ideas and identify the issues for those working at the interface, in both written and oral forms
- understand the issues that militate against full participation by Indigenous peoples in “Western” science, and suggest ways that these difficulties can be alleviated
- engage in debates, both written and oral, around ownership of knowledge at the interface
  - with a full command of the important terminologies in “interface” discussions, and an appreciation of the limitations of these
  - with a knowledge of the similarities and differences in worldview for Indigenous and non-Indigenous peoples
  - with a cognizance of issues for cross-cultural engagement in the interface eg socio-economic, political, philosophical, and
- make a critical comparative analysis of situations for different Indigenous peoples that is grounded in current literature by both Indigenous and non-Indigenous peoples.

### **4 KO NGĀ PUKAPUKA**

#### **Essential Texts**

#### **4.1 Required Text**

Students are required to purchase the Course Reader, *MAOR 317 Special Topic: Science and Indigenous Knowledge*, from the Student Union Building for a cost of approximately \$40. You should purchase this early in order to get a head start on your readings. All previous year’s versions of the course reader are also suitable.

## 4.2 Obtaining Student Notes

All undergraduate textbooks and student notes will be sold from the Memorial Theatre foyer from 7 February to 11 March 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](http://www.vicbooks.co.nz) or can email an order or enquiry to [enquiries@vicbooks.co.nz](mailto: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 2007 Edition

For about \$5, the *Te Kawa a Māui Academic Writing Guide 2007 Edition* is available for purchase from the Student Notes Distribution Centre, Student Union Building. This guide is required for all Te Kawa a Māui courses. All essays submitted for this course must be formatted using the JPS (Harvard) style, as indicated in the *Academic Writing Guide*, so make sure you have access to it.

## 4.5 Blackboard

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.

# 5 KO NGĀ MAHI Course Work

## 5.1 Lectures

MAOR 317 is a one trimester course, and two-hour sessions are held two times a week. Tuesday's session will be run as a lecture seminar, and Friday's session as a tutorial, in which students can present work and discuss issues arising from the week's readings and the Tuesday lecture. Students should read the week's assigned readings (see the Course Programme, Section 9) before Friday's class. You need to attend a minimum of 16 of 20 lectures/tutorials to make good progress in the course. An attendance roll will be taken near the beginning of each class, so please ensure you make it to classes on time.

## 5.2 Expected Workload

MAOR 317 is worth 20 points. Students should allow thirteen hours per week, inclusive of lecture time, for MAOR 317, as is standard for a third year course.

# 6 KO NGĀ TATAURANGA Assessment Requirements

## 6.1 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.

In order to stay abreast of material, it is highly important that students attend at least 80% of lectures and tutorials.

## 6.2 Assessment Tasks

Internal coursework will account for 100% of the total assessment for this course. This is made up of 10 weekly summaries, a case study report, an in-class presentation, an essay, participation in an online dialogue and a small research project.

6.3 Internal Course Work	100%	Due Date
5 Fortnightly Blackboard Tests	10%	Fortnightly Friday (Weeks 3, 5, 7, 9, 11)
Case Study Report	15%	Friday, 8 April (Week 6)
Reading Presentation	15%	(one Friday in Weeks 2-11)
UAF Student Forum Exchange	15%	Friday, 15 April (Week 7)
Essay	20%	Friday, 6 May (Week 9)
Local Knowledge Project	25%	Friday, 3 June (Week 12)

## 6.4 Fortnightly Blackboard Tests 10%

Starting from Week 3, an online Blackboard test will be posted every second Friday, just before class. These will typically include 10-20 short answer questions related to lecture material and readings, and will generally be marked out of 10. Each one is worth up to 2%, for a total of 10% across the 5 tests. Assignments are due by 5:00pm the following Friday. Students should treat the tests as a motivation for regular study, thereby reinforcing key ideas discussed in lectures and from readings.

**6.5 Case Study Report** 15%

In this assessment students will be required to find and discuss a particular case study. This should be a current/recent research project or educational initiative that explores the **interface** between Western and Indigenous science and knowledge. Some ideas have been posted on Blackboard, but you may choose any research project/initiative that fits the notion of an “Interface” project. Students will be required to write a 1500 word report that describes the project and critiques its aims and achievements with respect to the readings and themes discussed in MAOR 317. The report should include an abstract (a 150 word summary of your report), main body (describing the project, why it can be considered an interface initiative and a critical analysis in light of MAOR 317 readings) and conclusion. The report must be submitted by **5:00pm Friday, 8 April**. The report will be marked on how well it conforms to the specified requirements. The report marking sheet is available on Blackboard.

**6.6 Reading Presentation** 15%

During the first week of the course, each student will choose one of the weekly readings to read and give a presentation on. Sign up for this using the wiki tool on Blackboard, in the Assessment folder, or during class (first in, first served). You will be expected to give a 10 minute overview of the reading, and then lead the class in a 10 minute discussion on this article. The student will give their assigned reading presentation in the tutorial associated with the reading in question. These presentations will **begin in Week 2** and conclude in **Week 11**. The Programme Outline in Section 9 gives details of when each reading will be discussed. The presentation will give you the opportunity to delve more deeply into a particular reading. Good presentations will display a thorough knowledge of the reading. The presenter will be marked on their ability to identify and convey the key messages of the text within 10 minutes. They will also be marked on their ability to engage and lead the class in subsequent discussion.

**6.7 UAF Student Forum Exchange** 15%

You will have the opportunity to take part in a virtual exchange of ideas with students doing a similar course in another context and country. In 2007, 2009 and 2010 students from MAOR 317 collaborated with the University of Alaska, Fairbanks’ students taking CCS601: Documenting Indigenous Knowledge. The timing of this year’s assessment coincides with the USA Spring semester, so we will be communicating with students from ED350: Communication in Cross-Cultural Classrooms. You will be marked on the quality of your arguments and responses to a set of two readings, within a virtual forum, and/or using video-conferencing. More information will be given when our exchange partners are identified and confirmed. Assessment will be based on the degree of preparedness, and the quality of communication and engagement with our fellow Alaskan students. This will be completed by **5:00pm Friday, 15 April**. Specific marking criteria will be made available closer to the time.

**6.8 Essay** 20%

On or before **5:00pm Friday, 6 May** you will submit a 2000 word essay, worth 20%. The essay topics will be distributed in lectures and posted on Blackboard. Essays are expected to adhere to the JPS (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, yet within the confines of the course objectives. Assessment criteria will be specified on the essay marking sheet, which will be made available by Friday, 14 April.

### 6.9 Local Knowledge Project

25%

In this mini project, students will engage their choice of media as a means of documenting local knowledge specific to their own community. Community can be defined in a number of ways, eg whānau, hapū, students, common interest group. Below are some suggestions for the form of the project:

- a journal/logbook
- a multi-media scrapbook
- a short film
- video or picture files with audio commentary
- a cultural atlas using Google maps, or
- something else (to be approved by the Course Coordinator).

More information will be given in class about this assessment, including the assessment criteria by the end of week 7. The due date for submitting this project is **5:00pm Friday, 3 June**.

## 7 KO NGĀ WHIUNGA Penalties

### Penalties

Extensions will only be granted for extenuating circumstances. You should contact the Pūkenga 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. Where students have not informed the Course Coordinator, more severe penalties may be imposed.

**IMPORTANT:** For the sake of thematic continuity it is very important that readings are presented on the dates assigned. Students who, due to illness or bereavement, are unable to attend sessions in which they have been scheduled to give presentations **MUST** provide evidence for their absence. Only those with a legitimate excuse to be absent will be given another opportunity to present work.

## 8 KO NGĀ MAHI Mandatory Course Requirements

In order to complete this course, students must:

- attend at least 16 of 20 two-hour lectures/seminars in total, and
- attempt and submit all items of assessment.



**9 KO TE MĀHERE MAHI**  
**Course Programme**

This programme provides an outline of lecture content. The programme is a **guide only** and may be adjusted to suit guest lecturer needs. It may also be tailored to the needs and requests of the students in the course. The readings to be discussed each week are given by author and Course Reader page in the Lecture Theme column. Please ensure that you read the week's readings before Monday's lecture, and be ready to discuss them in Friday's session.

Week	Day/Date	Lecture Theme	Assessment Due
1	T 1 Mar F 4 Mar	<b>Indigenous Knowledge</b> Readings: Battiste and Henderson, Turnbull, Mercier (all on Blackboard)	
2	T 8 Mar F 11 Mar	<b>Indigenous Philosophy</b> Readings: Durie (p.3), Cajete (p.101)	
3	T 15 Mar F 18 Mar	<b>Traditional Ecological Knowledge and Ecology</b> Readings: McGregor (p.31), Berkes (p.43)	<b>Blackboard Test 1 Due</b>
4	T 22 Mar F 25 Mar	<b>Recording Traditional Knowledge</b> Readings: Simpson (p.65), Harmsworth (p.71)	
5	T 29 Mar F 1 Apr	<b>"Western" Science</b> Readings: Morris (p.143), Bohm (p.131)	<b>Blackboard Test 2 Due</b>
6	T 5 Apr F 8 Apr	<b>The Interface – non-Indigenous perspectives</b> Readings: Capra (p.83), Peat (p.173)	<b>Case Study Report due Friday, 8 April</b>
7	T 12 Apr F 15 Apr	<b>The Interface – Indigenous perspectives</b> Readings: Nakata (available on Blackboard), Deloria (p.157), Kawagley (p.115)	<b>Last date for Student Forum Exchange Friday, 15 April</b> <b>Blackboard Test 3 Due</b>
<b>Mid-Trimester Break: 18 April - 1 May</b>			
8	T 3 May F 6 May	<b>Indigenous Language</b> Readings: McKinley (p.197), Cajete (p.205), Kawagley (p.217)	<b>Essay due Friday, 6 May</b>
9	T 10 May F 13 May	<b>Indigenous Education</b> Readings: Aikenhead (p.223), Barnhardt (p.233)	<b>Blackboard Test 4 Due</b>
10	T 17 May F 20 May	<b>Indigenous Research</b> Readings: Rigney (p.251), Roberts (p.15), Bacigalupo (p.259)	
11	T 24 May F 27 May	<b>Indigenous People and Biotech</b> Readings: Hutchings (p.265), IPCB (p.283), Cooke (p.55)	<b>Blackboard Test 5 Due</b>
12	T 31 May F 3 Jun	<b>Indigenous Tino Rangatiratanga</b> Readings: Williams (p.277)	<b>Local Knowledge Project due Friday, 3 June</b>

**10 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.

- Battiste, Marie and Henderson, Sakej Youngblood, 2000. *Protecting indigenous knowledge and heritage : a global challenge*. Saskatoon: Purich Pub.
- 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.
- Cajete, Gregory, 2000. *Native Science. Natural Laws of Interdependence*. Santa Fe: Clear Light Publishing.
- Dei, George J. Sefa, 2011. *Indigenous Philosophy and Critical Education: A Reader*. New York: Peter Lang Publishers Inc.
- Deloria, Vine, 1997. *Red Earth White Lies. Native Americans and the Myth of Scientific Fact*. Colorado: Fulcrum Publishing.
- Goldie, W. H, 1904. *Maori Medical Lore*. Papakura: Southern Reprints (1998).
- Kawagley, Angayuqaq Oscar, 2006 (2<sup>nd</sup> ed.). *A Yupiaq Worldview: a pathway to ecology and spirit*. Long Grove, Ill.: Waveland Press.
- Ladyman, James, 2002. *Understanding Philosophy of Science*. London: Routledge.
- McLean, Robert and Tricia Smith, 2001. *The Crown and Flora and Fauna: Legislation, Policies and Practices 1983-98. Waitangi Tribunal Research Series Wai 262 (1997)*. Wellington: Waitangi Tribunal.
- Nakata, Martin, 2007. *Disciplining the savages: savaging the disciplines*. Canberra: Aboriginal Studies Press.
- Peat, F. David, 2002. *Blackfoot physics : a journey into the Native American universe*. Grand Rapids, MI : Phanes Press.

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

Whitt, Laurelyn, 2009. *Science, colonialism, and indigenous peoples: the cultural politics of law and knowledge*. Cambridge, N.Y: Cambridge University Press.

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.

## 11 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](http://www.victoria.ac.nz/home/study/plagiarism.aspx)

## 12 WHERE TO FIND MORE DETAILED INFORMATION

- Find key dates, explanations of grades and other useful information at:  
[www.victoria.ac.nz/home/study](http://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](http://www.victoria.ac.nz/home/study/academic-progress)
- Most statutes and policies are available at:  
[www.victoria .ac.nz/home/about/policy](http://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](http://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](http://www.victoria.ac.nz/home/about_victoria/avcacademic)

### **13 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/withdrawalsrefunds.aspx](http://www.victoria.ac.nz/home/admisenrol/payments/withdrawalsrefunds.aspx)

Information about refunds may also be found here.