



TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI



**VICTORIA**  
UNIVERSITY OF WELLINGTON

Te Kawa a Māui

# MAOR 317

Special Topic:  
Science and Indigenous  
Knowledge

Trimester 2  
2007

**IMPORTANT**

**Please read and note the information  
on the back page of this course outline**

**MAOR 317**  
**Special Topic: Science and Indigenous Knowledge**  
**Course Outline 2007**

Tēnā koutou. Greetings, and welcome to the inaugural offering of the special topic MAOR317, Science and Indigenous Knowledge. I hope that you will enjoy this course as much as I have enjoyed preparing it. This outline contains important information for your journey through the issues that will be canvassed in MAOR317.

*E tipu, e rea mō nga rā o tōu ao*

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

- |     |                                     |   |
|-----|-------------------------------------|---|
| 1.1 | Ko te Pūkenga<br>Course Coordinator | Dr Ocean Mercier<br>Room 207, 50 Kelburn Parade<br>Telephone 463 7457   |
|     | Office Hours                        | Mon, Wed 10am-10:50am   |
| 1.2 | Class Times                         | Wednesday, Thursday 4:10pm – 6pm<br>New Kirk, Room 203  |
| 1.3 | Additional Information              | Notices and course information will be posted at the MAOR317 Blackboard site with the url <a href="http://blackboard.vuw.ac.nz">http://blackboard.vuw.ac.nz</a> . Please check the site regularly for notices and lecture and reading material. |

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

This course examines the involvement and engagement of Indigenous peoples in scientific endeavours, historically, in the present day, and in the future. Students will acquire an understanding of the philosophical differences between Western science and Indigenous Knowledge. 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 of scientific methodology used by indigenous peoples in their traditional knowledge;
- describe indigenous viewpoints on contentious scientific issues;

- understand the challenges facing indigenous people who wish to engage in “Western” science and technologies;
- describe 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”?
- Global and Localised knowledge
- Indigenous knowledge in an international context
- Indigenous peoples engagement with science

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

- Be able 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 full cognizance of issues for cross-cultural engagement in the interface eg socio-economic, political, philosophical.
- Have the ability to 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**

#### **Texts**

#### 4.1 Text Required

Students are required to purchase the Course Reader, *Science and Indigenous Knowledge MAOR317*, from Student Notes Distribution Centre, Student Union Building for a cost of approximately \$35. You should purchase these early in order to get a head start on your readings.

Te Kawa a Māui, 2007. *Science and Indigenous Knowledge MAOR317*. Wellington: Victoria University Student Notes Distribution Centre.



<b>6 KO NGĀ TATAURANGA</b> <b>Course Assessment</b>
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### 6.1 Course Work

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

In the case of illness, attendance could become crucial in determining your final mark. In order to stay abreast of material, it is highly important that students attend **all** lectures, **especially** when guest lecturers are scheduled to speak.

### 6.2 Assessment Tasks

Coursework will account for 100% of the total assessment for this paper. This is made up of an in-class presentation, 10 lecture briefs, an in-class test, an essay and a case study and seminar.

6.3 Internal Course Work	100%	Due Date
Lecture Briefs	20%	(Weeks 3-12)
In-class Test	20%	(Week 6)
Reading Presentation	15%	(Weeks 2-12)
Essay (2500 words)	25%	September 20 (Week 9)
Case study Seminar	10%	October 4 (Week 11)
Case study Report (1500 words)	10%	October 11 (Week 12)

### 6.4 Lecture Briefs 20%

Students will be asked to summarise each Wednesday's lecture in 1 page, beginning with the lecture in week 2, to be handed in by 5pm Thursday the next week. These will generally be marked out of 10. You will be required to complete at least 8 out of 10 total briefs, and each one will count up to 2% towards your final mark. Some weeks the brief may be substituted with an online Blackboard test. Students will be given plenty of warning of any adjustments to the brief requirements. The student is expected to treat the briefs as an opportunity to reinforce ideas discussed in lectures, and thereby help meet the learning objectives of the course.

### 6.5 In-class Test 20%

A 50 minute test is scheduled for the 6<sup>th</sup> week of the course, in the first hour of the lecture on August 16th. This will examine all lecture material covered before August 16th. The in-class test gives you the opportunity to consolidate what you have learnt, and identify areas of weakness that may be corrected before submitting the essay and Case study assessments.

6.6 Reading Presentation 15%

During the first two lectures of the course, each student will be assigned a reading from the course reader. You will be expected to give a 10 minute overview of the reading, and then lead the class in a discussion on this article. The student will give their assigned reading presentation in the tutorial associated with the reading in question, with the exception of students assigned readings in week 6, who will present on Wednesday, 15 August. These presentations will **begin in week 3**. The Programme Outline in section 10 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 and its wider context.

6.7 Essay 25%

On or before 5pm on the **20<sup>th</sup> of September** you will submit a 2500-word essay, worth 25%. The essay topics will be distributed in lectures and posted on Blackboard. Essays are expected to adhere to the JPS 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.

6.8 Case study Report and Seminar 20%

In these two pieces of 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. 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 MAOR317. The report should include an abstract, main body and conclusion. Students will also give a 5-minute presentation on their case study. The presentations will be held in the session on **October 4<sup>th</sup>**. The report must be submitted by **5pm October 11<sup>th</sup>**. Equal weighting will be given to both the presentation and the report (ie 10% each).

## 7 KO NGĀ WHIUNGA Penalties

### 7.1 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:** 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. For the sake of thematic continuity it is imperative that readings are presented on the dates assigned. Because of this necessity you may not be given another opportunity to present your work if you miss your time slot.

## 8 KO NGĀ MAHI Course Requirements

### Mandatory Course Requirements

In order to complete this course, students must:

- attend at least 20 of 24 lectures in total;
- complete a minimum of 8 out of 10 briefs;
- give a reading presentation;
- submit a 2500 word essay;
- sit an in-class test;
- submit a case study report and seminar;
- attain a minimum combined mark of 50%.

## 9 KO NGĀ HAUĀ Students with a Disability

The University has a policy of reasonable accommodation for the needs of students with disabilities in examinations and other assessment procedures. Please contact the Course Coordinator if you have any queries or issues.

## 10 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 Wednesday's lecture, and be ready to discuss them in Thursday's session.

Week	Trimester One	Lecture Theme	Assessment Due
1	Wed July 11 Thurs July 12	<b>Indigenous Knowledge</b> Introduction, Course Overview	
2	Wed July 18 Thurs July 19	<b>Indigenous Philosophy</b> Readings: Durie (p3), Cajete (p101)	
3	Wed July 25 Thurs July 26	<b>Transmitting Traditional Knowledge</b> Readings: Simpson (p65), Harmsworth (p71)	
4	Wed Aug 1 Thurs Aug 2	<b>Traditional Ecological Knowledge</b> Readings: McGregor (p31), Berkes (p43)	
5	Wed Aug 8 Thurs Aug 9	<b>"Western" Science</b> Readings: Morris (p143), Bohm (p131)	
6	Wed Aug 15 Thurs Aug 16	<b>The Interface – non-Indigenous perspectives</b> Readings: Capra (p83), Peat (p173)	<b>Class Test Aug 16</b>



Week	Trimester One	Lecture Theme	Assessment Due
<b>20 August – 2 September MID COURSE BREAK: NO LECTURES</b>			
7	Wed Sep 5 Thurs Sep 6	<b>The Interface – Indigenous perspectives</b> Readings: Nakata (available on Blackboard), Deloria (p157), Kawagley (p115)	
8	Wed Sep 12 Thurs Sep 13	<b>Indigenous Language and Education</b> Readings: McKinley (197), Cajete (p205), Kawagley (p217)	
9	Wed Sep 19 Thurs Sep 20	<b>Indigenous Language and Education</b> Readings: Aikenhead (p223), Barnhardt (p233)	<b>Essay Due Sep 20</b>
10	Wed Sep 26 Thurs Sep 27	<b>Indigenous Research</b> Readings: Rigney (p251), Roberts (p15), Bacigalupo (p259)	
11	Wed Oct 3 Thurs Oct 4	<b>Indigenous People and Biotechnologies</b> Readings: IPCB (p283), Cooke (p55)	<b>Case Study Seminars Oct 4</b>
12	Wed Oct 10 Thurs Oct 11	<b>Tino Rangatiratanga</b> Readings: Hutchings (p265), Williams (p277)	<b>Case Study Report due Oct 11</b>

## 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.

### Reference Texts

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.
- 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 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.
- 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.
- 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 General University Requirements**

**Student and Staff Conduct**

**Academic Grievances**

**Academic Integrity and Plagiarism**

**Students with Impairments**

**Student Support**

### **General University Policies and Statutes**

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar available in hard copy or under 'About Victoria' on the VUW home page at [www.vuw.ac.nz](http://www.vuw.ac.nz).

## **Student and Staff Conduct**

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps are to be taken if there is a complaint. For information about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor or refer to the statute on the VUW policy website at [www.vuw.ac.nz/policy/student-conduct](http://www.vuw.ac.nz/policy/student-conduct). The Policy on Staff Conduct can be found on the VUW website at [www.vuw.ac.nz/policy/staff-conduct](http://www.vuw.ac.nz/policy/staff-conduct).

## **Academic Grievances**

If you have any academic problems with your course you should talk to the tutor or lecturer concerned; class representatives may be able to help you in this. If you are not satisfied with the result of that meeting, see the Head of School or the relevant Associate Dean; VUWSA Education Coordinators are available to assist in this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievance Policy which is published on the VUW website at [www.vuw.ac.nz/policy/academic-grievances](http://www.vuw.ac.nz/policy/academic-grievances)

## **Academic Integrity and Plagiarism**

Academic integrity is about honesty – put simply it means *no cheating*. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. The University defines plagiarism as follows:

*The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other students or staff.*

It is still plagiarism even if you re-structure the material or present it in your own style or words.

*Note: It is however, perfectly acceptable to include the work of others as long as that is acknowledged by appropriate referencing.*

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalized severely. Consequences of being found guilty of plagiarism can include: an oral or written warning, cancellation of your mark for an assessment or a fail grade for the course, suspension from the course or the University. Find out more about plagiarism, and how to avoid it, on the University's website [www.vuw.ac.nz/home/studying/plagiarism.html](http://www.vuw.ac.nz/home/studying/plagiarism.html).

## **Students with Impairments** (see Appendix 3 of the Assessment Handbook)

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities the same opportunity as other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in

lectures and tutorials or in meeting the course requirements, please contact the course coordinator as early in the course as possible. Alternatively, you may wish to approach a Student Adviser from Disability Support Services (DSS) to discuss your individual needs and the available options and support on a confidential basis. DSS are located on Level 1, Robert Stout Building, telephone 463-6070, and email [disability@vuw.ac.nz](mailto:disability@vuw.ac.nz).

The name of your School's Disability Liaison Person is in the relevant prospectus or can be obtained from the School Office or DSS.

### **Student Support**

Staff at Victoria want students to have positive learning experiences at the University. Each faculty has a designated staff member who can either help you directly if your academic progress is causing you concern, or quickly put you in contact with someone who can. In the Faculty of Humanities and Social Sciences the support contact is Dr Allison Kirkman, Murphy Building, room 407. Assistance for specific groups is also available from the Kaiwawao Māori, Manaaki Pihipihinga or Victoria International.

### ***Manaaki Pihipihinga Programme***

This programme offers:

- academic mentoring for all Māori Studies students at all levels of undergraduate study. Contact Dee O'Carroll via email [dee.ocarroll@vuw.ac.nz](mailto:dee.ocarroll@vuw.ac.nz) or phone 463 9977 to register for mentoring for Commerce and Administration courses
- postgraduate support network links students into all of the postgraduate activities and workshops on campus and networking opportunities. Contact [manaaki-pihipihinga-programme@vuw.ac.nz](mailto:manaaki-pihipihinga-programme@vuw.ac.nz) or phone 463 6015
- the Pacific Support Coordinator assists Pacific students with transitional issues, disseminates useful information and provides any assistance needed to help students achieve. Contact [pacific-support-coord@vuw.ac.nz](mailto:pacific-support-coord@vuw.ac.nz) or phone 463 5842.

Manaaki Pihipihinga is located at 14 Kelburn Parade, back court yard, Room 109 D (for Humanities mentoring and some first year Commerce mentoring) or Room 210, Level 2, West Wing Railway Station, Pipitea (Commerce mentoring space). Te Kawa a Māui mentoring is done at Te Herenga Waka Marae.

### **Student Services**

In addition, the Student Services Group is available to provide a variety of support and services. Find out more at [www.vuw.ac.nz/st\\_services/](http://www.vuw.ac.nz/st_services/) or email [student-services@vuw.ac.nz](mailto:student-services@vuw.ac.nz).

VUWSA employs Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and faculty delegates. The Education Office is located on the ground floor, Student Union Building. Telephone the Education Office on 463-6983 or 463-6984, and email at [education@vuwsa.org.nz](mailto:education@vuwsa.org.nz).

## 13 Withdrawal Details

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!

To withdraw from a course you must complete a change of course form, available from your Faculty Student Administration Office, and submit it by the following deadlines.

### **Second Trimester Papers, July – October 2007**

No addition of first trimester courses permitted after **Friday, 20 July 2007**.

Withdraw before **Friday, 20 July 2007** and you will get a refund of fees. The course will no longer appear on your academic record.

Withdraw by **Friday, 21 September 2007** and you will avoid getting a fail grade on your student record. The course will be graded WD, which means 'withdrawn'. This will remain permanently on your academic record but it is not a failing grade. Withdrawal (WD) grades do not appear on an official transcript.

### **Full-Year Papers, February – October 2007**

No addition of full-year courses permitted after **Friday, 23 March 2007**.

Withdraw before **Friday, 9 March 2007** and you will get a refund of fees. The course will no longer appear on your academic record.

Withdraw by **Friday, 17 August 2007** and you will avoid getting a fail grade on your student record. The course will be graded WD, which means 'withdrawn'. This will remain permanently on your academic record but it is not a failing grade. Withdrawal (WD) grades do not appear on an official transcript.