Includes course notes for:
- BEES4514/4516 – Research Project
- BEES4522 – Literature Review and Project Proposal
- BEES9011 – Essential Skills for Research Students

Students Commencing Session Two 2014
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# Faculty of Science Course Outline

## 1. Information about the Course

<table>
<thead>
<tr>
<th>Year of Delivery</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Codes</strong></td>
<td><strong>BEES4516, BEES4514, BEES4522, BEES9011</strong></td>
</tr>
</tbody>
</table>
| **Course Names** | Literature Review and Project Proposal  
Essential Skills for Research Students  
Research Project |
| **Academic Unit** | School of Biological Earth & Environmental Sciences (BEES) |
| **Level of Course** | Level 4 |
| **Units of Credit** | BEES 4516 and BEES 4521 both 12 UOC  
BEES 4514 24 UOC |
| **Session(s) Offered** | Session 1 and 2 |
| **Assumed Knowledge, Prerequisites or Co-requisites** | Acceptance into the BEES honours program/post-graduate program |
| **Contact Hours** | 60 hours for the session for coursework components  
Research components will vary according to project |
| **Number of Weeks** | Coursework components mostly run as intensive workshops in O week and Week 1. Other coursework classes typically run in Weeks 10 - 12  
Duration and timing of research projects typically throughout both semesters and also mid-session break |
| **Commencement Date** | O – Week of Session One and Two. |

### Summary of Course Structure (for details see 'Course Schedule')

<table>
<thead>
<tr>
<th>Component</th>
<th>Times and Location</th>
</tr>
</thead>
</table>
| Lectures and Workshops  
(includes Laboratory and Tutorials) | The majority of the coursework components will be presented as a series of lectures and workshops that will run during O week and Week One of Session One. Other classes will typically run from Weeks 10 12 subject to staff availability.  
The rooms for the classes were not confirmed at time of printing. |
| Online and Other Activities | Included above |
| **TOTAL** | **60 hours for the Session** |
| **Special Details** | Courses offered in both sessions, but some modules of BEES4516 are only offered in Session 1, so that students taking BEES 4516 in S2 will receive a WD grade and must return in S1 to complete the remaining modules. |
2. Staff Involved in the Course

<table>
<thead>
<tr>
<th>Staff</th>
<th>Name</th>
<th>Contact Details</th>
<th>Consultation Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Convenors</td>
<td>Dr Adriana Vergés</td>
<td>Room 617, BEES Building Tel. 9385 2110 <a href="mailto:a.verges@unsw.edu.au">a.verges@unsw.edu.au</a></td>
<td>TBA</td>
</tr>
<tr>
<td></td>
<td>Dr Danielle Drozdzewski</td>
<td>Room 405, G17 Building Tel. 9385 8283 <a href="mailto:danielled@unsw.edu.au">danielled@unsw.edu.au</a></td>
<td>TBA</td>
</tr>
<tr>
<td>Additional Teaching Staff</td>
<td>As outlined in Section 6: Course Schedule</td>
<td>Staff will outline contact times and details as appropriate during module. All initial enquiries best directed through the Honours Coordinators.</td>
<td></td>
</tr>
<tr>
<td>Other Support Staff</td>
<td>Alex Sentinella BSB Office</td>
<td><a href="mailto:A.Sentinella@unsw.edu.au">A.Sentinella@unsw.edu.au</a></td>
<td>Use email for administrative questions only</td>
</tr>
<tr>
<td></td>
<td>Firoza Cooper HOS Secretary</td>
<td><a href="mailto:F.Cooper@unsw.edu.au">F.Cooper@unsw.edu.au</a></td>
<td></td>
</tr>
</tbody>
</table>

3. Course Details

**Course Descriptions (Handbook Entry)**

**BEES4516 Research Project.** A 12 UOC Research Project in the School of Biological, Earth & Environmental Sciences, taken in combination with BEES4522 and additional BEES Research Project courses to total 48 UOC. This course is only available to students enrolled in an Honours Program in the School of BEES and enrolment must be approved by the School of BEES Honours Coordinator. The course entails research in a defined disciplinary area (Archaeology & Palaeoenvironments, Biology, Climate Science, Ecology, Environmental Management, Genetics, Geochemistry, Geology, Human Geography, Marine and Coastal Science or Physical Geography) developed in consultation with an Honours Supervisor.

**BEES4522-Literature Review and Project Proposal.** This course is an essential component of the Honours Program in the School of Biological, Earth and Environmental Sciences and is completed in the first session of an Honours Program. It is only available to students enrolled in an Honours Program offered by the School of BEES and enrolment must be approved by the School of BEES Honours Coordinator. The course results in a research proposal which includes an extended literature review and risk assessment in a defined disciplinary area (including archaeology & palaeoenvironmens, biology, climate science, ecology, environmental management, genetics, geochemistry, geology, human geography, marine & coastal science or physical geography). The course is taken in conjunction with an Honours Research Project in the School of BEES. The focus of the research proposal is decided in consultation with an Honours Supervisor and is related to the topic area of the research project.

**Note:** BEES 4516 and BEES 4522 are only available to students enrolled in an Honours program offered by the School of BEES, and other Honours students as approved by the Honours Co-ordinator.
BEES9011. The course covers essential skills needed for postgraduate students pursuing research in BEES and also for subsequent employment. Principal topics covered include presentation skills (written, oral, and audiovisual including computer-aided presentations), database and library usage, information retrieval and usage of major computer packages as well as more specific research skills which may be tailored to particular interest groups. The course must be taken by all commencing postgraduate students in the School of BEES unless they have already passed BEES4511 or BEES 4516

**Course Aims**

To provide essential skills for Honours and Postgraduate students including:

- research, writing and presentation skills;
- an introduction to workplace health and safety
- an overview of scientific and personal ethics;
- professional development to prepare students for careers after graduation;
- other specialist skills in particular fields of the school.

**Student Learning Outcomes**

At the end of the course you can expect:

1) to have well developed skills in scientific communication;
2) to have experience in using a workplace health and safety system
3) to recognize and deal with unethical behaviour in the sciences;
4) to have confidence in the practical and specialist skills for your research area;
5) to be better equipped to apply for jobs and sit interviews.

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4. **Graduate Attributes Developed in this Course**

<table>
<thead>
<tr>
<th>Science Graduate Attributes (maybe replaced by UNSW, School or professional attributes)</th>
<th>Level of FOCUS</th>
<th>Activities / Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research, inquiry and analytical thinking abilities</td>
<td>3</td>
<td>Seminars, Literature Review, Research thesis</td>
</tr>
<tr>
<td>Capability and motivation for intellectual development</td>
<td>3</td>
<td>Seminars, Literature Review, Research thesis</td>
</tr>
<tr>
<td>Ethical, social and professional understanding</td>
<td>3</td>
<td>Implementing Risk Management Procedures Ethics module assessed by exam</td>
</tr>
<tr>
<td>Communication</td>
<td>3</td>
<td>Presentation and Writing Skills Workshops, Problem Statement Exercise, Final Seminar and Literature review</td>
</tr>
<tr>
<td>Teamwork, collaborative and management skills</td>
<td>3</td>
<td>Seminars and research project</td>
</tr>
<tr>
<td>Information literacy</td>
<td>3</td>
<td>Research Skills Workshop Literature review</td>
</tr>
</tbody>
</table>
## Major Topics (Syllabus Outline)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Work Health and Safety;</td>
</tr>
<tr>
<td>2)</td>
<td>Research and Library Skills;</td>
</tr>
<tr>
<td>3)</td>
<td>Writing Skills;</td>
</tr>
<tr>
<td>4)</td>
<td>Speaking and Presentation skills;</td>
</tr>
<tr>
<td>5)</td>
<td>Ethics in research and occupation;</td>
</tr>
<tr>
<td>6)</td>
<td>Professional Development</td>
</tr>
</tbody>
</table>

## Relationship to Other Courses within the Program

Completion of 144 units of credit and the particulars of each undergraduate program including the general studies requirement. There are no other equivalent Level IV or postgraduate courses offered in any program.

## 5. Rationale and Strategies Underpinning the Course

### Teaching Strategies

The Honours program provides a final undergraduate year that is a very different experience to earlier years. There are fewer formal classes and more individual work. The honours year provides an opportunity to specialise in an area of particular interest.

BEES 4516 and BEES 4522 brings the disparate BEES honours year cohort (and new post-graduate students) into a single group, to provide some unity and mutual support. The course covers essential elements of conducting research such as use of the UNSW library, workplace health and safety, writing skills and ethics. It is designed to develop a range of skills that are widely applicable outside an individual student's particular research specialty: e.g., conducting literature searches, critical evaluation of the literature, and written and oral communication.

In addition the course provides an opportunity for students to share their own unique research experiences and approaches (lab, field, various agencies and statistical methods) with their peers.

The course provides training in writing and speaking skills by class instruction and peer assessment. Through lectures and examples and discussion, the course provides what is ethical behaviour in research and in business. We exploit the individual's own sense of what is right to resolve daily dilemmas and how to approach potential outright fraud.

Finally the course provides a series of workshops in Professional Development in which students are instructed on a variety of skills to help them prepare their resume and job application, and prepare for an interview.

### Rationale for learning and teaching in this course

The course is designed to make students think independently, and prepare them for professional careers or further research.

Students graduating with a science degree and from BEES in particular require a wide and diverse range of skills, from recognising experimental design or statistics, to developing networks with the public and industry, to constructively dealing with bureaucrats. Therefore many of the teaching modules are open ended and use the shared experience of the cohort as well as staff from BEES, UNSW and associated entities to develop an array of appropriate professional skills.
## 6. Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Day / Date</th>
<th>Module</th>
<th>Topic</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;O&quot;-Week</td>
<td>Monday 21st July 10 - 12</td>
<td>A</td>
<td>Introduction Library Research Skills Workshop</td>
<td><a href="mailto:David.Edwards@unsw.edu.au">David Edwards, Adriana Vergas and Danielle Drozdewski</a>, Nicole Robertson (UNSW Library)</td>
</tr>
<tr>
<td></td>
<td>Monday 21st July 2 - 4</td>
<td>B</td>
<td>Work Health and Safety</td>
<td>Chris Myers (BEES WHS Manager)</td>
</tr>
<tr>
<td></td>
<td>Tuesday 22nd July 10 – 12 and 2 – 4</td>
<td>C</td>
<td>Presentation/PowerPoint/Speaking Skills</td>
<td>David Edwards</td>
</tr>
<tr>
<td></td>
<td>Wednesday 23rd July 10 – 12 &amp; 2 – 4</td>
<td>D</td>
<td>Writing Workshops 1 and 2</td>
<td><a href="mailto:Pam.Mort@unsw.edu.au">Pam Mort (UNSW Learning Centre)</a></td>
</tr>
<tr>
<td></td>
<td>Thursday 24th July Feb 10 - 12</td>
<td>D</td>
<td>Writing Workshop 3</td>
<td><a href="mailto:Adriana.Vergas@unsw.edu.au">Adriana Vergas, Danielle Drozdewski</a></td>
</tr>
<tr>
<td>Week 1</td>
<td>Monday 28th July and Tuesday 29th July 9.30 – 5.30</td>
<td>C</td>
<td>Introductory Seminars</td>
<td>Adriana Vergas, Danielle Drozdewski</td>
</tr>
<tr>
<td></td>
<td>Wednesday 30th July (10 - 12)</td>
<td>D</td>
<td>Writing Workshop 4 and debriefing session</td>
<td>Pam Mort (UNSW Learning Centre), Adriana Vergas, Danielle Drozdewski</td>
</tr>
</tbody>
</table>

**Assignment and Submission dates (see also ‘Assessment Tasks & Feedback’)**

- Draft Seminar Outline
- Project Information Form Due Monday 3rd March.
- Draft Problem Statement
<table>
<thead>
<tr>
<th>Week</th>
<th>Day / Date</th>
<th>Module</th>
<th>Topic</th>
<th>Staff</th>
<th>Assignment and Submission dates (see also ‘Assessment Tasks &amp; Feedback’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>NO Classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>NO Classes</td>
<td></td>
<td>Problem Statement Due Tuesday 12th August @ 12 noon via email</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>NO Classes</td>
<td></td>
<td>Risk Management Exercise Due Tuesday 19th August @ 12 noon</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>NO Classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Tuesday 2nd Sept.</td>
<td>Literature Review Workshop (not compulsory just a catch up meeting)</td>
<td>Adriana Vergas, Danielle Drozdewski, and Chris Myers</td>
<td>Return of Risk Management Exercise and Problem Statements</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>NO Classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>NO Classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>NO Classes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mid Session Break
<table>
<thead>
<tr>
<th>Week</th>
<th>Day / Date</th>
<th>Module</th>
<th>Topic</th>
<th>Staff</th>
<th>Assignment and Submission dates (see also ‘Assessment Tasks &amp; Feedback’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Wednesday 8th October</td>
<td>F</td>
<td>Professional Development 1: Job Applications and Resume</td>
<td>Kate Riley (UNSW Careers Centre)</td>
<td>Literature Review / Proposal Due Tuesday 7th October @12 noon</td>
</tr>
<tr>
<td></td>
<td>Thursday 9th October</td>
<td>F</td>
<td>Professional Development 2: Interviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Wednesday 15th October</td>
<td>F</td>
<td>Professional Development 3: Online Applications and Recruitment</td>
<td>Kate Riley (UNSW Careers Centre)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thursday 16th October</td>
<td>F</td>
<td>Professional Development 4: Networking and Postgrad. Info Session. BEES Alumni Panel (Early Evening)</td>
<td>Jonathan Russell (BEES Postgrad Administrator)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Wednesday 22nd October</td>
<td></td>
<td>Presentation by Professionals Australia</td>
<td>Paul Grainger (Professionals Australia)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>By Appoint.</td>
<td>F</td>
<td>20 minute interview with UNSW Careers Centre</td>
<td>Kate Riley (UNSW Careers Centre)</td>
<td>Students submit CV for assessment</td>
</tr>
<tr>
<td>“14”</td>
<td>All Week</td>
<td>G</td>
<td>Post-graduate forum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“15”</td>
<td>Monday &amp; Tuesday</td>
<td>G</td>
<td>Final Seminars for completing Honours students</td>
<td></td>
<td>Literature Reviews can be collected from Supervisor</td>
</tr>
</tbody>
</table>
7. Assessment Tasks and Feedback

i) BEES 4516 Research Project

<table>
<thead>
<tr>
<th>Task</th>
<th>Knowledge &amp; abilities assessed</th>
<th>Assessment Criteria</th>
<th>Submit</th>
<th>Feedback (who, when, how)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module B: Risk Management Exercise</td>
<td>WH&amp;S.</td>
<td>Satisfactory Completion of a Risk Management Exercise</td>
<td>Week 4</td>
<td>Chris Myers in Week 6 class</td>
</tr>
<tr>
<td>Module C: Introductory Seminar</td>
<td>See module notes</td>
<td>Satisfactory Completion of a Introductory Seminar</td>
<td>Week 1</td>
<td>David Edwards and Peer Review in class</td>
</tr>
<tr>
<td>Module D: Writing Skills</td>
<td>See module notes</td>
<td>Satisfactory Completion of a Problem Statement</td>
<td>Week 3</td>
<td>David Edwards in Week 6 class and via email</td>
</tr>
<tr>
<td>Module E: Ethics</td>
<td>Not offered in Session Two. Students should have completed Module in S1 2014 or will have to complete in S1 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module F: Professional Development</td>
<td>See module notes</td>
<td>Satisfactory Completion of Resume and short interview</td>
<td>Make App't in Week 12 or 13</td>
<td>At end of interview by UNSW Careers Staff</td>
</tr>
<tr>
<td>Module A: Research Skills &amp; Module G: Seminars</td>
<td>See module notes</td>
<td>Attend 5 BEES seminars and Library Research Consultation</td>
<td>Week 13</td>
<td>N/A</td>
</tr>
</tbody>
</table>

ii) BEES 4522 Literature Review / Research Proposal

<table>
<thead>
<tr>
<th>Task</th>
<th>Knowledge &amp; abilities assessed</th>
<th>Assessment Criteria</th>
<th>% of Total Mark</th>
<th>Submit</th>
<th>Feedback (who, when, how)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Proposal and Literature Review</td>
<td>Scientific writing skills Critical reading of scientific literature See notes in Section D of Honours Manual</td>
<td>100</td>
<td>Week 10</td>
<td>Supervisor, Wk “15” Written comments on work made by supervisor and examiners</td>
<td></td>
</tr>
</tbody>
</table>
8. Additional Resources and Support

<table>
<thead>
<tr>
<th>Text Books</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Manual</td>
<td>Available both in print and online.</td>
</tr>
<tr>
<td>Required Readings</td>
<td></td>
</tr>
<tr>
<td>Additional Readings</td>
<td></td>
</tr>
<tr>
<td>Recommended Internet Sites</td>
<td></td>
</tr>
<tr>
<td>Societies</td>
<td>Students should consult with their thesis supervisor</td>
</tr>
<tr>
<td>Computer Laboratories or Study Spaces</td>
<td></td>
</tr>
</tbody>
</table>

9. Required Equipment, Training and Enabling Skills

<table>
<thead>
<tr>
<th>Equipment Required</th>
<th>e.g., personal protection equipment (PPE) such as safety glasses, lab coat</th>
</tr>
</thead>
<tbody>
<tr>
<td>None required for BEES 4511 or BEES 4521 but students should consult with their supervisor with regard to their thesis research work.</td>
<td></td>
</tr>
</tbody>
</table>

| Enabling Skills Training Required to Complete this Course | Outlined in this manual as relevant for various course components |

10. Course Evaluation and Development

Student feedback is gathered periodically by various means. Such feedback is considered carefully with a view to acting on it constructively wherever possible. This course outline conveys how feedback has helped to shape and develop this course.

<table>
<thead>
<tr>
<th>Mechanisms of Review</th>
<th>Last Review Date</th>
<th>Comments or Changes Resulting from Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Course Review</td>
<td>November 2012</td>
<td>Review of Honours Structure by Honours Committee and School of BEES. Significant changes made to modules offered, component weightings and subject requirements. New structure to be fully adopted by S1 2014.</td>
</tr>
<tr>
<td></td>
<td>To be completed in 2014</td>
<td></td>
</tr>
<tr>
<td>CATEI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Feedback Workshop</td>
<td>November 2008</td>
<td>Significant restructuring of course especially in relation to workloads and timetabling</td>
</tr>
<tr>
<td></td>
<td>July 2011</td>
<td>Changes to submission dates and requirements.</td>
</tr>
</tbody>
</table>
### 11. Administrative Matters

| Expectations of Students | It is expected that students should attend all scheduled classes and workshops. However it is appreciated that fieldwork, conferences and other aspects of your honours research may compromise your ability to attend classes. In such cases please contact the Honours Coordinator to make alternative arrangements.  

In particular students must attend 5 seminars and the Careers Seminar and have these attendances verified by a BEES academic on their Seminar Attendance Sheet. |
| --- | --- |
| Work Health and Safety | The School of BEES values the health and safety of all persons associated with its activities. The School is committed to the expectation, as outlined in the UNSW WHS Policy, that no one will come to harm whilst engaging in research, teaching or learning, or any other activity undertaken by BEES workers or others. To achieved this expectation all workers and others must ensure they take all reasonable care for their own health and safety, and also take all reasonable care that the health and safety of others is not adversely affected either by their acts or omissions. In addition, it is a legal requirement that all workers and others comply with any reasonable instruction given by UNSW with regards to health and safety to ensure UNSW is not in breach of the NSW WHS Act or Regulation 2011.  

The School of BEES follows the UNSW chain of HS responsibility and accountability for all persons in the workplace, extending down from the Head of School through to the students undertaking BEES courses. Within this chain of responsibility and accountability, the Course Convener is responsible for ensuring all activities associated with their course are safe. The Course Convener has identified all potential hazards associated with course activities and documented risk control measures to ensure your health and safety. For each activity, clear written instructions are given and appropriate hazard warnings or risk minimisation procedures included for your protection. It is the student's responsibility to prepare for all practical work. Students should be familiar with the written procedures scheduled for the practical class and identify all personal protection requirements needed to complete the exercise in a safe manner. Provided it is safe to do so, students must comply with all safety instructions given by the Course Convener and/or Laboratory / Field Demonstrator, and observe the safety Information located outside or within teaching rooms. If you are unsure of any safe work procedures or written instruction regarding safety, you should seek further information from the Course Convener and/or Laboratory / Field Demonstrator before attempting the task.  

**NOTE:** Students should discuss WHS matters relating to laboratory and fieldwork associated with their research with their supervisor. These activities do not fall under the WHS requirements of courses BEES 4516/4522/9011  

Failure to comply with safety instructions may be, in the first instance, considered as a form of misconduct with regards to the UNSW Student Code of Practice. If the outcome of a student's failure to comply with safety instructions results in personal injury, or endangers the health and safety of others, then the matter may be dealt with by WorkCover as a breach of the NSW WH&S Act (2011). For more information on WHS and Safety at UNSW visit the following site: [www.ohs.unsw.edu.au/](http://www.ohs.unsw.edu.au/) or the relevant pages on the BEES website at: [http://www.bees.unsw.edu.au/health-and-safety](http://www.bees.unsw.edu.au/health-and-safety) |
Assessment Procedures and Assignment Submissions
(Including advice concerning illness or misadventure)

Deadlines:
All written work is to be typed and submitted to the BSB Student Office (Rm G27) by 12 noon on the due date. Do not use the general undergraduate assignment box but lodge any work in person with BSB staff at the office. A receipt will be issued; do not leave your work without a receipt.

Relevant cover sheets and declaration pages are included in this manual or on the honours web site.

It is important to learn to organise your work and prepare to meet deadlines. Deadlines for seminars, literature review and thesis must be met. A penalty of 2.5% of the mark (for the component which is late) per calendar day or part thereof will be applied in cases where work is accepted after the deadline, up to a maximum of 10% after which the case will be reviewed by the Honours Co-ordinator and the Head of School.

Extensions:
Extensions would only be considered in exceptional circumstances (e.g. serious illness supported by a medical certificate) and when application has been made before expiry of the deadline (unless circumstances such as illness prevent this). If you suffer a period of extended illness or disruption during the honours year, please advise the Honours Coordinator as well as your supervisor, so that we may consider how best to deal with your problem. All requests for extension must be made in writing. All extension requests are dealt with by the Honours Committee.

Fieldwork that goes wrong (through weather, breakdowns etc) is no reason on its own for an extension, particularly if it occurs early or very late in a project. If you lose data (eg your lap-top computer is stolen or samples are lost) it is still no reason on its own for an extension.

Grievance Policy

School Contact
A/Prof. Jes Sammut (BEES School Grievance Officer)
J.Sammut@unsw.edu.au
9385 8281

Dr Wendy Shaw (BEES School Equity Officer)
w.shaw@unsw.edu.au
9385 3715

Faculty Contact
A / Prof. Julian Cox
Associate Dean (Education)
 julian.cox@unsw.edu.au
Tel: 9385 8574

or

Dr Gavin Edwards - Associate Dean (Undergraduate Programs)
g.edwards@unsw.edu.au
Tel 9385 4652

University Contact
Student Conduct and Appeals Officer (SCAO) within the Office of the Pro-Vice-Chancellor (Students) and Registrar.
Tel. 9385 8515
email: studentcomplaints@unsw.edu.au

University Counselling and Psychological Services
Tel: 9385 5418
Equity and Diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course Convenor prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit:

Tel. 9385 4734 or www.studentequity.unsw.edu.au

Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made. Information on designing courses and course outlines that take into account the needs of students with disabilities can be found at: http://www.studentequity.unsw.edu.au/educational-liaison.

12. UNSW Academic Honesty and Plagiarism

UNSW Academic Honesty and Plagiarism

What is Plagiarism?

Plagiarism is the presentation of the thoughts or work of another as one's own.

Examples include:

• direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, website, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
• paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
• piecing together sections of the work of others into a new whole;
• presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and
• claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does not amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via: www.lc.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

• correct referencing practices;
• paraphrasing, summarising, essay writing, and time management;
appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle
† Adapted with kind permission from the University of Melbourne.

**BEES Academic Honesty and Plagiarism**

In addition to the UNSW Policy on Academic Honesty and Plagiarism, the School of Biological, Earth and Environmental Sciences (BEES), also considers any work submitted that has been produced outside of a given course in a given year to be plagiarism i.e:

Work produced for a third party e.g. your place of employment, is considered intellectual property of the third party, and as such if such work is submitted in place of a required course work, it is deemed plagiarism.

All work submitted for assessment must be created specifically for the given assessment task in the given year. Work produced in previous years or for other assessments is not acceptable.

**Acknowledgments**

This version of the Honours Handbook was prepared by David Edwards in June 2014 with assistance from Alex Kinsella, Chris Myers, Kate Stuart, Rochelle Johnston and Penny McCracken. It is based upon an earlier version developed by Iain Suthers and Matt Hunt.

All web site links are correct at time of printing.

David Edwards accepts all responsibility for any errors or omissions.
Section B

General Honours Program Information

1. History, nature and expectations of the honours course

At the end of 2001 the Schools of Biological Science, Geography and Geology were disestablished and from the beginning of 2002 were amalgamated into a new school of Biological, Earth and Environmental Sciences (BEES). The Centre of Marine & Coastal Studies was disestablished in 2003 and is now administered via BEES as are the Institute of Environmental Studies (since 2012) and the Climate Change Research Centre (since 2013).

A unified honours program was adopted by the School of BEES since 2003 and this was subject to several modifications until 2012. At the end of 2012 the School approved a completely revised honours program that would cater for the new challenges and expectations of honours students across the broad discipline areas that BEES encompasses. This revised program took affect for students commencing in S1 2014.

The Honours program provides a final undergraduate year that is a very different experience to earlier years. There are fewer formal classes and more individual work based around your research project. The honours year provides an opportunity to specialise in an area of particular interest but will also develop a range of skills that are widely applicable outside the particular research specialty: e.g. conducting literature searches, critical evaluation of the literature, and written and oral communication.

The academic requirement for entry into honours is a WAM of at least 65. To commence the Honours program you must have completed your program requirements. Prospective students must obtain a graduation check confirmation from the Science Student Centre prior to submitting an application. All unresolved grades (eg WD, WC) need to be settled before you start the Honours program.

You may enter the Honours Year at the beginning of either Session 1 or Session 2, and take it either full-time (for 2 sessions, 24 UOC per session) or part-time (12 UOC per session, over 4 sessions), or partial part-time (over 3 sessions; any combination of 12, 18, 24 UOC per session). Admission to honours is not automatic, even in a 4 year degree.

Within the honours program you can choose to study within a variety of streams including: archaeology & palaeoenvironments, biology, climate science, ecology, environmental management, genetics, geochemistry, geology, human geography, marine & coastal science
or physical geography. The format of honours is the same regardless of which stream you choose but the details of the stream will be shown on your final degree.

The format of honours is outlined later in this book and is also available at:
www.bees.unsw.edu.au/current/honours

2. Coordinators, Supervision and Assistance

Table 1 outlines the staff involved with the various components of the BEES Honours program:

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Room</th>
<th>Email</th>
<th>Phone Ext.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Adriana Vergés</td>
<td>Honours Program Coordinators and Course Authority for BEES 4516, BEES 4514 and BEES 4522</td>
<td>617 (BEES Building)</td>
<td><a href="mailto:a.verges@unsw.edu.au">a.verges@unsw.edu.au</a></td>
<td>52110</td>
</tr>
<tr>
<td>Dr Danielle Drozdzewski</td>
<td></td>
<td>405 (G17 Building)</td>
<td><a href="mailto:danielled@unsw.edu.au">danielled@unsw.edu.au</a></td>
<td>58283</td>
</tr>
<tr>
<td>Alex Sentinella</td>
<td>Administrative Officer BSB Office</td>
<td>G27</td>
<td><a href="mailto:A.Sentinella@unsw.edu.au">A.Sentinella@unsw.edu.au</a></td>
<td>52691</td>
</tr>
<tr>
<td>Chris Myers</td>
<td>BEES HS Manager</td>
<td>G05A</td>
<td><a href="mailto:c.myers@unsw.edu.au">c.myers@unsw.edu.au</a></td>
<td>58031</td>
</tr>
<tr>
<td>Firoza Cooper</td>
<td>HOS Secretary and Hons Admin Officer</td>
<td>607A</td>
<td><a href="mailto:f.cooper@unsw.edu.au">f.cooper@unsw.edu.au</a></td>
<td>52067</td>
</tr>
</tbody>
</table>

Assistance. Supervisors are there to provide you with help, advice and encouragement. Make certain that you develop a productive working relationship with your supervisor and communicate with them on a regular basis. It is important that you do not work in isolation and seek help as soon as problems arise. The academic community (staff and students) of the school is a valuable source of advice and assistance. A mark of an educated person is that they can recognise when they need help and can seek out those most likely to be able to provide it. If you find it difficult to approach people, you must work on overcoming this barrier during your honours year. Develop the habit of talking to others in the school about your project; you can start by talking to other honours students. Get to know them during the O-week and Week 1 workshops.
Training your supervisor(s). By this stage you will realise that all staff members lead busy lives, but honours students are amongst the most important responsibilities we have, so you should not be backward in approaching staff you think may be able to help you. It is your duty to organise yourself, establish your needs clearly and then communicate them succinctly. It is imperative that you establish good communication with your supervisor from the very beginning. E-mail them for an appointment or set regular weekly or fortnightly meetings to discuss your project. Always take notes at your meetings and make certain that you fully understand their instructions – otherwise ensure that you ask for clarification.

Keep your supervisor up-to-date with your progress, or lack of progress. Use every opportunity to talk about how your work is going. After all, they have been instrumental in designing the project and will be keen to hear how it is going. Make certain you have regular "quality time" with them, when they can sit down and look at your results or preparations, and you can discuss the interpretation. With some supervisors you may have to make regular appointments to ensure that such sessions occur. Good planning is the key to success in honours. Discuss your plan with your supervisor regularly. Remember that you also have a panel of examiners who will have some knowledge of the area in which you are working. If you experience problems when your supervisor is unavailable, you should approach one of them.

Postgraduates have recently been honours students, and will probably know much about the facilities you need, and have experienced some of the problems you face. Get to know them through the Postgraduate Research Forum which is typically held during Week 14 (or Stuvac week).

3. Course Structure and Requirements

Students need to be enrolled into their Honours courses by the BEES Administrative Officer in the BSB Student Office prior to the start of Week One. The normal online enrolment system is not possible as school consent is required, in the form of a letter from the honours co-coordinator.

The variety of honours programs offered by BEES and the transition to the newly adopted Honours program means that there is no universal honours enrolment model across the entire cohort. However most students from S1 2014 should follow the structure outlined below. Do not panic if your enrolment looks slightly different to other honours students. This is highly likely while we transition to the new program structure.

In essence you must complete 24 Units of Credit (UOC) per session (12 UOC per session if part time) to total 48 UOC as shown in Table 2.
The majority of your honours enrolment is allocated to your Research Project. This is partitioned into BEES 4516 in your first session of enrolment and BEES 4514 in your final session. Despite the unequal allocation of the 36 UOC for your project across S1 and S2, it is expected that you work on your project over the entire academic year. Many students will have completed a significant proportion of their thesis research before the start of their official honours enrolment.

Table 2: Course Requirements for Honours Year for Students commencing in Session Two 2014

<table>
<thead>
<tr>
<th>Course</th>
<th>Typical Session of Enrolment</th>
<th>UOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEES 4516  Research Project</td>
<td>S2  2014</td>
<td>12</td>
</tr>
<tr>
<td>BEES4522  Literature Review and Project Proposal</td>
<td>S2  2014</td>
<td>12</td>
</tr>
<tr>
<td>BEES 4514  Research Project</td>
<td>S1  2015</td>
<td>24</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>48</td>
</tr>
</tbody>
</table>

BEES 4514 and 4522 are both graded courses. You will be given a mark and a grade (e.g. 87 HD or 79 DN) in the same way you have for most of your undergraduate courses. BEES 4516 is not a graded course and you will therefore only receive a grade of Satisfactory or Unsatisfactory. This course includes “Professional Skills” modules explained in Section C of this handbook. You must get a satisfactory grade for BEES 4516 to complete your honours degree.

**Special notes for Students Starting in S2.**

- The enrolment process is similar to that for students commencing in S1 but the timeframe to organize yourself before your first session of Honours commences is much more compressed – so get organized early.
- Some components/modules for BEES 4516 (such as Ethics) may only be offered in Session 1. This means you may not complete some modules until the last session of your Honours year unless you elected to complete these modules during your 3rd year. See the Honours Co-ordinators for more information on this.
- Your enrolment in S1 of the next year is not automatic – staff in the BEES Student Office will have to enrol you into your correct Honours courses in Jan/Feb for your concluding semester.
4. Assessment and Reporting of Grades

Your Honours grade is made of three components: a literature review and project proposal, your “thesis” (in the form of a paper), and your final seminar. The weighting of these assessment tasks for Honours is outlined in Table 3.

The literature review and the final thesis will both be marked by an Examining Committee composed of your supervisor and two independent examiners. Your final seminar will be marked by another two BEES academics that are not part of your Examining Committee.

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper based on Research Project (9,000 words)*</td>
<td>70</td>
</tr>
<tr>
<td>BEES4522 Literature Review and Project Proposal (4,500 words)*</td>
<td>25</td>
</tr>
<tr>
<td>Final Seminar</td>
<td>5</td>
</tr>
<tr>
<td>WEIGHTED TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

Notes: * These are absolute maxima and apply to all projects. (see Research Project guidelines in Section E for more information)

See sections D and E for more information about the Literature Review and Research Proposal or the Research Project.

Please note the following very carefully.

Your academic transcript will list your marks for each of the components in Table 2. However, your TOTAL weighted honours grade, as shown in Table 3, does not appear on your transcript. The “TOTAL” as determined in Table 3 is your overall honours mark, and classifies the level of honours pass according to the following ranges of marks:

1st Class \( \geq 85\%; \)
2nd Class Div I \( = 75\%-84\%; \)
2nd Class Div II \( = 65\%-74\%; \)
3rd Class or Pass \( = 50\%-64\% \)

The total honours marks and determination of Honours Class will ratified at a BEES school examination meeting held after the final honours seminars have been completed at the end of session. The outcome of this meeting is NOT reported to students, as both the grades and the
Honours Class are subject to change up until they are approved at Faculty Examination Committee meetings. Students will find out their grades by the normal UNSW grade reporting process via My UNSW or email notification etc.

The grade for the proportion of your thesis project that you completed in your first session of enrolment as part of BEES 4516 will be shown as SY (Satisfactory) on your transcript of results. The grade for your research project will ONLY be allocated to the project course code that you were enrolled in for your final session (typically BEES 4514).

The score that BEES will submit to the Australian Postgraduate Award (APA) scholarship committee (or committees at UNSW and elsewhere), will be based only on the mark awarded for the 36 UOC thesis-project. However your overall honours pass at graduation will be determined from the formula in Table 5 above. The awarding of APAs at UNSW is determined by a formula which at the start of 2009 was based on your thesis mark (67%), the average of your Level III marks (33%), plus a further score out of 20 based on research experience, publications, referees reports and if your project fits the school/laboratory profile. For more information on Australian Post-graduate Awards, see Section F.

5. Submission of Work and Deadlines

A generic schedule of assessment deadlines is outlined in Table 4. All written work is to be typed and submitted to the BSB Student Office (Rm G27) by 12 noon on the due date (typically Tuesdays) unless instructed otherwise. Do not use the general undergraduate assignment box but lodge any work in person with BSB office staff. A receipt will be issued; do not leave your work without a receipt. Relevant cover sheets and declaration pages are included in this manual or on the honours web site.

<table>
<thead>
<tr>
<th>Course Details</th>
<th>Item</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEES 4516</td>
<td>Project Information sheet</td>
<td>Monday Week 1</td>
</tr>
<tr>
<td>BEES 4516</td>
<td>Introductory Seminar</td>
<td>Week 1 (schedule TBA)</td>
</tr>
<tr>
<td>BEES 4516</td>
<td>Risk Management Exercise</td>
<td>Tuesday Week 4</td>
</tr>
<tr>
<td>BEES 4522</td>
<td>Literature Review</td>
<td>Tuesday Week 10 of your 1st session</td>
</tr>
<tr>
<td>BEES 4514</td>
<td>Thesis</td>
<td>Tuesday Week 13 of your 2nd session</td>
</tr>
<tr>
<td>Research Project</td>
<td>Final Seminar</td>
<td>Week “15” of your 2nd session</td>
</tr>
</tbody>
</table>
It is important to learn to organise your work and prepare to meet deadlines. Deadlines for seminars, literature review and thesis must be met. **A penalty of 2.5% of the total possible mark (for the component which is late) per calendar day or part thereof** will be applied in cases where work is accepted after the deadline, up to a maximum of 10% after which the case will be reviewed by the Honours Co-ordinator and the Head of School.

6. Altering Your Enrolment, Special Consideration and Extensions

Extensions would only be considered in exceptional circumstances (e.g. serious illness supported by a medical certificate) and when application has been made before expiry of the deadline. If you suffer a period of extended illness or disruption during the honours year, please advise the Honours Coordinator as well as your supervisor, so that we may consider how best to deal with your problem. All requests for extension must be made in writing. All extension requests are dealt with by the Honours Committee. Ultimate authority for extensions rests with the Head of School.

Fieldwork that goes wrong (through weather, breakdowns etc) is no reason on its own for an extension, particularly if it occurs early or very late in a project. If your lap-top computer or PC is stolen or breaks down – which is a serious matter for anyone let alone an honours student – it is still no reason on its own for an extension. See Backing Up Your Data in Section 8 below.

Some students start their first session full time, but for financial or personal reasons may change their second (and hence also third) session enrolment to part time, making an 18 month honours year. You can be completely part time (12 UOC per session for 4 sessions), or partially part time (over 3 sessions, any combination of 12, 18, 18 UOC). You should first discuss this with your supervisor. Changing from full time to part time to facilitate an increase in the scope of the research project as a result of feedback from examiners is generally not allowed.

Reasons for your change of enrolment must be stated in an e-mail to the honours coordinator. You may also need to provide additional supporting documentation. After the change to part time has been approved you then need to visit the BEES Student Office to modify your enrolment.
7. Accommodation, Access and Security

You may be assigned work space in your supervisor's laboratory or in other areas as arranged by your supervisor and with the agreement of the academic staff member responsible for general school facilities. Please consult the Honours Coordinator if you have problems.

The honours program is not a 9 to 5 job. If you start in Session One, you may wish to initiate a pilot study in January (or even earlier) but this typically requires permission of your supervisor and completion of Risk Management and other WHS documents. You may also need to obtain necessary permits and approvals (see section on Permits). If you are starting in Session 2, you are expected to start work by early July, and not to take UNSW vacation periods as holidays. Once you have completed enrolment and have a student card, contact the BSB Office (Room G27) to arrange for out-of-hours access to the building and see Francine Cox (Room 533) for keys for specific rooms. You are responsible for these keys, and must not pass them on to anyone else. A charge is made for all keys, refundable on return. Make certain you return them at the end of the year, or else your supervisor must pay the $20 fee (not a good career move).

If your project requires you to work in a laboratory or other research area you must receive an induction from each individual laboratory/research area supervisor and complete an authorisation to work after hours form (HS703 Working Alone and After Hours Approval Form) prior to being granted access. (See UNSW Health and Safety website: HS322 After-hours Guideline for further details and approvals).

PLEASE REMEMBER:

UNSW Security Services is always your first contact point for ANY incident or emergency on campus.

Contact Security on 9385 6666 (ext 56666).

Security is an ongoing problem in the Bioscience building, especially during February-March when there may be many strangers wandering the building. **Do not leave purses, wallets or bags containing valuables unattended.** Your supervisor should provide a lockable drawer or cupboard for valuables. It is good practice to lock rooms when they are unoccupied. The building should also be kept locked after 10pm or at weekends. If you find the outside door open, please lock it. Be aware of potential security risks when you work late at night. Use the Security Shuttle Buses that will take you to the main bus routes, or contact Unibeat for an escort. Further information and timetables are available from the BSB Office (Room G27) or from Unibeat (ext. 56000). More information on the Night Shuttle Service
and Unibeat escorts can be found on the My UNSW help pages at:

8. Computing and Software

i. Computing and word processing facilities. You should discuss your needs with your supervisor. Normally students use the facilities in their supervisor's laboratory or the various computing laboratories in the building when these are not used by classes. Access to computing lab G07 or G11, when they are not booked for teaching, can be arranged with the BSB Student Office. You must observe the regulations concerning limits on continuous use (no more than 4 hours at a stretch) so as to avoid RSI. A pay per use school, printer is available for use in G07. You should also be able to arrange printing through your supervisor.

ii. Email and Web Information. BEES 4514 and 4522 have a Moodle web site available through the UNSW TELT gateway. Only limited material is posted to these sites because not all honours students will have access to them. Group emails are the most important and common method of making announcements and disseminating information. It is therefore essential that the Honours Coordinator has your correct email address. If you use a non-UNSW account (e.g. hotmail or gmail) you may need to redirect your email to this account. Information on student email services is explained at:
https://www.it.unsw.edu.au/students/index.html

iii. Software. Access to software must be arranged through your supervisor. The University has site licenses for a range of packages such as Minitab and Microsoft Office, which reduce the cost of software, but a charge must still be met. UNSW has a site license for Endnote and Refworks which makes referencing much easier and will be part of the Library tutorials.

iv. Anti-virus software. This is essential. The University has a site license for Symantec Anti-virus software that has automatic updates via the web. This is free for students to download and use. Alternatively, many students use public domain programs. Either way make sure your files and computer are protected.

v. Backing up your data. Data are the stuff of science, and often take many hours to accumulate. Do not put them at risk. The hard drives of your PC or laptop are unreliable for storage of data. It is imperative that you quickly establish a routine of backing up your work on a separate disc - preferably on a CD, memory stick or on the hard drive of a second computer. BACK UP TODAY is the golden rule. If you are collecting lots of data, you should consider burning them on a CD for more permanent storage. Discuss all
this with your supervisor early in your project. Whether using CDs or memory sticks, always make TWO copies, and to keep one at home, one at uni. Sometimes cars get broken into or universities or homes burn down. Every year some student in this School is affected by such a disaster – don’t let it be you. Loss of data from a computer is not a valid reason for an Honours Thesis extension.

9. Other General Information for Honours Year

i. Mail/Information. There is a section of the notice board opposite the western lifts in the 4th floor corridor that is devoted to honours matters. The Honours “snail”-mail box is located in the photocopy/mail room on the 5th floor opposite the lifts. There are separate boxes for students with Family Names A – M and N – Z.

ii. Photocopying, faxes. There are photocopiers and a fax in Room 529 and Room 630. Use of these should be regulated by your supervisor. Find out how to use these machines properly before you run into problems. Please report any problems with these machines to Firoza Cooper or Francine Gregory. Journals cannot be removed from the library and must be copied there – but UNSW has a host of electronic journals that you may access over the web. The Library research workshop in Module A of BEES4516 will provide further information on these services.

iii. Permits. Research on any vertebrate requires an Animal Care and Ethics approval. Usually your supervisor would already have that organized as it can take up to several months for approval. Research in any National Park or on threatened species requires a permit. Research on fish or seagrass or rock platform – particularly if it involves collecting - requires a permit from NSW Fisheries. Research on human subjects (including surveys and questionnaires) requires approval by the UNSW Ethics Committee.

Where you have been granted permits or approvals for your research, these should be mentioned in the acknowledgements at the start of your thesis.

10. Honours scholarships in BEES

There are several scholarships offered each year to students completing their Honours year in the School of BEES. Lists and details are available at the Science Honours Scholarship site: https://scholarships.online.unsw.edu.au/

11. Use of School Vehicles
The use of any UNSW or hired vehicle for UNSW business must comply with UNSW travel policy and procedures:


See the relevant section of the BEES website for more information on using School vehicles:

Please be aware that to the general public you represent UNSW. It is expected that you observe the road laws diligently and that you show courtesy to other road users and pedestrians at all times.

**To use a School Vehicle you must:**
- Have a current licence. Drivers with a provisional licence must display appropriate P plates.
- Be a member of Staff, a Postgraduate or Honours student or a person otherwise approved by the Head of School.
- Have seen Jaz Lawes or Kate Stuart for your licence details to be recorded, to receive instructions in vehicle use and to learn how to use the vehicle booking system.
- Have made a booking using the vehicle booking system.

**Keys**
- Keys are kept in a locked safe in Room 551A.
- Keyrings usually hold ignition key, fuel card, roadside assistance contact details and key to Room 551. Sometimes there are other keys, such as one for the glovebox, or for a steering wheel lock.

**Parking**
- School vehicles may be parked in the Blue Zone (lowest level) in the Botany St Parking station. You may only drop off and pick up at the rear of Biological Sciences, not park. You may park in loading zones but only in accordance with instructions on the signs.
- Vehicles may only be parked off campus overnight with written permission from the Head of School (or Kate Stuart), and only if there is off street parking available. When requesting approval for parking at a home address, details must include the date, the number of the vehicle and the address of the driver.

**Logbook**
- The logbook is usually located in the glovebox of the vehicle.
- Each logsheet covers ONE week of vehicle use.
• Ensure you have the right page and ensure the cardboard backing sheet is in place. Check the date in the top right hand corner. Write the appropriate date if it is not there.

• Fill out the details of your journey in the appropriate columns of the logsheet - **Driver's Name** (yours, not someone else's), and **Account Number** (in the same column),

• **Odometer Readings** for Out (when you left) and In (when you returned) and Total,

• **Times Start and Finish**, and

• **Journey Details** (where you went and the reason for the trip). If you bought fuel, add those details at the bottom of the page (see Fuel below).

• NB. If you use a vehicle for longer than one day, write your departure and return odometer readings, and start and finish times, on the correct days of the correct page(s).

**Fuel**

• Ensure you know what fuel the vehicle uses (unleaded petrol, diesel or LPG).

• Whenever possible, use **Caltex, Ampol or Woolworths** service station and pay by Caltex fuel card. Note that, if you do not use these outlets, you will have to pay for the fuel yourself and claim the money back from LeasePlan.

• When paying with the fuel card, give the odometer reading when you are asked for it because that information is needed in order to calculate the cost per kilometre of running the vehicle.

• After paying for fuel, fill out the details (litres bought and docket number) in the appropriate space at the bottom of the logsheet. On a long journey, it may be difficult to fit all the information in the space provided but please try to do so.

• Never return a vehicle with less than half a tank of fuel.

**Cleaning**

• Ensure any vehicle you return is clean, inside and out.

• Crystal Car Wash near Souths Juniors is the nearest car wash. The school will pay for cleaning costs. You may clean it yourself if you wish.

• For dirty or potentially messy loads, such as SCUBA gear, seawater or animals, make sure you protect the interior of the vehicle. Use of a plastic sheet or a fish box is recommended in these situations.

**E-Tags**

• All vehicles are fitted with E-Tags. Report any malfunction, loss or misplacement to Jaz Laws.

**Parking or Traffic Offences**

• These are the responsibility of the driver. Fines will not be paid or reimbursed by UNSW.
Problems

- If anything needs to be fixed while you are using the vehicle, contact LeasePlan on 1300 130 572 for details of the nearest approved supplier. Ensure that the supplier knows that it is a LeasePlan vehicle and to send the invoice to them. If you in an isolated area, still call LeasePlan and ask for advice. It might be that you have to pay for the repair yourself and reclaim the money from LeasePlan.
- For roadside assistance contact the vehicle manufacturer’s roadside assistance (details on keyring or in manual) or ring LeasePlan on 1800 257 526.
- Note any problems of a less serious nature on the relevant page of the logbook and report them to the vehicle monitor or to Jaz Lawes at the first opportunity.

Accidents

- Do not admit liability even if you think the accident was your fault.
- There is a LeasePlan Accident Management card in the glovebox. Fill in the details on the card and follow all instructions.
- Report the accident to LeasePlan on 1800 64 64 22 within 24 hours.
- If a tow truck is needed, call 1800 64 64 22.
- Even minor damage must be reported to LeasePlan within 48 hours.

First Aid Kit

- Each vehicle has a first aid kit. If you use any item or the kit is missing please notify Kate Stuart or Jaz Lawes.

Contacts:
- Kate Stuart  K.stuart@unsw.edu.au
- Jaz Lawes  j.lawes@unsw.edu.au

12. Work Health and Safety (WHS)

Aspects of WHS (especially Risk Management) will be introduced and discussed by Chris Myers as part of Module C in BEES4516 during O-Week. Sample forms required for that module are included in this handbook. Forms are updated regularly and links to the forms can be found on the BEES School web site. It is likely that your supervisor will manage the WHS issues associated with your project but this should also be your responsibility.

*It is both the student's and academic supervisor's responsibility to ensure that appropriate risk management is undertaken. That is, all potential hazards associated with the research topic are identified and risk controls documented and implemented. This must cover all*
areas of risk ranging from deskwork and use of a computer, to laboratory and field work (especially driving and working in isolated locations).

Note that comprehensive information regarding WHS at UNSW is available at the UNSW Health and Safety Page on the Human Resources website at:
http://www.ohs.unsw.edu.au/

or the relevant pages on the BEES website at:

Up to date forms should be available from the BEES WHS pages at:
http://www.bees.unsw.edu.au/hs-forms

However, it is best practice to download the forms from the UNSW WHS website. Do not save and reuse templates on your computer as forms are regularly reviewed and revised to maintain comliancy with the WHS legislation. Some notes on the risk management procedure, risk assessment and safe work methods/procedures are outlined in the following sections.

i) An Overview of Risk Management at UNSW.

All businesses must have programs in place to eliminate or minimise health and safety risks. At UNSW, the risk management program minimises the health and safety risks in the workplace by ensuring that activities are conducted according to legislative requirements; health and safety concerns are identified at the planning and design stage of projects and/or prior to purchasing goods and services; and, through the application of a Risk Management procedure that continually reviews work activities undertaken at UNSW.

The Risk Management procedure (see UNSW HS329 Risk Management Procedure) is a four step process:
- Step 1 - identify all foreseeable hazards associated with an activity.
- Step 2 - assess the identified hazards to determine the severity and likelihood of harm.
- Step 3 - document the risk controls implemented to manage HS risks, and
- Step 4 - regularly review the risk controls to ensure they are effective.

You, in consultation with your supervisor, must complete a HS017 Risk Management Form before your project can be accepted as officially authorised UNSW work. Your project risk management document should cover the key elements of your project e.g. travel, fieldwork, laboratory/research methods, deskwork/computing, etc. However, the form may require subsequent revision or additional forms completed to cover activities not identified at the onset of your research. The Document Control Number assigned to your project risk management document is used for reference for a number of other forms e.g. HS026 Safe
Work Procedure, HS018 Fieldwork Plan and Authorisation, HS010 Volunteer Approval Request, Travel Approval Form (TR1), etc.

The essential information recorded on the risk management template include:

1. Person who wrote/prepared/submitted the document.
2. Document Control Number – Supervisor’s initials followed by the date (yy/mm/dd)
3. Approval by the School for the activity – Supervisor’s signature.
5. A concise outline of the activities involved in your project.
6. Details regarding the location for your work (physical location/remoteness etc)
7. Details regarding the persons who may be impacted by activities within your project.
8. Details regarding the methods to be employed to ensure those impacted upon by your activities are aware of both the risks and the controls measures implemented to mitigate the risks.
9. A listing of the tasks associated with the project, identification of the hazards and associated risks associated with the tasks, and the risk controls adopted to minimise the risks.
10. Record of document review schedules.
11. A list of persons and signatures of those people who have been inducted under this document.

ii) The 4-steps to the Risk Management process

a) Hazard Identification
Hazard identification involves breaking up a process or procedure into its component tasks. For each task all the things that could present a health and safety risk are listed along with the associated injuries or damages.

b) Risk Assessment
Under the former NSW Health and Safety legislation, the term “risk assessment” referred to the risk management procedure outlined above. However, under the current legislation the term is limited to the quantification and evaluation of the likelihood of a hazardous event occurring and the severity of the resulting consequences. That is, a perceived level of risk (low, medium, high or very high).

Risk assessment is required for some specified activities e.g. diving, working at heights, etc. and for activities where a person has not previously demonstrated competence with the process or procedure. For the purposes of the WHS assessment exercise and for the form you complete your personal project you should perform the risk assessment component on the
risk management template. If, through risk assessment you identify a hazard as medium or high you must have a signed Safe Work Procedure developed. If a hazard is assessed as very high after all risk controls have been identified then it is not permitted to proceed until the risk level is reduced to a lower level.

Guidelines for the HS Risk Management Procedure are available from the UNSW HS website:

c) Risk Controls
Risk Controls are the list of actions implemented to eliminate health and safety risks so far as reasonably practicable. If the health and safety risks hazards cannot be eliminated then they must be minimised so far as reasonably practicable. Procedures for controlling risks include following Australian Standards, Codes of Practice, UNSW health and safety guidelines, manufacturer’s instructions when using equipment, and checking for faults before commencing work, etc.

d) Risk Control review
The Risk Controls documented by the Risk Management procedure must be reviewed at least annually to ensure any changes to legislation or work practices are covered. The controls must also be reviewed if an accident or near miss occurs, to identify if there are any additional controls that could be implemented to further minimise the risk.

iii) Procedure for completing your project risk management documentation.

Risk Management forms must be completed, submitted for checking by the School’s Health and Safety Manager, and signed by the supervisor before the project or class begins. The form should be submitted electronically (as a Word document) to the HS Manager for review. If no modifications are required you then need to print the document, sign it, submit it to your Supervisor for signature, and then return it to the HS Manager. The document is scanned and copies are sent to you and your Supervisor. All subsequent records e.g. signatures of inductees, records of review, etc. should be maintained on the Supervisor’s copy and all documents must be kept for a minimum period of five years.

iv) Risk Register

The original signed copy of the Risk Management document is stored within the School archives and the Title information recorded in the School’s Risk Management Register. Hazard and risk information identified for the project risk management documents is also
used to compile the School’s Risk Register. The School Risk Register records details of all risks identified within the School, their grading in terms of likelihood of occurrence and risk rating. This Register is maintained by the School’s Health and Safety Manager and includes the following information:

- A description of each risk
- An assessment of the likelihood it will occur and the risk rating (low, medium, high);
- Who is responsible for managing the risk;
- What risk controls are in place to reduce the likelihood a risk will occur and/or reduce the seriousness should it occur
- Emergency procedures to reduce the immediate seriousness of the risk should it occur.

**v) Legal Considerations**

Section 17 of the Work Health and Safety Act 2011 states that a Person Conducting a Business or Undertaking (PCBU) e.g. UNSW, has a duty to eliminate risks to health and safety, so far as reasonably practicable; and if it is not reasonably practicable to eliminate risks to health and safety, to minimise those risks so far as reasonably practicable. Under Sections 28 and 29 you as a ‘Worker’ or ‘Other’ have a duty to take care of your own health and safety and that of others, and to comply with instructions given to protect health and safety. In addition, Workers must also cooperate with the health and safety policies or procedures implemented by a PCBU. With regards to your research project, this means that failure to identify a hazard that causes a serious injury may lead to you and your supervisor facing criminal prosecution for reckless conduct.

The Risk Management template provides a tailored approach to demonstrate that you have attempted to comply with this legislation. The document itself does not make you immune to prosecution in the event of an incident but it does provide you with written evidence that you attempted to identify all foreseeable hazards and control the risks associated with your project.

**vi) Safe Work Procedures (Methods)**

Safe Work Procedures (SWP) are administrative risk controls designed to minimise risks to health and safety by providing written instructions outlining the preferred and safest method of undertaking a task. SWPs must be developed for all techniques, processes, equipment and machinery where the risk to health and safety is assessed as medium or high according to the UNSW Risk Rating Procedure. An SWP should include the following information:

- Title and description of the activity
• specific information regarding the hazards and associated risks of the task identified by the Risk management procedure
• resources required and precautions to be undertaken before commencing the task
• personal protective equipment to be worn while undertaking the task
• the environment where the task should be undertaken
• clear step by step instructions for undertaking the task described in a safe manner
• emergency shutdown procedures
• emergency management procedures for fire, spills or exposure to hazardous chemicals, etc.
• clean up and waste disposal requirements
• legislation used to develop the SWP
• list the evidence of competency required for someone to be permitted to use the equipment or undertake the task
• list the competency required for someone to assess the competency of new inductees
• supervisory approval
• record of inductees

Supervisors must ensure that SWPs are displayed with all equipment for which they are responsible. Where training is required for users of a piece of equipment, a notice to this effect and a list of those who have been trained must be displayed nearby. Supervisors are responsible for ensuring that this is done.

A template for developing SWPs can be downloaded from the School’s website or from the UNSW HS website:
http://www.ohs.unsw.edu.au/hs_procedures_forms/index.html#Riskmanagement

The guideline for preparing Safe Work procedures is available from:
http://www.ohs.unsw.edu.au/hs_procedures_forms/guidelines/HS027_Safe_work_procedures_guideline.pdf

vii) Fieldwork

Fieldwork probably presents the most serious risks for members of the School of BEES. All participants must be familiar with and abide by both the BEES Fieldwork protocols and the UNSW Fieldwork guidelines. See the following web sites for more information:


http://www.bees.unsw.edu.au/fieldwork-approval
a) Field work Forms and Documentation

HS017 Risk Management Form
Before undertaking any fieldwork all foreseeable hazards must be identified and appropriate risk controls must be implemented. Examples of fieldwork hazards include: exposure to sun, injuries from working on even ground, or tick bite and mosquito-borne diseases such as Ross River and Barmah Forest. A Risk Management Form must be completed and sent (emailed) to the School’s Health and Safety Manager at least 10 days prior to undertaking any fieldwork, if this has not been done previously. As a reminder of the hazards and risk controls associated with fieldwork, please consult the following checklist when completing a HS017 Risk Management form for your fieldwork activities:

http://www.ohs.unsw.edu.au/hs_procedures_forms/index.html#Fieldwork

TR1 Travel Approval Form
Where fieldwork is conducted outside the Sydney metropolitan area, an appropriate Authority to Travel form (TR1) must be completed for each participant (i.e. staff, students and volunteers) and also submitted at least 10 days prior to travel. You should include the Risk Management document control number on the form to indicate that the point above has been addressed. This form identifies that your activity off-campus is official UNSW business and therefore covered by UNSW insurance. It also is the approval form for obtaining funds for travel. The TR1 form can be downloaded from:

http://www.fin.unsw.edu.au/files/forms/trav/TR1_Travel_Approval_form.pdf

HS018 Fieldwork Plan and Authorisation Form
An HS018 Fieldwork Plan and Authorisation Form also must be completed and submitted for School approval (as above) at least 10 days prior to departure. This document is verification that you, as the nominated fieldwork leader, are abiding by the UNSW Fieldwork Guidelines. Key information recorded on this document include: your Risk Management document control number, proposed fieldwork activity and itinerary, “home-base” contacts, and an indication that all approvals and permissions have been obtained. The HS018 Fieldwork Plan and Authorisation Form can be downloaded from:

http://www.ohs.unsw.edu.au/hs_procedures_forms/index.html#Fieldwork

For additional information see the following Fieldwork Notification Notes listed at:

http://www.ohs.unsw.edu.au/hs_hazards/fieldwork.html

When fieldwork is conducted within the Metropolitan Area on a repetitive basis, it is not necessary to submit a written HS018 Fieldwork Plan and Authorisation Form for School’s approval on each occasion. (Note that this provision now also applies to repetitive fieldwork outside Sydney). For correct procedures regarding repetitive field trips talk to Chris Myers.
Emergency contact details (home-based and in the field)
Prior to a field trip, the fieldwork leader must submit a list contact details for all participants and their respective ‘home-based’ emergency contacts to the School Office, if this has not been done previously.

HS010 Volunteer Approval Request
When volunteers will be participating in fieldwork, a HS010 Volunteer Approval Request must be submitted to the Head of School at least 10 days before the intended field trip. The form is available at:

http://www.ohs.unsw.edu.au/hs_procedures_forms/index.html#Fieldwork

Volunteers, as with all other participants, need to receive a full safety briefing prior to the fieldwork and must acknowledge the identified hazards and corresponding risk controls outlined by the HS017 Risk Management form. Supervisors must ensure all volunteers are appropriately inducted to assist with research project.

HS009 Fieldwork Medical Questionnaire and Authorisation Form
This form is for fieldtrips undertaken as part of coursework. The purpose of this form is to obtain permission from each student (or if under 18 from their guardian) to be taken on a coursework fieldtrip and to have their guarantee that they will abide by the UNSW Student Code of Conduct. The medical questionnaire is optional and information supplied must remain confidential at all times.

With regards to your research project, all participants attending a field trip must inform the fieldwork leader if they suffer from a medical condition that may affect their ability to participate safely. As a fieldwork leader your may wish to use this form (HS009) to collate medical contact information from participants if required. The form is not submitted with the other fieldtrip documents to the School’s HS Manager, but should be kept by the fieldwork leader for the duration of the fieldtrip. The document should be destroyed as confidential waste upon return.

b) Use of vehicles for fieldwork

Also refer to Section 11 of this chapter for detailed information on booking and using BEES vehicles.

All drivers of vehicles must have a current licence that covers the vehicle type being used for the field operation, such as 4-wheel drive, bus etc. When necessary, National Driver Work Diaries are to be used and mandatory driving hours restrictions adhered to. P-plates must be displayed if the driver has a provisional licence. Jaz Lawes runs regular vehicle inductions
and all students and staff must attend one of these session before they are permitted to drive a
BEES vehicle.

Smoking, the consumption of alcohol and the use of non-prescription drugs are not allowed
in UNSW vehicles. It is the responsibility of the field trip leader to ensure vehicles are
properly cleaned and refuelled on return.

See Section 4 of the UNSW Fieldwork guidelines for more information:
 http://www.ohs.unsw.edu.au/hs_procedures_forms/index.html#Fieldwork

c) First Aid

As part of your Risk Management procedure you should determine the number of trained first
aiders that are required to be part of your fieldwork team, and the number and size of the
field first aid kits. For further information please see Section 7 of the UNSW Fieldwork
guidelines:
 http://www.ohs.unsw.edu.au/hs_procedures_forms/index.html#Fieldwork

d) Communications

Staff and students working in the field must have a suitable system of communication,
including a Personal Locator Beacon if necessary. Please see the UNSW Fieldwork
Guidelines Section 5.2 for further details and consult with the School Health and Safety
Manager for available communication options.

viii) BOATING and DIVING

a) Use of Boats

All boating activities in BEES are under the control of the BEES Scientific Boating Officer:

Penny McCracken BEES Scientific Boating Officer
RM 550, 02 9385 8054, Mob. 0402 309 674.
p.mccracken@unsw.edu.au

Michael de Mol is the back up BEES Scientific Boating Officer:
RM G23A, 02 9385 5497, 0401 007 808
m.demol@unsw.edu.au
If your research work involves the use of BEES, Sydney Institute for Marine Science (SIMS), or other boats please email the BEES Scientific Boating Officer (SBO) as soon as possible to:

- Introduce yourself
- Briefly describe the type of research work you intended to engage in (locations, activities).
- Advise who you will be working with & your supervisor’s name/s
- The qualifications and experience you already have, or need to get (e.g. NSW boat licence)

The SBO will then be able to assist you with:

- Information about how to get your boat licence
- Boat related risk management and trip planning procedures
- Registering as a BEES boat skipper or crew
- BEES mandatory training, inductions, and assessment
- Getting your Marine Radio licence (exams are run in house)
- Getting your First aid certificate

All boat users need to complete an induction and on-water assessment. Inexperienced boat users (< 100 hrs logged sea time) will also need to complete a mandatory 15 hours supervised time driving boats (over 3 days) with an unrestricted BEES boat master.

The **BEES Boating Handbook**, boat safety management system, and other boat information and forms are available at www.unsw.edu.au/boats.

**b) Diving**

Diving is under the control of the UNSW Dive Safety Officer:

Rochelle Johnston  
Room: 550  
Phone: 9385 8054  
Email: Rochelle.johnston@unsw.edu.au

All divers must have the following:

- **Dive certification.** Please note that the type of diver certification you require differs according to whether you are a staff, student or volunteer. Typically students and volunteers require, at the minimum, an Open Water certification, while staff require a Dive Master or Scientific Diving certification. Please contact Rochelle to see what certification you will need.

- **Current AS2299 dive medical** (occupational NOT recreational). We recommend Dr Susan Willis at the University of Sydney (ph 93513484) or Dr Brhatt (ph 1300 892 490).
• **Current Apply First aid certificate** (also known as first aid in the workplace)
• **Current O2 provider certificate** (like DAN O2)
• **Current CPR certification** (you only need this if you first aid certification is more than one year old or your oxygen provider certification does not include CPR)
• **Log book** showing at least 15 hours diving post Open Water certification

Please note we offer the Oxygen provider and CPR certification here at UNSW at heavily discounted prices.

You can be registered to dive at UNSW once they have met with the Dive Safety Officer with all the required documents, have read and understood the required diving policy, and have completed a “check-out” dive to assess your competence.

For information regarding diving at UNSW go to [http://www.bees.unsw.edu.au/resources/scientific-diving](http://www.bees.unsw.edu.au/resources/scientific-diving)


**ix) Electrical Safety**

All portable electrical equipment to be used in the field should have been inspected and tagged in the last three months in accordance with AS 3760. In addition, electrical equipment must incorporate a portable residual circuit device (RCD)

**x) Further Information**

An overview of WHS in BEES at UNSW and the completion of forms (especially the Risk Management template) will be covered in Module B of BEES 4516 with Chris Myers (BEES Health and Safety Manager).
Section C

Professional Skills
(Coursework Component of BEES 4516)

1. Course Overview

BEES 4516 is offered in both S1 and S2. It represents the first stage of your research project. An essential component of successfully completing your project is the acquisition of a set of “Professional Skills” including library, writing and speaking skills, plus safety and ethics, necessary for your honours year. Most of the formal classes are held as a series of intensive workshops in O-Week and Week One of session. Additional classes are typically scheduled during Weeks 10 – 12. At the time of printing the venue for these classes was still be confirmed.

BEES 4516 must be taken during your first session of enrolment and hence the core components are offered in both sessions. **Students must plan their field work around BEES 4516 class times.** Attendance will be recorded. There is no text with this course. Readings specific to each unit will be made available as printed notes or posted as pdf documents at the appropriate times during the course.

The Professional Skills workshops are divided into seven modules:

- **Module A**  Introduction, Library and Research skills
- **Module B**  Workplace Health and Safety
- **Module C**  Presentation and speaking skills  (includes Intro. Seminar)
- **Module D**  Writing Skills
- **Module E**  Professional Ethics
- **Module F**  Professional Development
- **Module G**  School Seminars

2. Staff and contact details

Adriana Vergas and Danielle Drozdewski are the course co-coordinators. Their contact details and those of other staff involved in the honours courses are shown in Table 5.
### Table 5: Honours Staff Contact Details

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone Ext</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adriana Vergas</td>
<td><a href="mailto:a.verges@unsw.edu.au">a.verges@unsw.edu.au</a></td>
<td>52110</td>
<td>BEES Room 617</td>
</tr>
<tr>
<td>Danielle Drozdewski</td>
<td><a href="mailto:danielled@unsw.edu.au">danielled@unsw.edu.au</a></td>
<td>58283</td>
<td>Room 405 (G17 Building)</td>
</tr>
<tr>
<td>Chris Myers</td>
<td><a href="mailto:c.myers@unsw.edu.au">c.myers@unsw.edu.au</a></td>
<td>58031</td>
<td>BEES RoomG05A</td>
</tr>
<tr>
<td>Pam Mort</td>
<td><a href="mailto:p.mort@unsw.edu.au">p.mort@unsw.edu.au</a></td>
<td>51150</td>
<td>Learning Centre</td>
</tr>
<tr>
<td>Eva Chan</td>
<td><a href="mailto:e.chan@unsw.edu.au">e.chan@unsw.edu.au</a></td>
<td>55430</td>
<td>Careers Centre</td>
</tr>
</tbody>
</table>

### 3. Assessment

All modules have mandatory tasks that need to be completed as shown in Table 5 below. Satisfactory performance in ALL tasks is required or you will not pass the BEES 4516. The tasks for modules A and G require completion only whereas all other tasks will be graded. In the graded modules a satisfactory performance is classed as a mark of at least 75%. Failure to achieve this level of performance will require the student to resubmit or redo the task until a mark of at least 75% has been achieved.

### Table 6: BEES 4516 Assessment Breakdown

<table>
<thead>
<tr>
<th>Module</th>
<th>Key Tasks</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Research Skills</td>
<td>Library research consultation</td>
<td>Completion</td>
</tr>
<tr>
<td>B) Work Health and Safety</td>
<td>Risk management exercise</td>
<td>Graded</td>
</tr>
<tr>
<td>C) Presentation Skills</td>
<td>Introductory seminar</td>
<td>Graded</td>
</tr>
<tr>
<td>D) Writing Skills</td>
<td>Problem statement)</td>
<td>Graded</td>
</tr>
<tr>
<td>E) Ethics</td>
<td>Exam</td>
<td>Graded</td>
</tr>
<tr>
<td>F) Professional Development</td>
<td>Resume</td>
<td>Graded</td>
</tr>
<tr>
<td>G) School Seminars</td>
<td>Attendance</td>
<td>Completion</td>
</tr>
</tbody>
</table>

Details of each module are outlined in the following sections.
Module A - Introduction and Library Research Skills

Conveners: David Edwards and Nicole Robertson (UNSW Library)
Session: 1 and 2
Time: O-Week Workshop and student booked research consultation with UNSW Library early in Session.
Contact hours: 2 hours (max)
Assessment: Completion of Library Research Consultation

Content and Assessment

David Edwards will provide an introduction and outline of Honours Program and BEES 4516 Modules. A variety of other BEES staff may be on hand for you to be introduced to them.

Students must submit their Project Information Sheet to the BSB Office by Monday of Week 1.

Nicole Robertson will provide an overview of facilities and services available to Honours Students at UNSW Library. She will outline the introductory training available in searching electronic data bases and software for storing and handling literature citations.

Students MUST complete a Research Consultation with the UNSW library. This exercise is compulsory and students must get the completion of this task validated by a UNSW Library staff member on the Seminar Attendance Form. This is a very worthwhile exercise that can greatly improve your research technique. It is best completed early in the first session of your Honours year.
BEES Honours Research Project Information Form

March 2014

This form is to be completed by the honours student in consultation with the supervisor and returned to the honours coordinator by hard copy or pdf via e-mail by the end of Week 1 (in your first session).

(The following example is fictitious and any resemblance to persons living or dead is purely coincidental)

Student Name: Greg HUNT
ID number: z31070707

Email: globaldestroyer@student.unsw.edu.au Tel: 0402 114 501

UNSW Supervisor(s): 1) David Edwards

2)

(All students must have a full time member of UNSW academic staff as either supervisor or co-supervisor).

External co-supervisor(s):

Name: Tony Abbottt
Organisation: Sydney University

e-mail: The_Mad_Monk@usyd.edu.au Phone: 02 555 362436

Please indicate your Honours stream (circle the appropriate response):

archaeology & palaeoenvironments biology climate science ecology
environmental science/management genetics geochemistry geology
human geography marine & coastal science physical geography

Enrolment Status (please circle):

Full time / Part time. No. of Sessions if Part Time (please circle) 3 / 4
Tentative Title of Thesis Project:

How to run an environment portfolio using Wikipedia as the primary source of information on climate change.

Brief summary of project (4 lines, including aims):

Politics today is all about catchy 3 word slogans and pandering to a right wing dominated media. Real scientific information is therefore regarded as useless and my project will explore how much the government can fool the public by ignoring most of the recently published scientific literature and instead rely on sources such as Wikipedia.

Funding requirements and sources if >$500

Not applicable. Project is funded by large multinational mining companies

Student signature & date: 29/2/2014

Supervisor signature(s) & date: 1) ______________________________

2) ______________________________

By signing here, the supervisor(s) acknowledges:

• that they agree to supervise the student;
• that they will be on campus for the duration of the project (ie not away for >6 week continuous period) and / or they have made arrangements for alternative supervision during their absence; and,
• that they have ensured that the project is clearly within the expectations of a 30 UOC project and thesis.

Note: All students must be supervised or co-supervised by a full time academic staff member at UNSW. Post Doctoral students cannot be the sole supervisor of Honours students.
Module B – Work Health and Safety

Conveners: David Edwards
Other Staff: Chris Myers (BEES Health and Safety Manager)
Session: 1 and 2
Time: O-Week workshop
Contact hours: 2 hours (max)
Assessment: Risk Management Exercise due Tuesday Week 4
Re-assessment meeting Week 6 (To be confirmed)

Content and Assessment

Chris Myers will run an intensive workshop on Work Health and Safety (WHS). Students will then have to complete a Risk Management exercise as part of this module. This exercise is designed to develop competency and understanding in some of the essential WHS procedures involved with project work. Although not all projects involve fieldwork it is activity that presents the greatest potential risks for the School. For this reason it is essential that all students understand both the purpose of completing the appropriate forms and what information is required to be documented.

Most students should be familiar with form OHS403 UNSW Fieldwork Guidelines if you have participated in any fieldwork fieldtrip in BEES, as it is a requirement that students sign an authorisation form prior to attendance. This document provides a definition for fieldwork and the procedures that must be followed. In particular, the assigning of roles and responsibilities for the project supervisor, fieldwork leader and participants.

Students will be required to competently complete the following forms to meet the assessment for this module:

1. Receive an induction from the their supervisor recorded on a HS006 Induction Form
2. HS703 Working Alone and After Hours Approval Form
3. HS017 Risk Management and Control
4. HS010 Volunteer Request Form
5. HS018 Fieldwork Plan and Authorisation Form
6. TR1 Authority to Travel Form

The specific assessment tasks to be completed are as follows:
1. Complete a HS006 form and HS703 form with your supervisor and have your supervisor submit copies to Chris Myers for BEES HS records. These tasks are graded as Satisfactory or Unsatisfactory. If Unsatisfactory you will keep working on it with your supervisor until it is Satisfactory.  
**Submit both of these forms as signed, hard copies directly to Chris Myers.**

2. Working independently, students will complete the HS017, HS018, HS010, and TR1 forms required to undertake the fieldwork for the scenario described below. When completing the HS017 you must do the Risk Assessment as well. Accompanying these forms you need to provide a 1 page (or less) justification why you assessed the various levels of risk for the tasks listed on the HS017. These forms will be graded and students must achieve a mark of 75% or more to pass this component of the course. Note that plagiarism penalties will be strictly applied for this exercise so please ensure you submit your own work.  
**The forms for this part of the exercise must be emailed to the Honours Coordinators who will then forward them on to Chris Myers. Please ensure the forms are kept in their original format ie. keep word documents as a word file. Don’t change to html or pdf etc.**

More information on the scenario and the type of information and factors that need to be considered as part of the Risk Management exercise will be provided by Chris Myers during the workshop class. Some examples of the various forms are shown on the following pages.

**Scenario**

(This information is purely fiction and does not necessarily reflect current research activities within the School of BEES).

You are enrolled in honours under the supervision of Dr Ann Ant, a renowned invertebrate ecologist. For your project Dr Ant wants you to investigate the diversity of invertebrate fauna living under leaf litter dams in woodlands in Central NSW. You have been waiting for this opportunity for nearly for more than 2 ½ years, since you were enrolled in BIOS1301 – to do an honours project that includes some simple pitfall trapping of invertebrates to investigate biodiversity in different vegetation communities. You hope you can generate something from your Honours project that will pave the way to do a PhD.

The project will be completed at Yathong Nature Reserve (located approximately 660 km west of Sydney). The Reserve is managed by NSW Parks and Wildlife Service and Dr Ant
has given you these references to provide some background reading about the Yathong environment:


Dr Ant has organised with NSW Parks & Wildlife District Ranger for you to stay at the old shearer’s quarters on the Reserve. It has been arranged that the ranger will meet you at the Mount Hope pub at 6 p.m. on your day of arrival and will accompany you to the shearer’s quarters to show you where the essential services are like the fuse box and the taps for the water tanks, etc. Whilst the conditions may be ‘primitive’ you have access to bathroom and kitchen facilities (although you will have to get used to disturbing high numbers of mice that have set up house in the old leather lounge donated many years ago by the BEES HS manager).

Your ‘lab work’ on site will be conducted in the shed next to shearer’s quarters and at the kitchen table.

In brief, your fieldwork will involve the following tasks.

From 50 random sites at each of the 3 different vegetation communities selected for the study, you will collect litter samples in plastic bags. The bags of litter are secured by elastic bands to ensure no invertebrates escape. (Each sample has the volume equivalent to an A3-sized envelope). At the same time you will collect the top 5 cm of soil in a plastic bag (approximately 1 kg) directly below the litter from each site.

The litter samples are placed in Tullgren funnels and the invertebrates are driven down the funnel to avoid the heat and light from a lamp positioned above. A collection jar containing a mixture of ethanol and glycerol is placed below the funnel to trap the escaping invertebrates. Dr Ant has suggested you need to leave the litter samples in the funnels for 48 hours to ensure maximum effect. You have only 20 funnels so that limits your field sampling to 20 sites every 3 days.

After setting up your Tullgren funnels you then need to determine the moisture content of the corresponding soil sample. From the sealed plastic bag you will take approximately 150 g of soil, weigh it and then place it in the drying oven (that you borrowed from lab 402 in the Biological Sciences Building) for 24 hours at 105°C. The sample is then allowed to cool and then reweighed. The change in mass recorded and the moisture content calculated.

Once the first 20 litter samples are processed you can then start identifying the invertebrates under the microscope (borrowed from Biological Sciences Building G20).
You will not be alone whilst you are travelling to/from and staying at Yathong. Dr Ant has arranged with Professor Bill Gruff to coordinate your fieldwork trip for a period between mid-September and the beginning of November so it corresponds with the period when his two honours students (A. Troll and P. Gynt) will be conducting their feral goat surveys. (The two students are happy to be volunteers on your project. However, they do expect you will ensure there is a good hot meal waiting for them each evening when they get back from their fieldwork.)
# HS Risk management form

For additional information refer to HS329 Risk Management Procedure

<table>
<thead>
<tr>
<th>Faculty/Division</th>
<th>School/Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document number</td>
<td>Initial Issue date</td>
</tr>
</tbody>
</table>

**Risk management name**

<table>
<thead>
<tr>
<th>Form completed by</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible supervisor/authorising officer</td>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

## Identify the activity and the location of the activity

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Description of location</th>
</tr>
</thead>
</table>

## Identify who may be at risk from the activity:

This may include fellow workers, visitors, contractors and the public. The types of people may affect the risk controls needed and the location may affect the number of people at risk.

<table>
<thead>
<tr>
<th>Persons at risk</th>
<th>How they were consulted on the risk</th>
</tr>
</thead>
</table>

## List legislation, standards, codes of practice, manufacturer's guidance etc used to determine control measures necessary

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011
## Identify hazards and control the risks.

1. An activity may be divided into tasks. For each task identify the hazards and associated risks. Also list the possible scenarios which could sooner or later cause harm.
2. Determine controls necessary based on legislation, code of practice, Australian standards, manufacturer's instructions etc.
3. List existing risk controls and any additional controls that need to be implemented.
4. Rate the risk once all controls are in place using the matrix in HS 29 Risk Management Procedure.

### SHADED GREY AREAS

If you need to determine whether it's reasonably practicable to implement a control, based on the risk, complete the shaded grey columns.

Feel free to resize the boxes to suit your situation; the amount of text you need to use.

<table>
<thead>
<tr>
<th>Task/Scenario</th>
<th>Hazard</th>
<th>Associated harm</th>
<th>Existing controls</th>
<th>Any additional controls required?</th>
<th>Risk Rating</th>
<th>Cost of controls (in terms of time, effort, money)</th>
<th>Is this reasonably practicable Y/N</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
**List emergency procedures and controls**

List emergency controls for how to deal with fire, spills or exposure to hazardous substances and/or emergency shutdown procedures

<table>
<thead>
<tr>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional control measures needed:</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**REVIEW**

Scheduled review date:

Are all control measures in place?

Are controls eliminating or minimising the risk?

Are there any new problems with the risk?

Review by: (name)

Review date:

<table>
<thead>
<tr>
<th>Acknowledgement of Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>All persons performing these tasks must sign that they have read and understood the risk management (as described in HS329 Risk Management Procedure).</td>
</tr>
<tr>
<td>Note: for activities which are low risk or include a large group of people (e.g. open days, BBQs, student classes etc.), only the persons undertaking the key activities need to sign below. For all others involved in such activities, the information can be covered by other methods including for example a safety briefing, induction, and/or safety information sheet (ensure the method of communicating this information is specified here).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk management name and version number:</th>
<th>I have read and understand this risk management form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Signature</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
**HS018**  
**Fieldwork Plan and Authorisation Form**

### Notification details

<table>
<thead>
<tr>
<th>Faculty/School/Unit:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Head of School/Centre/Unit:</td>
<td>Signature:</td>
</tr>
<tr>
<td>Fieldwork Leader:</td>
<td>Signature:</td>
</tr>
<tr>
<td>Fieldwork location:</td>
<td></td>
</tr>
<tr>
<td>Risk Assessment reference:</td>
<td></td>
</tr>
</tbody>
</table>

### Fieldwork activities and itinerary

Describe fieldwork activities, place(s), times and dates of departure and arrival:

### Fieldwork communications

Describe contact names, phone numbers and means of communication:

### Basic fieldwork checklist

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority to Travel Form completed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk assessment completed and approved (Form HS017):</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Approval to use a private vehicle Form completed (Form T2):</td>
<td></td>
<td></td>
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<tr>
<td>List of fieldwork participants attached:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fieldwork Authorisation and Medical Questionnaires completed:</td>
<td></td>
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<tr>
<td>Fieldwork safety briefing for all participants:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All relevant insurance requirements have been assessed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All relevant licenses and permits have been obtained:</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
TR1 TRAVEL APPROVAL FORM

This form is to be completed before travelling on University business.

Applicant details

Name of Traveller

Faculty/School/Division

Email address

Phone No.

Travel details (Please attach copy of proposed travel itinerary)

First day of travel

Last day of travel

Nº of business days

Nº of private days *

Purpose of travel

* If number of private days exceeds 40% of total, FBT may be payable (Contact your Finance Manager).

Estimated travel costs (AUD$)

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airfare (incl taxes)</td>
<td>$</td>
</tr>
<tr>
<td>Fees - conf/seminar</td>
<td>$</td>
</tr>
<tr>
<td>Accommodation</td>
<td>$</td>
</tr>
<tr>
<td>Meals and incidentals</td>
<td>$</td>
</tr>
<tr>
<td>Other</td>
<td>$</td>
</tr>
<tr>
<td>Estimated Total Costs</td>
<td>$</td>
</tr>
</tbody>
</table>

Chartfields

<table>
<thead>
<tr>
<th>Fund</th>
<th>Department</th>
<th>Project</th>
<th>% allocation</th>
</tr>
</thead>
<tbody>
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</table>

Employee declaration

☐ I confirm that I have read and will comply with the UNSW Travel Policy and Travel Procedure
☐ I confirm that I have made arrangements to cover my teaching/supervision/duties for my absence
☐ For international travel, I confirm that I have read and understood DFAT travel advice.

Applicant’s signature

Date

Approval by Dean/Divisional Head/Head of School

I approve the travel arrangements and estimated travel costs indicated above.

Signature

Date

Name
Module C - Seminar Presentation Skills

Convener: David Edwards
Session: 1 and 2
Times: Workshops in O-Week
Intro Seminars in Week 1
(Times and venues for Intro Seminars to be confirmed in O-Week)
Contact hours: 5 hours instruction (max) plus seminar participation (approx 10 hours)

Aims of Module

Improve presentation skills via critical review of a seminar presentation that introduces the student's research topic. Students will acquire practice in giving a seminar and obtain assessment of the strengths and weaknesses of their presentation skills. This module will assist with students with preparation of future presentations such as their final honours seminar.

Content and Assessment

Students will be required to present a ten minute introductory seminar on their thesis research topic to the group. Times of presentations will be allocated in O-Week. The presentations will be critically reviewed and assessed by BEES staff and peers. Feedback on your performance will be provided. Satisfactory performance in the module will be based upon contribution to discussion, attendance, participation in peer marking and a score of at least 75% for a student’s seminar from BEES staff.

Introductory Seminar Rules and Structure

Presentation Time Limit 10 minutes
(longer presentations penalised @ 5% / 30 seconds over time)
Question Time 5 minutes
Assessment Content and delivery by UNSW staff and peers
Presentation Format Typically Powerpoint but may be on any software or medium. Must pre-loaded at venue on day/time of your seminar.

See Section E for more information on your Introductory Seminar.

A selection of notes and an example of a seminar assessment sheet is included on the following pages.
Top Ten Slide Tips

From www.garreynolds.com (April 2007)

1. Keep it Simple

PowerPoint uses slides with a horizontal or "Landscape" orientation. The software was designed as a convenient way to display graphical information that would support the speaker and supplement the presentation. The slides themselves were never meant to be the "star of the show" (the star, of course, is your audience). People came to hear you and be moved or informed (or both) by you and your message. Don't let your message and your ability to tell a story get derailed by slides that are unnecessarily complicated, busy, or full of what Edward Tufte calls "chart junk." Nothing in your slide should be superfluous, ever.

Your slides should have plenty of "white space" or "negative space." Do not feel compelled to fill empty areas on your slide with your logo or other unnecessary graphics or text boxes that do not contribute to better understanding. The less clutter you have on your slide, the more powerful your visual message will become.

2. Limit Bullet Points and Text

Your presentation is for the benefit of the audience. But boring an audience with bullet point after bullet point is of little benefit to them. Which brings us to the issue of text. The best slides may have no text at all. This may sound insane given the dependency of text slides today, but the best PowerPoint slides will be virtually meaningless without the narration (that is you). Remember, the slides are meant to support the narration of the speaker, not make the speaker superfluous.

Many people often say something like this: "Sorry I missed your presentation. I hear it was great. Can you just send me your PowerPoint slides?" But if they are good slides, they will be of little use without you. Instead of a copy of your PowerPoint slides, it is far better to prepare a written document which highlights your content from the presentation and expands on that content. Audiences are much better served receiving a detailed, written handout as a takeaway from the presentation, rather than a mere copy of your PowerPoint slides. If you have a detailed handout or publication for the audience to be passed out after your talk, you need not feel compelled to fill your PowerPoint slides with a great deal of text.
We'll talk more about this in the delivery section below, but as long as we are talking about text, please remember to never, ever turn your back on the audience and read text from the slide word for word.

This slide is not unusual, but it is not a visual aid, it is more like an "eye chart."

Try to avoid text-heavy (and sleep inducing) slides like this one.

Aim for something like this simple slide above.

And this may be even better...

3. Limit Transitions and Builds

Use object builds and slide transitions judiciously. Object builds (also called animations), such as bullet points, should not be animated on every slide. Some animation is a good thing, but stick to the most subtle and professional (similar to what you might see on the evening TV news broadcast). A simple "Wipe Left-to-Right" (from the "Animations" menu) is good for a bullet point, but a "Move" or "Fly" for example is too tedious and slow (and yet, is used in many presentations today). Listeners will get bored very quickly if they are asked to endure slide after slide of animation. For transitions between slides, use no more than two-three different types of transition effects and do not place transition effects between all slides.
4. Use High Quality Graphics

Use high-quality graphics including photographs. You can take your own high-quality photographs with your digital camera, purchase professional stock photography, or use the plethora of high-quality images available online (be cautious of copyright issues, however). Never simply stretch a small, low-resolution photo to make it fit your layout - doing so will degrade the resolution even further.

Avoid using PowerPoint Clip Art or other cartoonish line art. Again, if it is included in the software, your audience has seen it a million times before. It may have been interesting in 1993, but today the inclusion of such clip art often undermines the professionalism of the presenter. There are exceptions, of course, and not all PowerPoint art is dreadful, but use carefully and judiciously.

Try to avoid cheesy clip art like this.

This edited stock photograph is more effective and professional.

In this title slide, the image is primary.

In this slide of the same presentation, the image is secondary and "pushed" to the back by editing it first in Photoshop.
I often use images of people in my slides, as photography of people tends to help the audience connect with the slide on a more emotional level. If the photographic image is secondary in importance, then I decrease the opacity and add a Gaussian Blur or motion filter in Photoshop. If the photographic image is the primary area I want the audience to notice (such as a picture of a product), then the image can be more pronounced and little (or no) text is needed.

5. Have a Visual Theme But Avoid Using Powerpoint Templates

You clearly need a consistent visual theme throughout your presentation, but most templates included in PowerPoint have been seen by your audience countless times (and besides, the templates are not all that great to begin with). Your audience expects a unique presentation with new (at least to them) content, otherwise why would they be attending your talk? No audience will be excited about a cookie-cutter presentation, and we must therefore shy away from any supporting visuals, such as the ubiquitous PowerPoint Design Template, that suggests your presentation is formulaic or pre-packaged.

You can make your own background templates which will be more tailored to your needs. You can then save the PowerPoint file as a Design Template (.pot) and the new template will appear among your standard Microsoft templates for your future use. You can also purchase professional templates on-line (for example: www.powerpointtemplatespro.com).

6. Use Appropriate Charts

Always be asking yourself, "How much detail do I need?" Presenters are usually guilty of including too much data in their on-screen charts. There are several ways to display your data in graphic form; here are a few things to keep in mind:

**Pie Charts.** Used to show percentages. Limit the slices to 4-6 and contrast the most important slice either with color or by exploding the slice.
**Vertical Bar Charts.** Used to show changes in quantity over time. Best if you limit the bars to 4-8.

**Horizontal Bar Charts.** Used to compare quantities. For example, comparing sales figures among the four regions of the company.

**Line Charts.** Used to demonstrate trends. For example, here is a simple line chart showing that our sales have gone up every year. The trend is good. The arrow comes in later to underscore the point: Our future looks good!

In general, tables are good for side-by-side comparisons of quantitative data. However, tables can lack impact on a visceral level. If you want to show how your contributions are significantly higher than two other parties, for example, it would be best to show that in the form of a bar chart (below, right). If you're trying to downplay the fact that your contributions are lower than others, however, a table will display that information in a less dramatic or emotional way.
7. Use Colour Well

Colour evokes feelings. Colour is emotional. The right colour can help persuade and motivate. Studies show that colour usage can increase interest and improve learning comprehension and retention.

You do not need to be an expert in colour theory, but it’s good for business professionals to know at least a bit on the subject. Colours can be divided into two general categories: Cool (such as blue and green) and Warm (such as orange and red). Cool colours work best for backgrounds as they appear to recede away from us into the background. Warm colours generally work best for objects in the foreground (such as text) because they appear to be coming at us. It is no surprise, then, that the most ubiquitous PowerPoint slide colour scheme includes a blue background with yellow text. You do not need to feel compelled to use this colour scheme, though you may choose to use a variation of those colours.

If you will be presenting in a dark room (such as a large hall), then a dark background (dark blue, grey, etc.) with white or light text will work fine. But if you plan to keep most of the lights on (which is highly advisable) then a white background with black or dark text works much better. In rooms with a good deal of ambient light, a screen image with a dark background and light text tends to washout, but dark text on a light background will maintain its visual intensity a bit better.

8. Choose Your Fonts Well

Fonts communicate subtle messages in and of themselves, which is why you should choose fonts deliberately. Use the same font set throughout your entire slide presentation, and use no more than two complementary fonts (e.g., Arial and Arial Bold). Make sure you know the difference between a Serif font (e.g., Times New Roman) and a Sans-Serif font (Helvetica or Arial). Serif fonts were designed to be used in documents filled with lots of text. Serif fonts are said to be easier to read at small point sizes, but for on screen presentations the serifs tend to get lost due to the relatively low resolution of projectors. Sans-serif fonts are generally best for PowerPoint presentations, but try to avoid the ubiquitous Helvetica. I often choose to use Gill Sans as it is somewhere in between a serif and a sans-serif font and is professional yet friendly and “conversational.” Regardless of what font you choose, make sure the text can be read from the back of the room.
9. Use Video or Audio

Use video and audio when appropriate. Using video clips to show concrete examples promotes active cognitive processing, which is the natural way people learn. You can use video clips within PowerPoint without ever leaving the application or tuning on a VCR. Using a video clip not only will illustrate your point better, it will also serve as a change of pace thereby increasing the interest of your audience. You can use audio clips (such as interviews) as well. Something to avoid, however, is cheesy sound effects that are included in PowerPoint (such as the sound of a horn or applause when transitioning slides). The use of superfluous sound effects attached to animations is a sure way to lose credibility with your audience.

10. Spend Time in the Slide Sorter

According to the Segmentation Principle of multimedia learning theory, people comprehend better when information is presented in small chunks or segments. By getting out of the Slide View and into the Slide Sorter view, you can see how the logical flow of your presentation is progressing. In this view you may decide to break up one slide into, say, two-three slides so that your presentation has a more natural and logical flow or process. In this view you will be able to capture more of the gestalt of your entire presentation from the point of view of your audience. You will be able to notice more extraneous pieces of visual data that can be removed to increase visual clarity and improve communication.
Seminar Presentation Notes

Prepared by David Edwards March 2007

“What is well understood is expressed clearly.” (Nicolas Boileau, 1636-1711)

Your Experience

Have you seen any seminars/conference talks before? I don’t mean lectures at Uni but your standard 15 minute talk plus 5 minutes of questions that is the staple of most conferences and meetings.

If yes, what do you remember about the best seminar you’ve seen? What made it good?

What about the worst seminar you can remember? Why was it so bad?

Our Aims in this Module

De-mystify the intro and final honours seminar s
Prepare and equip students with some basic tools
But NOT a prescription/formula
Stimulate co-operation / mutual beneficial critique

Some Background Material

What is the Purpose of the Talk?

There is plenty of great general advice available on giving a talk (see Top Ten Slide Tips) but be careful with critical differences in type of talk and audience. You are going to present a scientific seminar not a presentation at a regional sales or marketing meeting.

Your intro seminar is a forum to introduce your honours topic, explain your research goals and methods and get some (hopefully) useful and insightful feedback from staff and peers. It is not a complete solution to a vexing scientific problem or a mechanism to demonstrate your knowledge as a means of assessment.

Your seminar should serve to focus your ideas so that the goals of your research are clear in your mind. In addition you will need to justify your research using an extensive and
thorough review of the literature. Thus you will need to crystallise your understanding of where your own research fits in to the bigger picture.

**Preparing for the Talk**

The more prepared you are the more comfortable and professional you will appear giving your talk. Make sure though that you don’t put lots of effort into the performance at the expense of the content. After all it’s the content that people have come to listen to.

If you have a helpful, hands on supervisor you should run through draft versions of your talk with them. But don’t be limited in your scope by their ideas alone. Remember the talk is an insight into YOUR research and you should be the expert in the area of your specific topic.

When starting to prepare your talk it is not a good idea to start editing or writing the slides upfront. You can very quickly fall in to the trap of adopting an atomic and linear view of your topic rather than a holistic and multifaceted perspective. Ignore urges to get caught up with irrelevant formatting concerns – that can be dealt with later as part of the review process.

A common suggestion is to assemble your future slides on a hand-drawn comic strip. This gives an overview (1 to 2 pages) of your talk and prevents you writing too much on each slide. At this stage you also can start asking how many slides will I need in total what is my timing per slide?

The planning and preparation process is an active progression towards your talk. It reflects your understanding, and thus it evolves with time. You should not plan your talk in the same chronological order as you carried out your research. You probably chose a logical method and plan to guide your research but make sure you choose a pedagogical plan for the presentation (i.e., one adapted to the audience, the duration of the talk, etc.).

How many key points are there to you entire talk? How do you want these to be structured to tell the story most effectively? You will need to consider both macroscopic and microscopic elements of your talk. At the macroscopic level you want to have simple and informative slides. Have a very clear overall plan that uses a roadmap approach: we were there, we are here, we are going there. Basic microscopic techniques start with the general rule of one point per slide. Each slide should have a title and yes it is true, a picture is worth 1000 words. But are they the correct 1000 words? Choose graphic content wisely.

**Final Preparation**

Check the room and equipment well before your talk. Usually this should be done at least the session before your own talk. Pre-load material on to the computer or check if your laptop
will link seamlessly with the projector or control panel. Don’t assume media (memory cards etc) will always be read without a problem. It’s best to run from the computer hard drive rather than the USB drive, especially if you have large embedded images. Have backup version on CD or other media form.

Check the lighting and clarity of your presentation on the screen. Does the projector wash out your images? Do the colours look the same as on your own PC? What about room lighting?

Meet with the chairperson and clarify any rules, signals re. time etc.

Sit down, relax and drink some water.

Lots of Mechanical Advice

(with thanks to Lachlan Yee from SCU)

Delivering your Talk

- It is a talk, not a speech or a lecture. So talk to your audience. Don’t read a speech. Points on OH or PPT slides should be your cues not cue cards or notes.
- Don’t just stand there and read the text on your slides. The audience can read; give them more information with your voice. If you want to read, then don’t put the text on the slide, put down the key points and talk about them, remember you are telling the story so talk to them.
- Face your audience, talk to them, try not to talk to the slide or the laser pointer or the monitor, you will quickly lose your audience. They’ve come to listen to you, they could easily read anything your write in a book so talk to them, engage your audience.
- If looking at your audience makes you nervous you can try defocusing your eyes so you are not looking at specific people, or you can look at the wall behind the last row of listeners. The audience can be a very powerful feedback device on how you are talking. If they look confused, perhaps you should explain more detail. If they look excited and attentive, this can be a very positive reinforcement.
- Use an active voice, emphasis and pause are very good prompting tools for the voice, they keep the talk and your audience interested. If you speak softly, please use a microphone (if provided). Talk as if you needed to get your message to the people up the back, this will ensure your voice is clear and projected. Drink before you talk, but note that milk tends to coat the throat making your voice softer so be aware. Also be aware of “fizzy” drinks –there nothing worse than trying to suppress a burp during your all important finale.
• Use the laser pointer but don’t point at everything. Keep the dot moving, even slowly, you cannot hold still without it shaking which tends to show your nervousness. When you practise your talk, imagine where you would shoot your pointer to help the audience see which part of the diagram you are talking about for instance. Don’t point to each paragraph you are talking about, the audience can see that for themselves.

• The mouse cursor is also a pointer when using power point, simply move the mouse and the pointer can be used to show things during your talk. This may be more useful than a laser pointer or “stick” as it keeps you facing your audience.

• Use simple language, no need to send people scurrying for the dictionary to understand your talk, the message is very important and if you speak simply and get to the point, your message is that much more effective. Use jargon where necessary but not to try and impress. Consider which terms will need defining.

• Watch out for use of ACRONYMS, yes use BEES or UNSW or DNA or ANOVA but what the hell does TOGA or GARP stand for.

• Careful with ‘um’ or “ah” or “you know”. Never swear.

• Hands out of pockets. Key jangling is a definite no no.

• Try not to lean on the pointer – some people engage in a weird “pole dancing” routine.

**Slides and Graphics**

• Not too much text on slides. Keep message clear and simple.

• Use a large sans-serif font. Arial is a very clear font but yes it is very common. Font size should be at least 20 point but you may have to use up to 32 point in some venues.

• Each slide should have a title but also make sure the title is informative. Instead of “Results” try “Results of Field Trials”

• Watch your colour combinations, use contrast, don’t put red on a yellow background.

• Make sure images and graphs are large and clear. Don’t use small pictures or photos, at least half a slide should be a single picture or photo. Maximum 2 graphs to a page.

• Keep images and graphics as simple as they can be to tell the story. Remove superfluous details.

• Use thick lines on your graphs, thin lines cannot be seen at a distance. Watch your colour combinations.
• Make sure the chemical symbols in equations or other types of symbols in flowcharts etc are large and clear.

• If you show error bars, it indicates thorough science, but only if they tend to work in your favour, at times they can change the conclusions you can draw: make a sensible choice.

• If you have good photos, they can enhance talks and provide very effective illustrations. When talking about contact lenses, a slide with a single eye on it is very catching.

• Know a little bit about power point, learn some of the short cuts and it’s tools as you will most likely be using this program to give your presentation.

• Some like to put graphics in their header lines so they appear on each slide. Don’t make them so fancy or humorous as to distract the audience from focusing on your science. Students have used burning flames or jumping marsupials in the past that have distracted the audience from the more essential elements of the talks.

• Watch out for tables. Some like to put huge 10 by 20 column tables only to refer to a few cells out of the 200. Perhaps they want to show the audience how many experiments they’ve done and they are good little scientists. Try instead to show those few important numbers in a more succinct and effective manner. Use a graph, chart or simply talk about the 2 or 3 key experiments. IF the audience don’t need to see your huge ‘weather predicting’ table, then don’t show it!

• Don’t over crowd graphs. If the message can be told with 4 traces, then don’t show a graph with 9 traces, it simply confuses the audience.

• Don’t have too much on your slides, if you find you talk too long on a slide, perhaps you should split your information over two slides. Make a judgement call here.

• Definitely don’t put too much on your slides and then whip it off before the audience has time to see this slide.

• Proof your slides, make sure there are no spelling errors.

**Selling your message**

• In rank order you want people to remember
  the main messages from your talk,
  something about you
  other details such as who you work for etc.

• How many messages can you get across in 15 minutes? Typically 3 – 5 different ideas. So try to deliver your best 3 or 4 and cut out any other less important aspects of your work.
Always emphasise the positives, be discreet about the negatives, “sell your science”, talk about the negatives only if you can clear show why and ways to improve. Have good replies to obvious negatives that may arise in question time.

Don’t use anything that you will not talk about

Make sure the talk flows well, that a good story is told and there is a logical progression from one slide to the next. An overview slide at the beginning helps with the flow and gives the audience a good sneak preview of what is to come, this prepares them and the understanding flows from that. But this “Outline” slide is somewhat redundant for talks less than 15 minutes long.

Draw clear simple and well supported conclusions. Try not to rehash too much of your talk, simply pick key points and highlight them again as your conclusions. A practice audience will help in deciding if you can claim these conclusions.

Look the part. For your seminar “neat casual” dress would be fine. The corporate look is probably overkill for BEES but may be important at a real conference. Your talk should not be fashion statement.

Play by the Rules

You must stick to the time given to you. This cannot be stressed enough. Going under time is better than going over. For a 15 minute talk you afford to go 1- 1½ minutes under time but no more than 30 seconds overtime.

For a 15 minute talk you may use anywhere from 5 to 20 slides depending what is on each slide. You need to give audience time to see what’s on your slides. If you are whipping past the slide too quickly perhaps you don’t need a slide there or you should blend it with the next one.

Have a halfway or three quarter time marker. eg you should get through slide 11 by the 10 minute mark.

After the Talk

BREATHE !!!

You should be asked some questions. Good talks have lots of questions because people are interested in knowing more about your project.

Sometimes you may give out some of your best information during the question time.

Acknowledge the question and clarify if you don’t understand. It may help to repeat the question but don’t do this ALL the time. Basically you are just trying to give your mind time to work on an answer.
• Questions may be: technical - give a technical answer. friendly - use it to make your point even better challenging - be upfront.

Learn to recognise what type of question you are being asked. Beware of wolves in sheep’s clothing in your audience.

• It can be hard sometimes to work out what the question is:
  Q. Blah blah blah. Blah blah. Blah blah blah blah blah blah. blah blah blah blah blah blah blah blah blues? A. The question I believe is “Blah blah?” ...(and then offer an appropriate answer)...

  Q. I don’t like your approach at all. (Blah blah blah.) A. I am sorry. What was your question?

  Q. More than a question, I want to make a comment.
       Blah blah blah.
  A. Thank you very much.

• Don’t be scared to say “I don’t know”. But then make sure you offer a pathway to an answer based on what you do know.

• Don’t treat all questions as negative attacks on your work even if they first appear to come across this way.

• Don’t waffle on for ages and lose track of the question.

• What if there are no questions? Does this reflect lack of interest in your talk or lack of understanding by your audience? Or have you overwhelmed them?

• If there are no questions you could show some slides or material you held back in reserve (ie a small demo of a computer simulation) but check this is OK with the chairperson first.

• It may be better to make sure you say your thank you’s very clearly and make a dignified exit.
Our ideal seminar is a free, enthusiastic and confident presentation that guides us through some interesting work. The main points are explained with the aid of suitable visual aids. Audience questions are answered with courteous and considered responses.

The seminar is evaluated under the following headings. Comments should be also be provided to help students with feedback on elements done particularly well and indicate problems or room for improvement.

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<th>Structure of talk</th>
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<th>Very Good</th>
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<td>Interpretation and resolution of topic / problem</td>
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<td>Conclusion</td>
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**Manner and delivery**

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<td>No distracting mannerisms</td>
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<td>Not too much text or crowded slides</td>
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**Question time**

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<td>Attention to questions</td>
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<td>Positive and civil attempt to respond</td>
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**MARK %**
Module D - Writing Skills

Conveners: Pam Mort (UNSW Learning Centre) and Honours Coordinators
Session: 1 and 2
Time: Four workshops held during O-Week and Week One.
Contact hours: 10 hours (max)

Aims of Module

This an intensive course on scientific and technical writing skills which will assist you, directly or indirectly, in a variety of writing tasks, including the writing of literature reviews, theses, abstracts, grant proposals, job applications, reports, scientific papers and CVs. Detailed information about the format and structure of your Literature Review/Project Proposal and thesis will also be provided.

These workshops are essential for completion of your literature review and research paper. In these workshops; you will explore past theses, explain and justify your research topic, identify the strengths and weaknesses in your writing, and constructively review each others’ writing.

Content and Assessment

A variety of workshop tasks will be competed that provide you with self and peer assessment of your writing skills. Students will be required to write a Problem Statement (< 500 words) on their thesis research. This is due on Tuesday Week 3 (12th August) and will be assessed by peers and UNSW staff. Instruction on how to write a Problem Statement forms the basis of one of the workshop classes.

Satisfactory performance in the module will be based upon contribution to discussion, attendance, participation in peer marking and a score of at least 75% for their Problem Statement from BEES/UNSW staff

To help you gain the most from the workshops we recommend you bring the following to each workshop:
- Bring your draft writing for your lit review/proposal
- Bring your draft problem statements (General & Specific)
- Bring print outs of your Intro Seminar presentation slides
- Bring at least two pages of writing for your literature review/proposal.

A variety of paper and web based resources will be distributed at the workshops
Module E - Professional Ethics

Convener: To Be Advised

Session: Offered in Session One only
(students starting in Session 2 should have completed the module in S1 2014 or will have to complete the module in S1 2015).

Content and Assessment

This module draws on a variety of staff from UNSW and associated institutions.

Topics covered in Session One of 2013 included:

- Interesting case studies of fraud and ethical issues (A/Prof Iain Suthers)
- Business of Fraud (A/Prof. David Cohen)
- Animal Care & Ethics (Prof. Margaret Rose, POW Hospital)
- Human Ethics (Dr Wendy Shaw)
- Bioprospecting and Biopiracy (Dr. Daniel Robinson, IES)

Similar topics are expected to be covered in 2015.

Satisfactory performance in the module will be based upon contribution to discussion, attendance, and a score of at least 75% in a 90 minute test (5 short essay questions) to be held at the end of Week One.
Module F Professional Development

Time:    Weeks 10 and 11, Wednesday and Thursday 10 am – 1 pm
Place:   Room TBA
Contact hours: 12 hours (max)
Conveners: The module will be presented by Kate Riley and other staff from UNSW Careers and Employment. 
Kate Riley, Careers Consultant, Australian School of Business, Careers and Employment
E: k.riley@unsw.edu.au T: 9385 7941

Eva Chan, Senior Careers Consultant, UNSW Career and Employment
Level 2, East Wing, Quad Building
E: e.chan@unsw.edu.au, T: 9385 5430

Assessment: Preparation of resume and interview with UNSW Careers and Employment

Content and Class Schedule

This is a compulsory series of seminars and workshops for all honours students. Post Grad students are also welcome to attend.

These workshops are designed to assist BEES students in exploring their career options, finding a job and developing their career management skills. Topics to be covered include:

- career options and resources available to BEES graduates
- effective job search strategies for tapping into the hidden job market
- job analysis and how to read between the lines of a job ad
- applying for a job including writing a cover letter and preparing a resume
- how to differentiate yourself from other applicants.

There will be plenty of opportunity to ask questions and work through specific examples of job applications. The proposed sequence of workshops is as follows:

Wk 10 Wednesday 8th October, 10am
Writing a Winning Job Application: Resume, Cover Letter & Selection Criteria Document

Wk 10 Thursday 9th October, 10am
Ace the Interview! Effective Interview Preparation

Wk 11 Wednesday 15th October, 10am
Business Writing and Business Etiquette
Graduate Recruitment Q&A: Understand the Recruitment Process

Wk 11 Thursday 16th October, 10am
Network for Success: Building Your Professional Network
Careers in Research: PhD and Beyond

Wk 11 Thursday 16th October, 4-6pm (TBC)
BEES Alumni Panel

The final meeting will include a panel discussion with BEES alumni. This represents a rare opportunity to talk to past graduates and find out how they followed their various career paths. This meeting is likely to be scheduled in the late afternoon to facilitate Alumni participation.

Assessment

You are required to find a job advertisement relevant to your area of study and develop a tailored resume according to the standard discussed in the resume workshop. Reflect on the quality of your resume by completing Section 1 of the Resume Feedback Form (attached).

You must register for and attend a 20-minute Individual Career Advice Appointment with a Careers Consultant by the end of Week 13 (Friday 31st October, 2014). The use of the online booking system for this is outlined below and will be explained at the first class in Week 10. Bring along your resume, the job ad, and the completed Resume Feedback Form to the appointment and you will receive feedback and evaluation on your resume. You will be assessed on:

- your ability to tailor the resume to the job; and
- your ability to demonstrate what you have learnt in the resume workshop

Students will be assessed on participation in the workshops, preparation of a resume and performance at the Career advice appointment. Satisfactory performance in the module will require a grade of at least 75% for the Resume Preparation task.
Registering for an Individual Career Advice Appointment

You can view our availabilities and register for an appointment online. Appointments are open for registration 2 days prior.

**Step 1:** Go to [www.careers.unsw.edu.au](http://www.careers.unsw.edu.au) and click the pink “STUDENTS” button on the bottom menu.

**Step 2:** Log on to Careers Online or set up an account using your student number and UNIPASS.
Step 3: Register for a workshop / appointment using the left menu.

Note: You can manage and cancel your booking(s) through Careers Online. You will be banned from registering or using our services for 2 weeks if you fail to attend an appointment you have registered for.
UNSW Careers and Employment – Resume Feedback Form

Name:  
Student No.:  

Section 1: Your Reflection:

Overall
− Drafted specifically for the position  YES   Needs work
− Appropriate Length (2-3 pages)  YES   Needs work

Presentation & Layout
− Formatted in a professional style  YES   Needs work
− Headings and sub-headings clearly stand out  YES   Needs work
− Fonts, dates & titles are written consistently throughout  YES   Needs work
− Only bullet points and short paragraphs have been used  YES   Needs work

Structure
− The most relevant sections appear first  YES   Needs work
− The most recent info is placed first within each section  YES   Needs work
− All necessary information is included  YES   Needs work

Achievement Focus
Used achievement statements to describe:
− Education  YES   Needs work
− Employment  YES   Needs work
− Key Skills / Attributes  Section Missing   Needs work
− Extra Curricular Involvements  Section Missing   Needs work

Language
− Most sentences begin with an active verb?  YES   Needs work
− Used key words and phrases relevant to the position  YES   Needs work
− Grammar, and spelling have been checked  YES   Needs work
− Past tense used for events that happened in the past, present tense for current activities  YES   Needs work

Section 2 - Feedback (to be filled in by a Careers Consultant)

☐ 50% - a draft that needs some changes.
☐ 75% - a good resume demonstrating learning from the resume workshop. Only minor changes needed.
☐ 100% - an excellent resume that has a strong achievement focus and is tailored to the job.

Comments:

Name of Consultant:  
Date & Time:
Module G: BEES Seminars

A variety of seminars are held within the School of BEES. Some are hosted by the entire School and others by sub-units such as the Evolution and Ecology Research Centre. Some talks are by BEES staff members and others are by external or visiting academics and scientists. Posters advertising the seminars are usually displayed adjacent to the lifts. They are also usually advertised on the BEES school website and group emails. These seminars represent a good opportunity to see how seminars should be presented (and sometimes how they should not be done).

Students are generally expected to keep abreast of recent advances in research across the disciplines covered by BEES through attendance at the school seminars throughout their honours year. Voluntary attendance in past years by students (and academics) was quite abysmal and so this component is now (partially) compulsory for honours students. As part of your assessment for BEES 4516 you are required to attend at least five full school seminars during your first session of enrolment.

All honours students will be issued with a seminar attendance sheet which must be completed and submitted to the BSB Office by the end of your first session of enrolment. You must have your seminar attendance sheet signed off by any BEES academic for each seminar. Any bona fide academic from another school or a seminar held at another university is also acceptable. Students will also be able to attend a full one hour session of postgraduate or final honours seminars as a substitute for a single school seminar.

Students must also complete a Research Consultation with the UNSW library and include this on their seminar attendance sheet.

Some students seem puzzled about our insistence on attending seminars outside their narrow research area. One answer is that we are encouraging you to learn and think broadly that may assist in unanticipated ways with your thesis or your future employment. Another answer is that you are graduating with honours from the School of Biological, Earth and Environmental Sciences, and we want you to have a broad experience of across the disciplines of biology, earth and environmental sciences.

Don't leave it until it is too late; try to attend seminars on a regular basis from the start of session!
UNSW School of BEES Honours

Seminar Attendance Sheet

**Student Name:**

Please hand this completed sheet to the BEES Student Office by Week 13 of your first session of Honours.

<table>
<thead>
<tr>
<th>Date</th>
<th>Seminar speaker and (approximate) title</th>
<th>Name and Signature of BEES or Academic</th>
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Name, extension and signature of UNSW Library Staff member

Library Research Consultation

Students are expected to attend the school seminars during both sessions. You are required to attend at least 5 (five) full school seminars during your first session of honours and have this form signed off by any BEES academic. A full one hour session of postgraduate or final honours seminars or a bona fide seminar at another school or university is also acceptable.

Students MUST complete a Research Consultation with the UNSW library. This exercise is compulsory and students must get the completion of this task validated by a UNSW Library staff member.
1. Types of Research

The Australian Research Council (ARC) defines research as:

“original investigation undertaken to gain knowledge, understanding and insight.”

The ARC notes that research is a broad concept that cannot be defined in a simple and unique way across all disciplines. Research can lead to the creation of new knowledge. Alternatively, it may use existing knowledge (or the synthesis and analysis of previous research) in a new and creative way so as to generate new concepts, methodologies and understandings.

There are four types of research activity as defined in the Australian Standard Research Classification:

- **Pure basic research** is experimental and theoretical work undertaken to acquire new knowledge without looking for long term benefits other than the advancement of knowledge.

- **Strategic basic research** is experimental and theoretical work undertaken to acquire new knowledge directed into specified broad areas in the expectation of useful discoveries. It provides the broad base of knowledge necessary for the solution of recognised practical problems.

- **Applied research** is original work undertaken primarily to acquire new knowledge with a specific application in view. It is undertaken either to determine possible uses for the findings of basic research or to determine new ways of achieving some specific and predetermined objectives.
• **Experimental development** is systematic work, using existing knowledge gained from research or practical experience for the purpose of creating new or improved products/processes.

UNSW students and staff are engaged in many fields of research and your honours research project helps contribute to the BEES research profile. Many of our students go on to publish the results of their honours research in highly reputable peer reviewed journals.

### 2. Research Proposals and Funding

Most research requires money and other resources to complete. Money to fund research projects is typically acquired through formal granting schemes or from industry. Whatever the funding source, it is important to realise that it is a competitive process and therefore requires an application or research proposal to be submitted and evaluated before any funds can be granted or the project approved. Obviously, the better your research proposal the better your chances of obtaining funding.

Most research proposals follow a similar format. Typically a research proposal should demonstrate that the problem you propose to investigate is significant enough to warrant investigation and also justify the suitability and feasibility of the methods you intend to use. Your proposal should convince the reviewer that your proposed research will make an original contribution to your particular field of science. This may sound easy but it sometimes you may be so absorbed by the project itself that you fail to get the message across to others.

### 3. Preparation of a Research Proposal

The format of your proposal should follow a simplified format of a 2015 Discovery Grant Proposal for the Australian Research Council. The ARC information for applicants can be found at the following site:


Essentially there are eight components of the ARC proposal:

- Project Title
- Project Summary
- Aims and Background (Literature Review)
- Research Project Details
- Role of Personnel
- Research Environment
- Communication of Results
• Management of Data

PLEASE NOTE CAREFULLY. Your research proposal is not expected to be as comprehensive as the ARC proposal. You will only be expected to cover the elements outlined in the following sections. Organise your proposal using the same sections and headings.

A. PROPOSAL TITLE
Provide a short descriptive title. Avoid the use of acronyms, quotation marks and upper case characters.
This does not have to be the same as your thesis title.

Suggested Word Limit: < 25 words

B. PROPOSAL SUMMARY
Focus on the aims, significance and expected outcomes of the Project.
The summary should be written in clear, plain English using the minimum of terminology unique to the area of study. Avoid the use of quotation marks, acronyms and do not use all upper case characters in the text.

Suggested Word Limit: < 100 words

C. AIMS AND BACKGROUND
This is effectively a condensed form of a Literature Review (refer to the notes on preparation of a Literature Review in the following sections). You should try to:
• Describe the aims and background to the Proposal.
• Describe how the research is significant and how it addresses an important problem.
• Where possible define the problem that your research addresses and develop a clear research question.
• Include information about recent international progress in the field of the research, and the relationship of this Proposal to work in the field generally.
• Refer only to refereed papers that are widely available to national and international research communities.

Suggested Word Limit: No specific limit but generally 2000 – 3000 words
D. DETAILS OF THE PROJECT (includes the approach and methodology)
This section should outline the conceptual framework, design and methods. You should demonstrate that these are adequately developed, well integrated and appropriate to the aims of the Proposal. Include research plans and provide a timeline for the Project including key dates for task completion. Outline the feasibility of the project, in terms of design, budget and proposed timeline.

Include a summary of the relevant work if the rationale for some of the Proposal rests upon manuscripts that are still in the process of being published, or on results of work that may not be available to assessors. Absolutely no results of your proposed research are to be included in the proposal even though you may have collected preliminary data etc. It is about research you plan to do, not a progress report on work you have already undertaken.

Suggested Word Limit: No specific limit but generally 1000 – 2000 words

E. SIGNIFICANCE, INNOVATION and OUTCOMES
In this section you need to demonstrate how the research is significant from a scientific perspective and whether the research addresses an important problem. Describe how the anticipated outcomes will advance the knowledge base of the discipline and why the Proposal aims and concepts are novel and innovative. Where relevant detail what new methodologies or technologies will be developed.

You also need to prove that your research is meaningful, and that it will be successful. Describe the expected outcomes and the likely impact of the proposed research. Using plain language, summarise the national/community benefits that are expected to arise from the research.

Suggested Word Limit: < 500 words

F. REFERENCES
Be careful about plagiarism and make sure you acknowledge sources. Include a list of all references. The citation in the text is typically by author and date (Harvard Style), in an acceptable and uniform style of a typical journal in your field. Footnote referencing should only be used where this is the typical standard for publications relevant to your discipline area. Single line spacing and 10 point font may be used for the reference list. Your reference list is not included in the word limit.
G. RISK ASSESSMENT
Attach an appropriate HS017 Risk Management and Control Form for the project. Note that this is NOT the form you completed as part of WHS module but should be form completed by you or your supervisor as part of your research project.

4. Preparation of the Literature Review Component of your Proposal

The writing workshops held in Module D of BEES 4516 will cover the main aspects of writing a Literature Review. Additional notes will be provided as part of that Module.

The Aims and Background section is one of the most important components of your Research Proposal. The background to your project and the development of your aims are traditionally referred to as a Literature Review. Your review should provide background information on the research project and include critical appraisal of published scientific investigations which are relevant to the project being undertaken. It should identify the limitations of the literature and areas of controversy and assess them critically. It should be adequately referenced with recent and appropriate studies and have clear and logical flow.

A literature review should summarise the published work in the field of the honours project, so as to provide a background for the thesis. It should typically demonstrate that you are aware of:

- the current state of factual knowledge in their topic area and key interpretations that have been made;
- the theories developed and the extent to which there is consensus or dispute in these areas of the field;
- where there are limitations, gaps, and/or new possibilities, and,
- the methods used by various authors, and other available methods, and have an appreciation of their various strengths and weaknesses, and of any assumptions that are inherent in either the methods themselves or the interpretation of the results obtained.

i) Scope and Breadth
A general orientation to the research area and purpose of the review should be included along with the stated aims of the project. These aims should clearly relate to the areas of controversy outlined in the introduction and hypotheses developed from these aims should also be clear and valid.
The review should not become simply a list of what people have said. It is appreciated that students at this stage of their course will have a limited ability to evaluate critically the published work, but it is important that you make an effort to do so. Where later workers have disagreed with earlier workers, some assessment of the basis of this disagreement should be given, and a comment as to whether the change in interpretation or conclusion seems (on the face of the published evidence) to be justified. The most recent author is not necessarily right! Note also that a strict chronological order may not be the most rational way to present developments in the field, and undue emphasis on the dates or authors’ names detracts from the presentation of the ideas and observations.

The breadth of available literature in some fields is tremendous, and an exhaustive review of it would exceed the word limit. For this reason the review may only be expected to cover at least the 20-40 publications of most direct relevance to the honours project. Careful consideration to the selection of these 20-40 most relevant references should have been given (in consultation with supervisors). Examiners are then required to argue that a publication omitted from the review is of significantly greater import to the project than one of the 20-40 cited references before the student can be penalised for the omission.

ii) Review of Methods

The Literature Review is, quite simply, a review of the literature relevant to your project and therefore does not have to spell out the actual experimental approach that you will follow in your project. The methods and approaches should be covered in Section D of your Proposal where they should be summarised clearly and concisely and be appropriate and valid for the stated aims.

Students in ecological and physiological areas usually understand the importance of reviewing methods of investigation and types of experimental design available for their type of study. It is essential that the best methods are selected if the most is to be obtained from the project, so this may form an essential part of the literature review. Students in all discipline areas should understand that alternative methods of analysis or investigation may exist, and the particular course of action they intend to follow in their project must be justified. Some methods that still appear in current literature may be quickly dismissed as being flawed in certain respects, but it is still important that students do clearly indicate why they have chosen the particular techniques. The students should consult with their supervisor to determine whether this critique and justification of the methods chosen should be included as part of their Literature Review or the Project Details section of their proposal.
iii) Conclusion.
The conclusion of the literature review typically outlines the project you are working on and leads the reader to the position where they are convinced that the student is addressing a significant scientific question. In general, your literature review does not focus on your project details; but rather on the science and issues that your project will address.

5. Submission Requirements

i) Word limit. The proposal must not exceed 4,500 words of text. This limit excludes tables, figures and the reference list.

ii) Expression and Style. The proposal should be written in a clear and succinct style and cite references in a manner that would be acceptable to international scientific journals. Consult the Guidelines for preparation of the literature review, and the Style Manual for Authors, Editors and Printers of Australian Government Publications, Canberra, 2010.

Examiners will take into consideration the standard of writing (the clarity and correctness of expression, and the organisation of the content) in arriving at their mark. Make certain that you use spell check to remove as many typographical errors as possible, and proof read the final copy carefully. The hallmark of a poor review is to constantly lead with the author (e.g. “Smith (1970) found this but Jones (1972) found that”). Let the subject lead the sentence and start with keywords, that are linked to the previous sentence (don’t leave the link buried at the end of the sentence such as “While temperature can affect the growth of fish it is the water quality that is paramount….”). If there is no link, then start a new paragraph.

iii) Printing and Formatting. Your proposal must meet the following criteria:

- at least size 12 font (use a simple font like arial, calibri or times new roman);
- at least 1.5 times line spacing;
- printed one side only of A4 paper;
- allow an ample margin at the left for binding (say 3 cm), and on the other three sides to allow for subsequent trimming (say 2 cm);
- it must have a title page bearing the words "Literature Review and Research Proposal", plus the title of your project and your name, and a Declaration page;
- it must be contained within a secure folder. You are encouraged to use the spiral binding format that is available at the campus printers, rather than the expensive and cumbersome spring-back folders.
iv) Editing and drafting. It takes time to develop a research proposal properly. DO NOT leave it until the last minute. It is important to concentrate on obtaining and digesting the literature on your topic at an early stage. You should aim to submit a plan of your proposal to your supervisor for discussion and approval by Week 6. Hence, you need to have done most of the reading by the start of Week 5; this also helps in the preparation of your problem statement.

Your supervisor should provide you with detailed criticism of one draft of your written work, but after that the actual writing must be your own work. This does not mean that you should not seek help on specific points or discuss any problems you are having with content, organisation or style. It is recommended that a draft copy of your review be submitted to your supervisor(s) by Week 8 to allow sufficient time for detailed criticisms to be provided and for you to act on them, and also for you to correct and proof-read the final copy.

This is in all probability the first time you have had to “polish up” a significant piece of writing. The time to find out about a proposal’s shortcomings is before you submit it, not when you are told that it was unsuccessful and you read the assessors’ comments! Make certain you allow sufficient time for your supervisor(s) to read and comment on your draft, and for the necessary rewrite in the light of the criticisms. If you are concerned about the standard of your written expression, give your supervisor your draft work in sections so that you can correct faults in the later parts. The better the draft, the more detailed consideration it will receive from those reading it. Start work early! Do not concentrate on your experimental work to the detriment of assembling and reading the literature and preparing the review.

There are also many people (staff and research students) in the School who you will find willing to help you with problems and review your work. You can obtain comments from people other than your supervisor so long as it is exactly the same draft that is being commented on. It is important that you acknowledge the help you have been given.

v) Submission Location and Date. One hard-copy (paper-copy) for each examiner plus supervisor needs to be submitted to the BSB Student Office (Rm G27) by 12 noon on Tuesday 7th October (start of Week 10). For most students this would mean three copies: one for each examiner and one for their supervisor. Ensure that you have completed, signed and attached a declaration page (see over for example) to your review/proposal. Do not use the general undergraduate assignment box but lodge any work in person with BSB office staff. A receipt will be issued; do not leave your work without a receipt.

If you have an external co-supervisor please ensure that BSB Office staff have the appropriate contact details (including email and mail address).
Students must discuss with their supervisor the impact of field work or other specialised requirements of their project on their ability to meet this deadline. Requests for late submission will not be viewed favourably.

Under special circumstances some students may have chosen (or been forced to because of UOC restrictions) to not enrol in BEES 4522. These students should consider submitting a condensed version of a Review or Proposal to your supervisor and examiners. This provides valuable feedback at an often critical stage of your project and also helps keep you in touch with (and on good terms with) your examiners.

vi) Assessment.
Your work will be assessed by two internal examiners and your supervisor(s). You will be notified when this panel has finalised a mark which should be by the end of session. You should be notified of the panel's agreed mark by your supervisor, and all copies of the review should be returned to you by the end of the Session One exam period, with annotations and a written critique, so that you may benefit from these comments when writing your thesis. Contact the honours coordinator if you do not get this feedback.

Your examiners will not comment on the draft of your proposal or your draft thesis. Remember that they are not necessarily expert in your field, but are chosen to provide breadth of expertise and to help maintain uniform standards across the school.

An example of the marking sheets used in S1 2014 to assess a Research Proposal and a Literature Review are included on the following pages. NOTE: we may use a slightly different assessment sheet in S2 2014 but the overall elements will not change
The University of New South Wales
Faculty of Science
School of Biological, Earth and Environmental Sciences

BEES4522 - Project Proposal and Literature Review

Declaration page

I hereby declare that this submission is my own work and to the best of my knowledge it contains no plagiarised material. I have a back up copy of this document.

Word count: ........................

Student Name (please print) ..........................................................

Student Signature ...........................................................................

Date ........................................
BEES Honours

BEES 4521 Research Proposal

Examiner Assessment Form

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Project Title (abbreviated)</th>
<th>Supervisor(s)</th>
<th>Examiners</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Edwards</td>
<td>Impact of flatulence on global warming</td>
<td>Fred Nerk</td>
<td>Earl Grey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elvis Presley</td>
<td>William Shakespeare</td>
</tr>
</tbody>
</table>

1. Notes and Instructions to Examiners

Students enrolled in the BEES honours program were required to complete a Research Proposal for the course BEES 4522. The format of the proposal was based upon a simplified format of a 2014 Discovery Grant Proposal for the Australian Research Council. The ARC information for applicants can be found at the following site:

http://www.arc.gov.au/pdf/DP14/DP14_Instructions_To_Applicants.pdf

Essentially the student had to complete the following components:

- Project Title
- Project Summary
- Aims and Background (this includes an extensive Literature Review)
- Research Project Details (includes approach and methodology)
- Significance Innovation and Outcomes
- References
- Risk assessment

Please assess the standard of the various elements of the research proposal by indicating the % mark range in the spaces on the following pages. Clearly outline critical faults/weaknesses of any of the elements on the last page. Attach additional sheets if required. Please ensure you provide comments and useful feedback throughout the Research Proposal (or on a separate sheet) that may benefit the student when they adapt this material into their final thesis.

Provide an overall suggested mark at the end of this sheet. **Note that no one portion of the assessment should be given overriding importance in determining the final mark.**

The student’s supervisor should convene a meeting of examiners as soon as practical to determine a mark out of 100 for the Proposal. The panel should arrive at an AGREED mark rather than arbitrarily averaging disparate marks. This mark should be communicated via email to beesinfo@unsw.edu.au as soon as possible to enable collation and finalization of student grades.

Once the agreed mark has been entered the copies of the proposal (but not the marking forms) can be returned to the student via the supervisor. Supervisors should retain copies of all the marking forms.
2. Key Elements of the Proposal.

Summary: (100 word limit) Is this clear and concise? Does it adequately reflect the project as portrayed in the rest of the proposal?

```
Grade | <75 | 75-80 | 80-85 | 85-90 | >90 |
```

Aims and Background (including literature review and problem definition)
Are the topic and problem introduced and clearly defined? Have they provided the context for the proposed research with key ideas and concepts explained in a lucid, accurate and succinct manner?

Have they provided an insightful and critical review of the relevant literature in which appropriate sources, including key works, are examined and covered in adequate depth? Is the significance of these sources thoroughly discussed and critiqued? Is an understanding of the research literature clearly demonstrated?

Does the review present a clear and rational argument where ideas flow in a logical order? Is there a progression from general to specific concepts with smooth transitions between elements?

Does the review provide a clear analysis and synthesis of ideas? Does it demonstrate higher level thinking and original insight into the problem in the context of the appropriate scholarly literature?

Does the review highlight where there are limitations, gaps, and/or new possibilities? Is there a clear and logical explanation for the rationale and contribution of the current study?

Are any conclusions strongly supported and do they follow directly from the information presented?

Are the aims/objectives and any hypotheses clearly stated? Do the aims/objectives logically follow from the problem? Do the aims seem achievable?

```
Grade | <75 | 75-80 | 80-85 | 85-90 | >90 |
```

Details of the Project (including approach and methodology).
Has the student clearly outlined the conceptual framework, design and methods? Do these appear appropriate? Are these framed correctly in terms of the hypothesis?

Are aspects of experimental design and statistical analysis clearly explained? Have they critically reviewed previous/alternative methods and approaches?

Have they considered the logistics of the project including personnel and resources? Do the personnel and resources match the information provided in the method?

Are any risk management or ethical issues properly considered?

Is a timeline set out clearly and have all the elements of the project been included? Does the allocation of time appear appropriate and have any contingency plans been noted?

```
Grade | <75 | 75-80 | 80-85 | 85-90 | >90 |
```
**Significance, Innovation and Outcomes**

Has the student attempted to demonstrate how this project resolves a problem or improves our understanding of an issue/phenomenon?

Are aims or the key concepts novel and innovative? Are new methodologies or technologies developed?

Outcomes may be scientific, social or policy/management related. Are these valid in the context of the problem and aims? Do these appear valid and genuine: not trite and trivial?

Has the student convinced you that the research is meaningful and likely to succeed?

<table>
<thead>
<tr>
<th>Grade</th>
<th>&lt;75</th>
<th>75-80</th>
<th>80-85</th>
<th>85-90</th>
<th>&gt;90</th>
</tr>
</thead>
</table>

**References**

Are the references uniformly and correctly cited throughout?

Does the reference list show them correctly, uniformly, without omission and without inclusion of uncited work?

Does the reference format comply with that of the selected journal? (Note: a smaller font was permitted for references)

<table>
<thead>
<tr>
<th>Grade</th>
<th>&lt;75</th>
<th>75-80</th>
<th>80-85</th>
<th>85-90</th>
<th>&gt;90</th>
</tr>
</thead>
</table>

**Risk Assessment**

Has an appropriate Risk Assessment been included? Even projects based upon modelling in computer labs require this. Note that you are not required to assess the adequacy of the Risk Assessment.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
</tr>
</thead>
</table>

**3. Elements of structure and presentation**

**Overall structure and Clarity of Written Expression**

Are ideas organized into a coherent sequence that provides a consistent and unified argument?

Are there clear links between relevant information in the introduction and the methods?

Are the ideas presented in a clear and cogent manner using paragraph structures and/or subheadings?

Is the review written clearly and succinctly? Is it correctly punctuated and virtually without spelling, grammatical or typographical errors?

<table>
<thead>
<tr>
<th>Grade</th>
<th>&lt;75</th>
<th>75-80</th>
<th>80-85</th>
<th>85-90</th>
<th>&gt;90</th>
</tr>
</thead>
</table>
Illustrations and Tables
Are the figures and tables necessary and relevant? Are they used correctly and sufficiently to support the text?
Are they of excellent quality, being clear and accurate? Are they obviously referred to in the text and are the sources correctly cited where appropriate?

<table>
<thead>
<tr>
<th>Grade</th>
<th>&lt;75</th>
<th>75-80</th>
<th>80-85</th>
<th>85-90</th>
<th>&gt;90</th>
</tr>
</thead>
</table>

Word Limit
Has the student complied with the word limit of 4,500 words? (This includes all text but excludes the reference list and diagrams). Submissions exceeding this limit should be clearly identified and could be penalised.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
</tr>
</thead>
</table>

4. Additional Comments:
Use the space below to summarise the key strengths and the main faults/weaknesses in the proposal or to make any further comments (use additional sheets if required).

Examiners Suggested Mark: ____________________ %

Examiners Name: ____________________________________________________________

Examiners Signature: ___________________________ Date: ________________
HONOURS RESEARCH AND THESIS

Your honours research will dominate your year. You should carefully plan all elements of your research (e.g. fieldwork, lab work, data analysis) to avoid unnecessary down time or a frantic rush at the end of the year.

There are several elements of assessment along the way that should keep you on track with your honours research including an introductory seminar, your problem statement, your literature review and proposal, your thesis and your final seminar. The following sections explain your seminars and thesis in more detail.

1. Introductory and Seminar

The introductory seminar is compulsory for all honours students and should completed in Week One of your first session. The exact dates and times will be announced in workshops during O-Week.

The introductory seminar will be a public presentation of no more than 15 minutes duration (10 min seminar, plus 5 min questions). It will outline the research project you are undertaking and should set out the aims of the project and detail the methods by which they will be achieved. It is not intended to be an oral presentation of the literature, although reference to previous work will usually be appropriate in setting out the problem that is being addressed. It is intended to produce constructive criticism of your project at a time when you can still implement suggestions.

If you wish to use Powerpoint as part of your seminar then you should load the relevant files on to the PC in the seminar room before you give your presentation – your 10 minutes begins when you arrive at the lectern, so don’t waste it on uploading. One possible format is to devote nearly 50% of your seminar duration on the background and needs of your research, then Question 1, Expectation; Method, Question 2, Expectation; Method etc etc.

This seminar forms part of BEES4516 and is marked accordingly. Students will also receive written criticisms of their presentation and content as part of the effort to improve oral skills.
2. The Thesis

a) General Format and Style.

The written report on the project should be written in the form of a paper published in a scientific journal. Your paper must therefore be written in a clear and succinct style. Your supervisor will provide general guidance on the organisation of the thesis, and will make detailed criticisms of one draft of each section. Make certain you commence writing early enough to allow for considered reading and improvement of your initial draft. In general the format should be that of a manuscript ready for submission to a journal (such as Austral Ecology or Australian Journal of Earth Sciences) with Abstract, Introduction, Methods, Results, Discussion, References, Tables and Figures.

A “thesis” is almost an anachronism, and most universities expect postgraduate theses to be a collection of research papers. Honours theses are no exception. It is perfectly acceptable to write your thesis in the form of a simple manuscript, without chapters, as if it is being submitted to a journal as a research paper. The exact format and style of your thesis should be decided upon after consultation with your supervisor.

It is expected that the School of BEES will specify a list of suitable journals relevant to each of the School’s sub disciplines that should be followed in terms of format and layout. This list should was not available at the time of printing of this handbook but is expected to be available by the start of S2 2014. You will be required to state which journal format you have followed for your thesis.

b) Word Limit and Document Layout.

There is an absolute limit of 9,000 words of text that applies for ALL theses.

This limit excludes tables, figures, references and any appendices. Examiners and modern scientists expect a short terse document rather than a long discussion and so shorter theses will be welcomed.

The thesis must be bound, together with any appendices (eg extended data tables or imagery) within a secure binder. Spiral binding is preferred rather than edge staples. The front cover should clearly bear the student's name and the thesis title as well as the student's supervisors. You may wish to include an illustration but this is optional only. An example of a thesis cover sheet is shown on the following pages.

The following document format rules must be followed:

- Use standard A4 paper;
- Print on one side of the paper only;
• Use at least size 12 font (use a simple font like arial, calibri or times new roman);
• Use at least 1.5 times line spacing;
• Allow at least one extra line between paragraphs;
• Use at least 2.5 cm margins to allow for binding and space for examiners comments;
• You do not have to use the column format of a journal article. Use the full page width;
• The thesis must have the pages numbered.

In general use the following order of pages:
• Page 1 Project title and student's name, date, etc.;
• Page 2, Declaration page;
• Page 4, Acknowledgements;
• Page 5, Abstract;
• Page 6, Commencement of paper;
• Geology students may also wish to include a field thesis directory form, to be inserted before any appendices. (See example on the following pages.)

c) Tables and Figures
Marks are awarded for clear and appropriate figures and tables, not fancy presentation or technicolour images. Keep it simple. Inserting figures/tables into the text takes time. In general figures and tables should not scroll across a page. Insert the figure and caption into the body of the text where appropriate. This may produce difficulties in page formatting (such as headings appearing at the bottom of a page and leaving half a blank page etc.).

Figures and tables should also be numbered using an independent sequence for each. There is NO need to provide a separate list of figures or tables as in older theses.

d) References and Citation
The thesis must have reference citation in the text using the Harvard or author and date method, in an acceptable and uniform style of a typical journal in your field. Use of footnotes for referencing will only be allowed where this follows the format of one the allowed journal templates.
e) Submission Details:

- **When and where.** You must submit your thesis at the BEES Student Office (Room G27) by 12 noon on Tuesday of Week 13 in S1 2015. You will receive a receipt for your submission from the office staff. Late submission will incur penalty marks as explained in Section B5 of this handbook.

- **Submission copies.** Submit one copy for each examiner, plus the supervisor(s). So for most students this will be three or four copies. Thesis submission will be incomplete until the correct number of copies has been received. You will receive a receipt from the School secretary, noting these submissions.

You must also submit one digital copy, on CD or DVD. You can choose to re-submit a “corrected” print and digital version of your thesis after it has been examined. This will not be remarked but you may prefer to have a corrected version lodged in the School library or with your supervisor.

The digital version of your thesis will be kept in the BEES Honours library. Some components of your thesis (e.g., geology maps and diagrams) may be very difficult to submit digitally in the original software format. In these cases, just lodge these elements of your thesis into an easy-to-read format such as a scanned image.

- **Contact Details.** The student and/or supervisor is responsible for ensuring BEES Office staff have a current email or address for getting a copy to your external co-supervisor by express post, e-mail etc. This also applies where examiners and supervisors are travelling overseas at the time of thesis submission.

f) Drafting and Printing.

It is generally a good rule to start with the Methods and Results sections well in advance of the deadline. Even if you are a speed typist, there are many other things you will need to do, such as illustrations, analyses, proof reading and correcting. **DO NOT leave the printing and photocopying of your thesis until the final day.** Try to get this done on the Friday before your thesis is due. First, it is a lengthy business, and collating and inserting figures takes many hours. Second, laser printers and photocopiers have a habit of going wrong when you need them most. Third, other people may be using them for large print runs, and you are not the only student. There has been a long line of tearful stressed-out students pleading for an extension because they have been unable to print their thesis in time. This excuse is not viewed sympathetically and penalties for late submission will be applied.
If you prepare your written work on one computer (say, at home) and print it from another computer (say, in the lab), this is very likely to cause changes in format so that all the careful spacing and pagination has to be tediously redone. This may be true even when the same word processing program has been used. The problems will be much worse if different programs have been used. Leave the detailed formatting until you are printing, and allow the time required. Alternatively try saving your final document as a pdf file. This normally prints the same on virtually all machines.

g) Appendices.
Appendices may be used to include material that is peripheral to the project, or to present full details of methods used or large assemblages of primary data or in the GeoSciences theses for the systematic description of thin sections or perhaps in the biological sciences for extended species description tables. Appendices will not be examined, although examiners may refer to them for evidence that the student has carried out proper techniques, or to examine the primary data. Appendices are not to be used as a way of exceeding the word limit on the thesis. Excessive appendices are discouraged.

It is recommended that the project proposal should be included as an appendix with your thesis. The proposal will not be re-assessed but typos and major flaws should be corrected - of course!. You must include (if possible) the raw data in an appendix for both paper and digital versions of your thesis. If this is impractical, then leave the raw data only in the digital version. Some thorough students may wish to include data in a more accessible form (.txt, or .xls) and images on a CD that is left in the back cover of two copies (e.g. their own and the supervisor’s) - but this is not compulsory

h) Acknowledgments.
Most students will include an Acknowledgments section. Typically in this section, students will thank their supervisors and all the other people that assisted them with their project (eg fieldwork assistance). Don’t let this section get out of hand such as “thanking friends that stood by you in the tough times” etc. More importantly make sure you acknowledge any Ethics approval and permissions given by property managers such as National Parks to conduct the research on restricted land or where specific licenses were required.

i) Thesis Examination and Release of Marks.
Examiners will look for:
   • a clear definition of a problem;
• careful documentation of methods and materials, and a critical assessment/justification of methods used where appropriate;
• appropriate analysis of the data;
• proper interpretation of results leading to justifiable conclusions;
• critical discussion of results in the context of previous work in the field;
• evidence of ability to perform experiments, make good quality preparations or accurate observations as appropriate to the field;
• ability to write a well organised report in a clear succinct style and prepare good quality illustrations.

An example of a thesis marking guide is included in the following pages BUT NOTE that this marking guide will be revised throughout 2014. Students should be able to see an example of the revised guide before they submit their thesis in October.

After your final seminar, the mark for your thesis is determined at a meeting between your supervisor and the examiners. A few days later your overall honours grade is determined at a BEES school meeting. Note that your mark is not finalized until it has passed through the Faculty Assessment Review Committee and hence is subject to change up until this time. It is BEES School Policy that student marks will not be released to students except by the normal UNSW grade notification process. All marks are subject to change up until this time and so marks released to students by supervisors may not be correct.

You may collect the copies of your thesis from your supervisor any time after the BEES honours grading meeting. It is customary for your supervisor to retain a copy of your thesis.
Title of Biological, Marine, Geographical or Geological honours thesis

Insert photo or diagram (optional)

Jane M. Smith

Supervisor(s):
Dr Mike Michaels,
Professor Mary Jones-Smith

Submitted in partial fulfilment of the requirements for the degree of Bachelor of xxxx,
School of Biological, Earth and Environmental Sciences,
Faculty of Science,
The University of New South Wales

June (or November) 20XX
The University of New South Wales
Faculty of Science
School of Biological, Earth and Environmental Sciences

Honours thesis project declaration page

I hereby declare that this submission is my own work and to the best of my knowledge it contains no materials previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at UNSW or any other educational institution, except where the acknowledgement is made in the thesis. Any contribution made to the research by others, with whom I have worked at UNSW or elsewhere, is explicitly acknowledged in the thesis.

I also declare that the intellectual content of this thesis is the product of my own work, except to the extent that assistance from others in the project’s design and conceptions or in style, presentation and linguistic expression is acknowledged. I have also submitted a digital copy of this thesis.

Word count excluding references, tables and captions: ...........................................

(Signed).................................................. Date.................................

Thesis committee (type out their names, not signatures):

Supervisor...........................................Co-supervisor..................................

Examiners: ...........................................

..................................................

I am fully aware that the School retains a copy of the thesis and is free to allow them to be consulted or borrowed. The thesis may be restricted for up to 2 years or longer by a written request to the Head of School.
GEOLOGY HONOURS THESIS

Year……………………………..

THESIS TITLE……………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………………………
AUTHOR: ………………………………………………………………………………………………………………………………………
SUPERVISOR (S):……………………………………………………………………………………………………………………………………

ABSTRACT:

CO-ORDINATES OF MAPPED AREA
NAME OF SHEET……………………………………………………………………………………………………………………………………
SCALE:………………………………………………………………………………………………………………………………………………

References of map margins:

LATITUDE:
LONGITUDE:……………………………………………………………………………………………………………………………………
Area of Map:

SKETCH MAP OF LOCATION: (Showing grid and naming source of grid, or latitude and longitude, plus a few conspicuous geographical features such as towns, main roads, rivers, Etc. and stating any distances in km).
### Honours Thesis Examination Sheet

#### October 2014

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Thesis Title (abbrev)</th>
<th>Supervisor(s)</th>
<th>Examiners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fred Nerk</td>
<td>Do bush rats prefer to smell crickets or guppies?</td>
<td>M. Hunt</td>
<td>J. Russell, D. Page</td>
</tr>
</tbody>
</table>

Please indicate the standard of the thesis by providing a percentage mark for each of the items below. Itemise the key strengths and the critical faults/weaknesses on the back of this sheet (or separate sheet if required).

Provide an overall suggested mark on the bottom of this sheet. **Note that no one portion of the assessment should be given overriding importance in determining the final mark**

1. **Overall structure**
   
   (Does the thesis have a consistent and unified argument whereby ideas are organized into a coherent sequence? Are links between relevant information in methods, results and discussion clear, and do conclusions follow directly from the information presented?)

2. **Overall expression and Presentation**
   
   (The expression should be clear and succinct, approximating the style of a published paper, correctly punctuated and virtually without grammatical or typographical errors).

3. **Introduction and definition of the problem**
   
   (Is this lucid, accurate and succinct?)

4. **Methods**
   
   (Are these clear and well documented? It should contain no errors or omission, and provide proper justification and/or assessment of their accuracy and appropriateness.)

5. **Results**
   
   (Are these well organised and clearly set out, presented in sufficient detail and have appropriate analyses if applicable?)

6. **Discussion and Conclusions**
   
   (Is this well organised, concise and complete, without significant error? Does it critically evaluate the results in light of the literature and the problem established in the Introduction? Are the conclusions cogent and fully justified by available data?)

7. **Abstract**
   
   (Is this an adequate reflection of the thesis? Is it expressed clearly and succinctly?)
8. **Figures and Illustrations**

   __________ %

   (Are they of excellent quality, being clear and accurate? Are they all necessary, or referred to in the text and sufficient?)

9. **References**

   __________ %

   (Uniformly and correctly cited throughout? Does the reference list record them correctly, uniformly, without omission and without the inclusion of uncited work?)

10. **Key Strengths of Thesis** (use additional sheets if required)

11. **Critical Weaknesses of Thesis** (use additional sheets if required)

12. **Overall Comments** (use additional sheets if required)

   Examiner’s Name: _________________________  Examiner Mark: ______%

   (see note 1)

   Examiner’s Signature: _______________________  Agreed Mark %

   (see note 2)

   This is an important document (if the mark is challenged) so please ensure the student’s supervisor has a copy of all examiners’ reports.

   Note 1: The overall mark is not simply an average of the various component marks but an overall appraisal of the thesis using the component marks as a guide. ≥ 85% = High Distinction, 75 to 84% = Distinction, 65 to 74% = Credit.

   Note 2: The agreed mark is not simply an average of the Examiners’ and Supervisor’s marks but is a mark agreed upon after careful deliberation at a meeting of the examination panel.
3. Final Seminar

This is compulsory for all honours students and is normally completed in Week “15” of your final session. The order of presentations will be determined by the Honours Coordinator and exact dates and times will be advertised in Week 13 of Session.

Students will present to interested members of the School a seminar summarising their project. Particular emphasis should be given to the results of the project and a discussion of their significance. The presentations are not to exceed 15 minutes, and will be followed by a period of 5 minutes of questioning, initially by the examiners and then by other members of the academic staff or research associates. Honours and research students of this school are welcome to attend these orals.

The seminars are usually held in a BioMed lecture theatre. If you wish to use Powerpoint as part of your seminar then you should load the relevant files on to the PC in the seminar room before you give your presentation – your 15 minutes begins when you arrive at the lectern, so don’t waste it on uploading.

The final seminar is worth 5% of your overall Honours Grade.
Beyond Honours

After completing your honours year you may seek employment or decide to pursue post graduate qualification.

1. Letters of reference

The School cannot provide unsolicited letters of reference for past honours students (legal reasons). The student must give us written authority. So do not use any of us as referees unless you make a written (e-mailed) request, including details of the position.

2. Postgraduate Studies

Again talk to your supervisor and write to other universities as well. Australians tend not to travel between their BSc and PhD which is most unfortunate, and in fact academically unhealthy. You should apply for an Australian Postgraduate Award (APA, ~$25,000 pa tax free, full time, for Australian and NZ citizens and residents only) by late October (or late April for Session 2 start). University Postgraduate Awards are identical in all ways, but funded from a separate pot. I realize that October is a busy time for you, but it is worth the investment (see dot points below).

See https://scholarships.online.unsw.edu.au/ for application form, conditions and details.

- You will have to apply to other universities separately for an APA, and you can apply to as many as you wish. E-mail possible supervisors there, visit them if you can or await an offer and then visit their lab. Other universities may have a lower cut-off mark for an APA. Remember that graduate students are the life blood of a university – they do the hard and insightful work, and bring in considerable funds to the school. So if you get an APA offer, you are often courted and flattered!
- There are Commonwealth Travelling Scholarships for overseas travel (NZ, Canada, UK), but are very competitive. Study in the US is difficult and expensive.
- There are APA(Industry) scholarships at around $23,000 pa, with at least $5,000 pa research costs, and don’t require a first class honours pass. These are advertised individually in the major newspapers and by e-mail.
• For an APA at UNSW it is often assumed that you need at least 86% in your overall honours mark (leave that section of the form blank as your mark won’t be known until November, when the School forwards the information), supplemented by nice letters of recommendation from your supervisor and one other referee. A publication and or work experience would also help. A brief general abstract is also required, but does not form part of the assessment (i.e., they won’t hold you to it).

• APAs at UNSW will be assessed by a formula based on your thesis mark (67%), the average of your Level III marks (33%), plus a further score out of 20 based on research experience, publications, referees reports and if your project fits the laboratory. Most universities use a similar formula.

• You also need to apply to do a post graduate degree on a separate form with your nominated supervisor. Even if unsure, apply anyway, or apply to a couple of universities and you can always decline without prejudice.

• You need a separate application to apply for APAs at other universities – go to their web site.

• If successful you will be told by mail in usually late December. But don’t panic if no letter – there is a second and third round of offers later on. You are required to take up the scholarship within 6 months of the offer (in special cases your supervisor can plead and guarantee you will take it up in 8 or 9 months, otherwise the University loses your declined scholarship to Canberra).

• It makes your CV look great to be offered an APA, even if you decide to turn it down for a year and travel or work etc. If you do decline, you will have to reapply again and re-enter the competition the next year.

• You can hold only one APA in your life (i.e., you can’t have one for an MSc here, and a PhD there). If you accept and use more than 3 months of an APA, then you are ineligible to apply for another later on.
Section G

BEES 9011
Professional Skills for Postgraduate Students

Times: As for BEES 4516
Venue: As for BEES 4516.

Newly enrolled postgraduate students may be required to attend the Professional Skills for Postgraduates BEES9011 course, which is presented in both sessions. This is a similar course to BEES4516 Professional Skills for the honours program, and is divided into six modules (A to F). Students are required to attend the course in either Session 1 or 2 of the first year of their enrolment. Because the schedule may change slightly from year to year, new students should consult the Honours Coordinator or the BEES website for dates.

The first class of Module A will be held from 10 am to 12.00 noon on the Monday of O-Week. It is especially important as the Work Health and Safety lecture is given, and it is at this time that the course coordinator can meet with you. Students who have already completed the Professional Skills course (BEES4516) of the School’s Honours Program, or an equivalent from a related institution may be exempted from the rest of the course. Exemption will be discussed after the first class meeting in O-Week.

All other new postgraduate students must attend the five core modules of BEES4516 (Modules A, B, C and D and F), as listed in the assessment table below. Note this excludes the Professional Development module of BEES 4516 but students may still to choose to attend this module if they wish.

External students: Special arrangements may be necessary for the attendance of students based off-campus. If you are in that position please see the Postgraduate Studies Coordinator.
**Assessment:**

Your performance in BEES9011 will be assessed on the basis of Satisfactory Performance in most modules, and recorded in your individual School file. As outlined below you will need to complete tasks for Modules A, B, C and E; and attend modules D and F.

<table>
<thead>
<tr>
<th>Module</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Risk Management Exercise</td>
<td>Satisfactory / Unsatisfactory</td>
</tr>
<tr>
<td>B) Library Research Skills/Research Consultation</td>
<td>Completion</td>
</tr>
<tr>
<td>C) Introductory Seminar</td>
<td>Satisfactory / Unsatisfactory</td>
</tr>
<tr>
<td>D) Writing Skills</td>
<td>Attendance</td>
</tr>
<tr>
<td>E) Ethics</td>
<td>Satisfactory / Unsatisfactory</td>
</tr>
<tr>
<td>F) School Seminars</td>
<td>Completion</td>
</tr>
</tbody>
</table>

In Modules A, C and E your work will be graded along with the honours students enrolled in BEES 4516. A grade of at least 75% is required to pass these modules.

Each student will be given a form that identifies the tasks for each assessable module. This form must be “signed off” by the appropriate module convenors and then returned to the Honours Coordinator at the completion of the course.

Postgraduate students will typically also present an Introductory Seminar as part of the Postgraduate Forum organized by the Postgraduate Studies Coordinator. This is assessed separately to BEES 9011 and is independent of the Introductory Seminar presented as part of BEES 9011.
Comment form for BEES4516 Professional Skills and for the honours year in general:

Please fill in below and add your comments,

We would really appreciate your comments about the honours experience, particularly constructive comments so it can be improved in the future

1) Program: 3970, 3990, 3988, (Please circle); Other___________

2) Honours in Biology, Genetics, Geology, Physical Geography, Botany, Ecology, Zoology, Marine Science & Environmental Science (Please circle); Other___________

3) What are your comments on BEES4516? Satisfactory? Or lacking?
   a) Module A?
   b) Module B?
   c) Module C?
   d) Module D?
   e) Module E?
   f) Module F?

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

4) Are there generic problems with the honours project that we need to know?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

If you would like some feedback please leave me your e-mail address:
KEY DATES

Session One of Hons Year

O-Week: Introduction and BEES 4516 Workshops

Week 1
- Introductory Seminars
- Project Information Form due
- Ethics Exam

Week 3
- Problem Statement Due

Week 4
- Risk Management Exercise Due

Week 10
- Literature Review and Project Proposal Due
- Careers Workshops

Session Two of Honours Year

Week 13
- Thesis Due

Week “15”
- Final Seminar