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MONASH University

Medicine, Nursing and Health Sciences

# Mid-year 2016-17 Honours

## Immunology and Human Pathology Handbook

## Central Clinical School

AlfredHealth Burnet Institute Baker IDI HEART & DIABETES INSTITUTE nhri MAPrc ACBD

# Central Clinical School Mid-year 2016-17 Honours Handbook

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# WELCOME

***This is an official guidebook for BSc students only.***

*Dear Students,*

*Welcome to your Honours year based at the Central Clinical School. As you should already be aware, this year will be quite different from your undergraduate experience and will allow you to sample, first hand, the field of biomedical research. For many of you, this will be the start of a career in medical research and will lead onto higher degrees such as a PhD. For all of you, this year will be invaluable in developing your skills in critical analysis, organisation and communication that will stand in you in good stead in whatever career path you choose. You should all be congratulated on reaching this point and we hope it is an enjoyable year for you.*

*The year is focused on research with the bulk of the assessments centred on the research project. Approximately 85% of the assessment may be directly associated with your project. You will primarily be located in a research laboratory and be supervised by researchers conducting active research projects. You should not view your role as a token gesture for the year from your supervisor. Each project has its worth and is answering important questions likely to be used in future publications and funding applications. As a researcher, you will probably experience many of the highs and lows of research as you strive to complete your projects. Frustration and doubt are quite normal experiences. Results may be unpredictable and "negative" results should not be seen as failure. Research is about experimental design, data collection, analysis and interpretation. Attention to detail is paramount as trouble-shooting experiments and techniques are a critical part. Your task with the project is to address a question and compose a thesis based on your findings. Finally through oral presentations, you will develop the valuable skill of compiling data and presenting it to your peers. This should not be underestimated as a skill; remember the last boring talk that you attended!*

*Once again, welcome and do not hesitate to contact us if you have any problems*.

Dr Justin Hamilton
Honours coordinator (Human Pathology)
Email: justin.hamilton@monash.edu

A/Prof Margaret Hibbs
Honours Coordinator (Immunology)
Email : margaret.hibbs@monash.edu

# COURSE OBJECTIVES

**BROAD AIM:**

To provide students with a solid grounding for a career in biomedical research or laboratory based employment. This will be achieved through a specific research project and discipline based tasks.

**COURSE OBJECTIVES:**

On completion of the Honours year of the Bachelor of Science, Bachelor of Biomedical Science or Masters Part 1, students will:

1. Be able to critically review the scientific literature in their research area.
2. Understand and execute the processes involved in the design, development and implementation of a research project.
3. Be able to execute and analyse a set of laboratory-based, or other appropriate studies.
4. Be proficient in computer based data acquisition, analysis, presentation, and word processing.
5. Be able to write up scientific work in a potentially publishable way.
6. Be able to demonstrate communication skills in both oral and written presentations.
7. Have acquired a range of technical skills appropriate to their research area.
8. Have the capability to perform a variety of scientific procedures and techniques that are essential to the satisfactory completion and reporting of a research project.
9. Have the opportunity to pursue higher studies and learning in selected research areas of science.
10. Have gained insight into the breadth and diversity of the sciences through exposure to research and seminars conducted outside their specific field.

# CALENDAR OF EVENTS FOR Mid-Year 2016-2017
**BSc(HONS)**

## I. BSc(Hons)

| Event | % total mark | Date and room location# |
|---|---|---|
| **Monash University Animal Ethics Information Session - "Animal Use in Research & Teaching**<br>(Attendance compulsory) | | **Date:** Monday 18th July 2016<br>**Time**: 10am-12.30pm<br>**Venue:** Lecture theatre S1, 16 Rainforest walk, Clayton Campus<br>Contact: animal.ethics@monash.edu |
| **OH&S sessions**<br>**Student Safety Risk Management** | | **Date:** Wednesday 20th July 2016<br>**Time:** 2-4pm<br>**Venue:** Lecture theatre M1, 35 Rainforest Walk (Bld 13D) |
| **Biosafety 1 - OGTR session**<br>*(students to attend one session only)* | | **Date:** Thursday 21st July and Friday 22nd July<br>**Time**: Both held at 12noon - 2pm & 12noon - 2pm.<br>**Venue:** Both sessions held in Engineering Lecture theatre E3, 21 College Walk (bld 32). |
| **Biosafety 2 - OGTR session** | | **TBA** |
| **CCS Honours orientation**<br>(Attendance compulsory) | | **Date:** Monday 25th July 2016<br>**Time:** 10am-12pm<br>**Venue**: Boardroom 1, level 6, Alfred centre |
| **Finding information for your literature review**<br>**Venue**: computer lab, level 5, Alfred centre | | **Finding information for your literature review**<br>Thursday 28th July, 9.30-11:00 am<br>**Introduction to Endnote sessions**<br>Thursday 28 July, 11:15 am-12.45 pm |
| **Literature Review Writing class**<br>**Venue**: computer lab, level 5, Alfred centre | | Monday 8th August, 10:00am – 11:30am |
| **Literature review with Project outline deadline**<br>*Submit an electronic copy via Moodle* | 7.5% | **Thursday 8th September 2016** by 4pm via Moodle |
| **Seminar:**<br>Literature review of project outlined and methodology | S/NS | **Thursday 22nd September 2016**<br>Time: 11am-12pm<br>Venue: Lecture theatre, Level 5, Alfred centre |
| **PART 1: Coursework component**<br>**Discipline specific (attendance compulsory at all six lectures)** | 10% | Lectures begin **23 March – 04 May**<br>**Time: 1-2pm**<br><br>Thu 23 March – Lecture 1 - Seminar room 1, Level 5, Alfred centre<br>Thu 30 March – Lecture 2 - Seminar room 1, Level 5, Alfred centre<br>Thu 06 April – Lecture 3 - Seminar room 1, Level 5, Alfred centre<br>Thu 13 April – Lecture 4 - Seminar room 1, Level 5, Alfred centre<br>Thu 20 April – Lecture 5 - Seminar room 1, Level 5, Alfred centre<br>Thu 04 May – Lecture 6 - Seminar room 1, Level 5, Alfred centre<br><br>Written Assessment due: Mon 15 May via Moodle<br>Oral assessment: Fri 19 May Lecture Theatre, Level 5, Alfred Centre |
| **PART 2: Coursework Component : Stats course**<br>Contact: Molla Huq – molla.huq@monash.edu | 7.5% | Begins Friday 3rd March and ends 5th May - 8 lectures<br>**Time:** 4-6pm<br>No lectures in mid semester break (14th April Good Friday and 21st April)<br>**Venue:** Lecture theatre H3, 20 Chancellor's Walk<br>*All lectures will be livestreamed for Alfred students, see venue details below. |
| **Critique writing workshop** | | **Date:** Monday 29th May<br>**Time:** 9:30am-1:30pm<br>**Venue:** Firkin Room, Level 6, Burnet Centre, 89 Commercial Road |
| **PART 3: COMMON CORE COMPONENT**:<br>**Written Critique** | 7.5% | **Date: Tuesday 6th June**<br>**Time:** 9.30am-1.30pm<br>**Venue:** Seminar room 1, Level 5, Alfred centre |

| | | |
|---|---|---|
| **THESIS DEADLINE**<br>*(Late submissions will incur a penalty)* | 60% | **Thursday 18th May 2017 at 4 pm**<br>Submit via Moodle |
| **Final seminar abstract due (on-line submission)** | | **Wednesday 24th May 2017 at 4 pm**<br>Electronic delivery - details TBA |
| **Common Core Stats Course assignment deadline** | | **Friday 26th May at 4 pm**<br>Contact : Molla.Hug@monash.edu.au |
| **Research seminar – FINAL**<br>(Attendance compulsory) | 7.5% | **Wednesday 14st June 2017**<br>Time: 11:30am-12pm<br>Venue: Classroom 3, Ground floor, AMREP |
| **Thesis oral review** | | **Friday 16th June 2017**<br>**Time: 10am-11am**<br>Venue: Tute Room 1, level 5, Alfred centre |

## COURSE STRUCTURE

The BSc(Hons) or BBiomedSc(Hons) year comprises a number of assessment tasks. The BSc Honours course is officially composed of two units that comprise 36 points (BMH4100) and 12 points (BMH4200). Various aspects of your assessments are used for each unit. BMH4100 is associated with thesis and thesis review, and BMH4200 is associated with course work and oral presentations throughout the year. Your final grade is decided from all assessments. To avoid confusion, you should treat the year as one unit only.

## TWO STREAMS: HUMAN PATHOLOGY AND IMMUNOLOGY

Due to the increase in student numbers over recent years, this year the students will be partitioned into two streams based on their research project: Human Pathology (HP) or Immunology (IMM). Each of the streams is administered by different individuals. Dr Justin Hamilton is responsible for students in the HP stream, while A/Prof Margaret Hibbs is responsible for students in the IMM stream. For the most part, students in both streams will conduct their coursework together, however certain assessment tasks, such as oral presentations, will occur separately.

## COMMUNICATION WITH STUDENTS

Several students, while being administered and assessed at the Central Clinical School, will be conducting their research projects in external laboratories and not necessarily on the AMREP campus. Throughout the year, we will need to communicate with all students on a regular basis. The most efficient means is via email and **we will be using your student email accounts** for this. It is important that you get into the habit of checking your email daily. **If you intend to use other email accounts issued by your department or institute, then please ensure that you have your emails redirected.** Your local IT officer will be able to do this for you. We will not be sympathetic to those who "forget" to check their emails. The Honours calendar of events and important announcements will be sent to your student email address and posted on the current honours students web-page: http://www.med.monash.edu.au/cecs/education/current-honours.html

## CONFIDENTIALITY AND SOCIAL MEDIA

Students must check with their supervisors before posting any data related to their Honours project online on social media for potential issues of confidentiality.

## DEPARTMENTAL/INSTITUTIONAL SEMINAR AND TALKS


The broad aim of attending seminars and talks, or specially organised presentations, is to broaden your exposure to the variety of science that is being performed. At AMREP we are lucky to have a broad range of disciplines that will enrich your general knowledge. Attending seminars is compulsory and is assessed.

Students are expected to attend ALL Honours and MBiomedSc(Part 1) oral presentations; this includes student literature reviews, progress seminars and final seminars.

Students should also attend those seminars that are offered by their local department or institute. This includes weekly talks by invited speakers or internal post-graduate progress seminars. For example, the Department of Immunology and Pathology has a seminar series on Wednesdays at 11.30am, the Australian Centre for Blood Diseases @ 11am every Tuesdays, the Burnet Institute has a seminar series every other Wednesday at 9am and the Baker IDI Heart and Diabetes Institute has a seminar series on every second Tuesdays starting at 3.30pm. If your local department or institute does not have a regular seminar series, you should attempt to find one. The Department of Immunology and Pathology is more than happy for people to attend their talks, please contact student services at Central Clinical School via email, hdr.ccs@monash.edu for details.

From time to time, special seminars or talks may be offered. You should make every effort to attend these as well. Central Clinical School Events Calendar link below:

http://www.med.monash.edu.au/cecs/headlines/events-calendar.html

## PASTORAL CARE

There are a number of counselling avenues available for students who have problems during their Honours year that may be adversely affecting their performance. These problems may arise within the laboratory, department/institute or may be of a personal nature.

If possible, problems should initially be discussed with the Research Supervisor.

1. Alternatively, the Honours course co-ordinators, Dr Justin Hamilton and A/Prof Margaret Hibbs are available to discuss any problems that may arise.

2. Departments and Institutes often have Graduate Student Committees that assist in the pastoral care of Honours students. Problems can be brought to the attention of the following department representatives. The student department representatives provides an avenue to raise issues students may not wish to discuss directly with academic staff members they are involved in, in the first instance.

   - Burnet Institute: Dr Raffi Gugasyan
   - ACBD: Dr Justin Hamilton
   - Medicine – Ms Bonnie Dopheide
   - Surgery: Ms Daphne Voiagis
   - Melbourne Sexual Health Centre: Dr Tim Read
   - MAPRc: Dr Stuart Lee
   - Infectious Disease: Prof Jennifer Hoy
   - Baker IDI: A/Prof Julie McMullen
   - NTRI: Dr Teresa Howard
   - Immunology and Pathology: A/Prof Margaret Hibbs
   - Gastroenterology: Dr Jane Muir
   - Hudson Institute of Medical Research: A/Prof Mark Hedger

## STUDENT SUPPORT

**Student Support Services**
It is well known that what affects you personally will also affect you academically – so taking action early is good self-management and many students have successfully completed courses despite experiencing difficulties of a personal nature. Please contact the Student Services officer Ms Sharmila Ramesh (sharmila.ramesh @monash.edu or phone 990300368).

**HWD (Health Wellbeing and Development)**
HWD offers a range of services to students including: *General health (GPs); counselling; chaplaincy and financial assistance*. Services are confidential and free, and can be accessed by phoning or dropping in to the HWD HUB:

| **Campus** | **Location** |
|---|---|
| **Caulfield** | Building B, Level 1 (ground floor) |
| **Clayton** | University Health Service, Building 10 (Campus Centre), Ground floor |

Phone number: 9905 3020 (for all campuses)

**Counselling Service**
The Counselling Service offers a daily drop-in service for new clients (check campus for times) with subsequent sessions by appointment. Contact: 9905 3020, website: www.monash.edu/counselling
After hours counselling for students and staff: 1-800 350 359

**Community Care Line**
Community Care Line (9905 1599) offers assistance to any staff or student who feels threatened or unsafe, or has concerns about someone's wellbeing.

**Be proactive – ask for help early if concerned about yourself or someone else!**

# ORIENTATION PROGRAM
## Monday 25th July 2016

| Time | Location | Content | Speaker |
|---|---|---|---|
| 10-10.05am | Lecture theatre, level 5, Alfred centre | Welcome and introduction | Dr Steven Petratos |
| 10.05-10.15am | Lecture theatre, level 5, Alfred centre | Student Safety and Wellbeing at AMREP | Ms Bonnie Dophiede, Dr Eva-Rachele Pesce |
| 10.15-10.25am | Lecture theatre, level 5, Alfred centre | Library Skills and Workshops | Dr Penny Presta |
| 10.25-35am | Lecture theatre, level 5, Alfred centre | Flow cytometry: Procedures and use of flow facilities | Dr Geza Paukovic |
| 10.35-10.45am | Lecture theatre, level 5, Alfred centre | Animal Facility: Introduction into procedures and requirements for the use and handling of animals in the AMREP animal facility | Dr Steve Comber |
| 10.45-10.55am | Lecture theatre, level 5, Alfred centre | Micro-Imagining facility and procedures | Dr Iska Carmichael |
| 10.55-11am | Lecture theatre, level 5, Alfred centre | Communications @CCS | Ms Julia Veitch |
| 11am Morning tea break<br>11.15 Meet with Coordinators in following breakout rooms | | | |
| 11.15am | Tutorial Room 6, level 5, Alfred centre | Immunology and Human Pathology | Dr Justin Hamilton & A/Prof Margaret Hibbs |
| 11.15am | Lecture theatre, level 5, Alfred centre | Bachelor of Medical Science | Dr Paki Rizakis, Ms Laisa Tigarea |
| 11.15am | Tutorial room 4, level 5, Alfred centre | Graduate Research | Dr Steven Petratos |
| 11.30am | Foyer, level 5, Alfred centre | Group & Individual photograph | |

# STUDENT / SUPERVISOR LIST
## BSc (Hons)

| *Stream | Title | First Name | Last Name | Supervisor | Department |
|---|---|---|---|---|---|
| Human Pathology | Ms | Paulina | Pajak | A/Prof Julie McMullen | Baker IDI |
| Immunology | Ms | Lorena | Goldring | Prof David Tarlinton | Immunology and Pathology |

# ROLE OF THE SUPERVISOR(S)

Supervisors of Honours or Masters of Biomedical Science (Part 1) students have a major responsibility in assuring the day-to-day supervision of students. In practice this will vary from lab to lab and student to student but the student should feel comfortable with the situation. As a student, you should take responsibility and highlight any issues of supervision that are not clear. While supervisors are there to guide and support students, it is unrealistic to expect 100% attention at all times.

## CO-SUPERVISION

It is increasingly common for senior members of laboratories who have a significant input into student supervision and progress to be listed as co-supervisors. This is encouraged where applicable.

Some of the responsibilities of a supervisor/s include:

**Student based**

- Assisting the student in understanding the rationale behind their project
- Guide the student through introduction to relevant literature
- Instruct students in experimental techniques required for their project
- Assist students in designing experimental protocols
- Assist students in analysis and interpretation of data
- Assist students in developing oral and communication skills through their various assessments and lab presentations
- Guide students in structuring their thesis
- Provide informative feedback to ensure effective learning

**Course based (see calendar for dates)**

- Attend oral presentations and participate in assessment of students as an examiner
- Review and comment on literature reviews submitted by other honours students (these will be returned to students as feedback)
- Assess and give a mark for honours theses. Each supervisor is expected to mark 2-3 theses for each student they supervise
- Attend the oral review of your student(s) as an observer and as an examiner for those students whose theses you have marked

**Supervisor input into the literature review and thesis**

Supervisors should interact freely with their students in the planning of the literature review and thesis. Students and supervisors should plan together the layout of the thesis, the disposition of figures, etc. They should advise, but leave to the student, decisions about data interpretation, etc. Students should then prepare a first draft. **Students may submit one draft only of the literature review/thesis for comment by their supervisor(s)**. The supervisor can edit hard copy of this first draft but only very broadly. Syntax, spelling corrections, and typing are the responsibility of the student. **Supervisors should NOT CIRCULATE draft versions of the review/thesis to staff, other than the co-supervisor, for detailed comments. Supervisors and co-supervisors must comment on the exactly same version of the review/thesis.** Supervisors should never write any part of the review/thesis themselves. **Supervisors are not permitted to edit the review/thesis draft using track changes.** This is important since the review/thesis must be original work that is clearly identified as the student's effort and not that of the supervisor. Note that drafts cannot be circulated by the student to any other staff members, postdoctoral fellows, research assistants or to postgraduate students. Note that supervisors and co-supervisors will not be examiners of the literature reviews/thesis written by their own students.

## BSc(Hons) & Masters Part 1 COURSE COMPONENTS

| Assessed components | Mark weighting |
|---|---|
| **BMH4100 (worth 75% of Total mark)** | |
| Literature Review seminar | S or NS |
| Thesis (worth 60/75) | 60% |
| Literature Review + Project Outline (7.5/75) | 7.5% |
| Final Seminar (worth 7.5/75) | 7.5% |
| Thesis defence (S/NS) | |
| | |
| **BMH4200 (worth 25% of total mark)** | |
| Part 1: Discipline Specific Module (worth 10/25) | 10% |
| Part 2: Statistics Module (worth 7.5/25) | 7.5% |
| Part 3: Written Critique (worth 7.5/25) | 7.5% |
| | |
| **Total** | **100** |

**Final Grades**

80-100% Honours Class I
70-79% Honours Class IIA
60-69% Honours Class IIB
50-59% Honours Class III
< 50% Fail

## ASSESSED COMPONENTS

**Written literature review and Project Outline**

**Due Date: Thursday 8th September 2016** by 4pm via Moodle

**Submission:** The literature review and attached project outline should be submitted to your School or Departmental representative. SUBMIT THREE [3] HARD COPIES and an ELECTRONIC COPY. A signed assessment coversheet must be attached. These outlines will be sent out to members of the academic/research staff in the University for assessment and written feedback.

**Details of task:**

For the literature review, attention is drawn to the following requirements/guidelines:

- COVER PAGE (project title, student name and ID number, department/institute, word count [see below]).
- TABLE OF CONTENTS.
- LITERATURE REVIEW
- PROJECT OUTLINE
- REFERENCES
    - Students may choose which referencing system they wish to use, but the system must be one of those in regular use in biomedical journals. If in doubt, students should consult with their supervisor and use a system in regular use in journals in their discipline.

For the Project outline the supervisor and student are required to submit a summary providing an outline of the background/rationale of the research, the aims of the project, the experimental design and methodology, (including the statistical methods proposed for analysing the data), and the anticipated outcome of the research which has been agreed to by both the supervisor and student. The aim of this task is to get the student and supervisor talking, planning and discussing possible obstacles, difficulties, etc. A timeline outlining your anticipated progress through the year should also be included. The project outline is NOT a binding document, so changes to the research project are permitted even after submission of the outline.

**Supervisor input into the literature review**

Supervisors should be involved with their students in the planning of the literature review. Students and supervisors should plan together the layout of the literature review, the disposition of figures, etc. They should advise, but leave to the student, decisions about data interpretation, etc. Students should then prepare a first draft. Students may submit one draft only of the literature review for comment by their supervisor(s). The supervisor can edit the hard copy of this first draft but only very broadly. Grammar, spelling corrections, and other typographical errors are the responsibility of the student.

Supervisors should NOT CIRCULATE draft versions of the review to staff, other than the co-supervisor, for detailed comments. Supervisors and co-supervisors must comment on the exact same version of the review. Supervisors should never write any part of the review themselves. **Supervisors are not permitted to edit the literature review draft using track changes**. This is important since the review must be original work that is clearly identified as the student's effort and not that of the supervisor. Note that drafts cannot be circulated by the student to any other staff members, postdoctoral fellows, research assistants or to postgraduate students. Note that supervisors and co-supervisors will not be examiners of the literature reviews written by their own students.

**Word limit:** 4000 (± 10%) words. Please note that the word count DOES NOT include the references in the bibliography, figures, figure legends, tables and graphs or PROJECT OUTLINE. The word limit only applies to the words in the body of the text. Project outline should be a maximum of 4 pages.

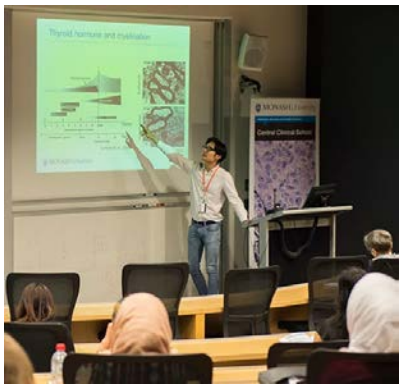
**Value:** 7.5%

**Presentation requirements:** 11 point Arial font, double spacing.

**Criteria for Marking:**

| Grade | Mark range | Criteria |
|---|---|---|
| HI upper (Outstanding) | 90-100 | An outstanding piece of work. Has total control of relevant literature and shows an excellent synthesis of factual and conceptual components. Shows outstanding insight and an ability to structure and synthesise published material with research project. Work reflects extensive reference to original articles. The candidate could be expected to achieve no more. Expression, style, grammar and referencing are outstanding. |
| HI lower (Excellent) | 80-89 | An excellent piece of work. High level of understanding of all relevant publications with excellent, relevant use of referencing and examples. Communicates clearly and effectively using a coherent structure showing insight and perceptiveness. Work reflects extensive reference to original and review articles. A commendable degree of academic originality. Expression, style, grammar and referencing are excellent. |
| H2A upper (Good) | 75-79 | A good piece of work. Shows a firm grasp of majority of the relevant literature. Argues well and effectively and is able to criticise and evaluate material. Evidence of fairly extensive background reading beyond the review articles. Sustained argument throughout. Well-structured and shows good evidence of wider background reading. Expression, style, grammar and referencing are good. |
| H2A lower (Satisfactory) | 70-74 | A competent piece of work, which shows reasonable understanding of the material and presents it satisfactorily with appropriate examples and referencing. Structure is apparent and there is a coherent (though possibly weak) argument with adequate conclusion. Evaluative/critical/analytical skills present but not highly developed. No obvious weaknesses except for a lack of originality. Expression, style, grammar and referencing are moderately good. |
| H2B upper (Pass) | 60-69 | An adequate piece of work, which shows some structure, relevant use of examples and evidence of background reading. Some limited referencing. Limited evidence of independent thought and the development of substantiated arguments. Conclusions not well developed. Evaluative/critical /analytical skills present but not highly developed. Expression, style, grammar and referencing are adequate. No obvious weaknesses except for a lack of originality. |
| H2B lower (Borderline/ weak) | 50-59 | Argument obscure, weak or unbalanced. Only partially relevant. Have major content omissions. Some understanding, reflection, structure and referencing. Partially successful attempt to use relevant examples and facts. Some reading. Conclusions weak. Expression, style, grammar and referencing limited. |
| H3 (Fail/ Unsatisfactory) | 0-49 | Weak. Lacking evidence of preparation, evaluation or reflective skills. Largely irrelevant. Little or no understanding. Hardly any, or no, evidence of reading or organisation. Expression, style, grammar and referencing very poor. |

# LITERATURE REVIEW SEMINAR – NON ASSESSED



As with the written component, the aim of this task is to orally communicate to a lay audience the basis of your area of research in a set time. It also gives the other students, supervisors and members of the school, the first opportunity to see what you will be doing throughout the year. While this oral presentation and written review are not formally graded, they will form part of first impressions, so be sure to make the required effort.

Talks will be 10 minutes in length with 5 minutes (extra) for audience questions. It is advisable and recommended that you practice your talk beforehand.

The literature review seminar is used to present your research area and project to the audience and will be your first exposure to staff members. You should give a background to the area; indicating the major points which define the field and your project. The hypothesis that you are addressing should be clear and the last few minutes should be spent outlining what you propose to achieve throughout the year. As a general guide, you should consider the following time allocations for each of the components when planning your seminar.

| | | |
|---|---|---|
| *General Introduction* | *1* | *min* |
| *Review of the literature/rationale for the project* | *4* | *min* |
| *Aims* | *1* | *min* |
| *Experimental plan (including statistical analysis)* | *3* | *min* |
| *Expected outcomes* | *1* | *min* |
| *Total* | *10* | *min* |

The presentation time for each student will be strictly adhered to. For those who have thoroughly prepared and practised their seminars, timing should not be a problem

# ASSESSED COMPONENTS

## Coursework and Assessment

The coursework components are designed to promote self-learning techniques and develop skills in the interpretation of information and communication of this in various forms. To broaden the relevance of the coursework material for the students within the Central Clinical School environment, we utilise senior researchers within AMREP and offer a number of specialist lectures as part of the coursework. Students will be asked to attend all six lectures, which will provide information that will enable them to complete their Part 1 theory and oral assessment. Assessment of the modules will be conducted by the Honours Coordinators. Modules will be structured and assessed in a similar manner although some variation may occur.

## APPLICABLE FOR ALL HONOURS STUDENTS

### PART 1: Coursework Component - Discipline Specific Module (10%)

Students will be required to attend six lectures - See calendar of events in 2017 for specific dates, times and venue. There will be different speakers for each of the lectures over a number of broad topics that will constitute a theory module. You will be required to submit a written assessment and undertake an oral assessment.

The Honours Coordinators will be responsible for delivery and assessment of the tasks. The written assessment task should be completed by date to be advised in 2017. The oral assessments will take place – date to be advised in 2017. If you are unable to attend one of the lectures, you will be required to inform the Student Services Officer, Ms Sharmila Ramesh (sharmila.ramesh@monash.edu) and produce a medical certificate.

### PART 2: Coursework Component - Statistics Module (7.5%)

This task will involve students participating in a mini-lecture series taken by Mr. Molla Huq on biostatistics theory and practice. Assessment will be by written exam. This task will begin **March 2017**

### PART 3: Coursework Component - Written Critique Module (7.5%)

**Due Date: To be advised in February 2017**

**Details of task:**

This will be based on a topic unrelated to the individual student research project. An article will be chosen from journals such as *Science, Nature,* or *The New England Journal of Medicine*, etc. A number of Journal articles will be provided to accommodate differing backgrounds and interests of students. Student will be given appropriate reading time in which to peruse the articles and decide which one to critique.

All articles will have the title and abstract removed. After you have made your choice of paper you will be asked to do the following:

- Provide a short 200 word summary/ abstract for the article
- Provide a title
- Write a critique by answering the designated questions
- Comment on the scientific significance of the article

You will have one hour reading time followed by three hours to complete the exam.

**How should a written critique be approached?**

Assume that the paper is still unpublished and has been sent to you by the editor of a journal to review. Don't be fazed by the fore knowledge that the paper has already been peer-reviewed (presumably by experts in the field) and subjected to tight editorial scrutiny. There are still many opportunities for critical appraisal of many published works.

Some questions that you should consider are:

1. Does the introduction to the paper clearly indicate the basis on which the ideas for the experiment(s) were developed?
2. Is there a clear hypothesis to be tested and are the aims clearly outlined?
3. Does the study address the aims adequately?
4. Are the methods clearly explained? Could you easily repeat the experiments using the information on animals, experimental planning and techniques?
5. Are the results concisely described?
6. Are the statistical methods appropriate?
7. Does the discussion cover all the important aspects of the results and in particular place the data from the study within the context of previous studies?

This is only a guide to the types of critical questions you should be addressing and is not exhaustive!!

You need to write a brief background to the paper for context, explain the methods in enough detail to provide an understanding of experimental plan, outline the most important aspects of the results and explain why the data is important. A critical review doesn't mean that you need to be negative about the study. Point out where you think the science was good and why, but also, where appropriate, indicate any shortcomings of the study.

It is advised that you practise writing a critique. Several articles will be placed on the Moodle site for students to use as practise. Sample answers are also posted on the site. Try to set time limits to make the exercise realistic.

**Final Research Seminar (7.5%)**


You will give a research seminar after submission of your thesis. This will be for 15 minutes plus 5 minutes (extra) for questions and discussion. Students will be assessed on their presentation of data, their ability to communicate this clearly to the audience and participation in questions and discussion. An assessment sheet follows for your information and reference. As you can see, there are a number of areas that make up a successful presentation. Senior scientists and academics within the audience will conduct the assessment. When preparing your talk, do not assume that everyone in the audience is an expert in your field.

In addition, an abstract of 250-300 words will need to be submitted on-line and due one week prior to your date of presentation. This information will be included in a presentation booklet that will be available before the sessions.

Power Point is the preferred mode of presentation. **Presentations should be saved on a USB stick and tested before the day.** You should ensure that you give yourself plenty of time to prepare and practice your talks with other students or people from your research laboratory. You should also resist the temptation to make your slides busy or distracting. Assessors will be looking for clarity and the ability to read and understand the information being presented.

Examples of assessment sheets are illustrated on the following pages.

# EXAMPLE OF A TYPICAL ASSESSMENT SHEET

**Literature Review Seminar 1**

**Student's Name**: _____

| | Grade - tick appropriate box | | | | |
|---|---|---|---|---|---|
| **Criteria for assessment (tick appropriate box)** | Very high | High | med | low | v.low |
| 1. Command of expression and quality of presentation | | | | | |
| 2. Evaluation and integration of existing literature | | | | | |
| 3. Clearly stated aims and rationale for project | | | | | |
| 4. Understanding of research methods, attention to critical design issues in the execution of project | | | | | |
| 5. Significant insights and original thoughts dealing with critical issues | | | | | |
| 6. Response to questions | | | | | |

Comments: if required

_____

_____

_____

_____

_____

_____

**Examiner's name: _____Examiner's Signature:_____**

# EXAMPLE OF A TYPICAL ASSESSMENT SHEET

**Final Oral Seminar 2**

**Student's Name**: _____

| | Grade - tick appropriate box | | | | |
|---|---|---|---|---|---|
| **Criteria for assessment (tick appropriate box)** | Very high | High | med | low | v.low |
| 1. Clear and introduction and statement of hypothesis | | | | | |
| 2. Choice of data analysis and presentation and reporting of results | | | | | |
| 3. Critical evaluation and interpretation of data | | | | | |
| 4. Conclusions and clear summary that includes a personal opinion | | | | | |
| 5. Clarity of presentation and use of audio visual aids. Command of expression and logical argument | | | | | |
| 6. Response to questions | | | | | |

**Grading scale: H1=80+, H2A=70-79, H2B=60-69, H3=50-59, N=<50**

**Numerical grade:** ☐

Comments: if required

_____

_____

_____

_____

_____

_____

**Examiner's name: _____Examiner's Signature:_____**

# THE THESIS REPORT
**(Worth 60%)**

**Due Date: Thursday 18th May 2017 at 4 pm**

**Submission:** SUBMIT THREE [3] bound copies to your School/Departmental Coordinator. You are also required to submit a signed assessment coversheet with your thesis.

**Details of task:**

The Honours thesis is the culmination of all the work that you have done during the year in your research project. It is one of three avenues in the course that provides you with an opportunity to display and discuss your research achievements. Honours students should achieve, in quality and quantity, a high standard of work that is publishable in a reputable, peer-reviewed journal. Flick through a previous Honours thesis to get a clear idea of what is expected in terms of content and presentation.

## When to finish your research?

Students are advised to try to finish their experimental work at least one month before the thesis submission date. It is important that you let your supervisor read and comment on each section of your thesis and provide feedback, not only on content but also on format. It is important that you ensure that your supervisor has sufficient time to comment on your section drafts well in advance of that date, several weeks before submission should be allowed. Of course, syntax, corrections, and typing are the responsibility of the student. Students are advised to discuss the format of their thesis and the proposed content with their supervisor well before commencing writing. Additional advice may be sought from the Course Coordinator.

In the case of the two Clinical Schools, each supervisor will nominate thesis examiners to the respective School Coordinators. In the case of the School of Biomedical Sciences, the Thesis examiners will be nominated by the Honours coordinators of each Department. Your School representatives will oversee the examination process for your thesis.

## Thesis structure and content

The thesis should contain the following sections:

- A title page (Thesis length should be stated on this page)
- Declaration. A confirmation of the originality of the work and a clear indication of any significant practical input into the research by others
- Acknowledgments
- Summary/Abstract (2 pages, 11 point Arial font, double-spaced)
- Introduction (modified literature review to suit the project and results obtained, aims and hypothesis tested. Generally this would be shorter than the literature review that was written at the beginning of the year and would begin with an explanation of the research problem)
- Materials & Methods
- Results
- Discussion
- Conclusions and Future Directions
- Bibliography
- Appendices

## Abstract/Summary

The abstract should state the aims of the research and the significance of the results. The reasons for the project should be made clear, the methods should be stated briefly (unless your project was biased heavily towards development and testing of methodology), the results should be concisely presented and their significance clearly indicated. There should also be a brief summing up of the conclusions reached from your research.

## Introduction

This section should give a comprehensive background to the research project, the reason(s) for undertaking the study and its significance. A clear statement is required of the problem(s) being investigated and this should be supported by reference to all the pertinent published information on the subject. Most of this information will have already been incorporated into your literature review. In most cases your literature review can be included in the thesis with some revisions to ensure that the content is still relevant. Any relevant new information, which has been published on your thesis topic, should be included. In some situations, however, because of changes in the direction of your project during the year, it may be necessary to restructure your literature review to reflect the new direction(s) of your research.

## Materials and methods

All the methods used in the study need to be described in detail and particular attention should be given to any specific innovations or any changes that have been made to standard methods or techniques. Explain clearly the animals used, the experimental plan - especially the controls and why they were selected - and explain the rationale for the particular procedures that you have chosen. Particular attention to the methods selected for data analysis is required.

## Results

The results should be concise and focussed on the tables, figures and diagrams, which provide the detail of your research findings. Do not discuss your results in this section (the discussion is obviously the place for this!). In order for your results to have the most impact on the reader, careful planning and display of the data is needed and this should be done in collaboration with your supervisor. You are required to prepare all of your own tables and diagrams if possible. If for some reason (e.g. complexity?) you need assistance from another person, acknowledge this assistance in your thesis. Tables require a concise but informative heading and should be able to be understood without reference to the text. Figures and diagrams should be clearly presented and be supported by a caption situated below or on a facing page. The statistical significance of the data presented in tables and figures should be clearly indicated using standard methods and include the statistical test used and specifically statistical parameters. Note: all photographs or diagrams should include an indication of scale or magnification.

## Statistics

A small practical point - if expert advice on statistical analysis is required it is advisable to do this during the critical planning of the project, rather than at the end of the year. Students will attend a compulsory statistics course that will be assessed as part of the Common Core Component (BMS4200) at the beginning of the year.

## Discussion

This section should be used to synthesise the results of your study and relate them to the findings of previously published studies. The discussion provides an opportunity for you to demonstrate your intellectual capacity for originality, logic and critical analysis. It is important that you provide a clear interpretation of the data and explain the significance of the findings in the context of previous studies. It is also appropriate to indicate in this section what you believe the important future directions should be in this area of research. Be objective and constructive in your interpretations and conclusions.

## Bibliography

Students may use any referencing system. Keep references to a minimum and cite only those which are directly relevant. Try not to cite too many reviews or textbooks. Remember that your work is original research and therefore most of your reading and citations should be of other original works. The easiest and most efficient method of maintaining an updated list of your bibliography is using the program EndNote. Tutorials on how to use EndNote will be conducted at the beginning of the year. For further information please contact Penny Presta (penny.presta@monash.edu) from the Hargrave-Andrews Library on 990 52099.

## Appendices

Appendices should be kept to a minimum. You may include information on methods in an appendix but it is preferable, if possible, to cite standard methodology to an appropriate published journal article. Any method you have developed or modified should be included in your methods section. It is acceptable to provide tables of data in appendices for material which is presented graphically in the text.

## Cost of thesis illustrations and binding

**Students may use the services of a printing and illustration service, for example, Monash Multimedia Group recommends *Monash Print Services.* http://www.retail.monash.edu.au/printservices/.**

## Role of your supervisor in thesis preparation

Supervisors are expected to participate with students in the design of experiments, other data collection methods and the interpretation of data. Supervisors should interact freely with their students in the planning of the thesis. Note, submission of Honours work in the format of a journal article is not acceptable. Students and supervisors should plan together the layout of the thesis, the disposition of figures, etc. They should advise and discuss, but leave to the student, decisions about data interpretation, etc. Students should then prepare a first draft. Students may submit one draft only of the thesis for comment by their supervisor(s). The supervisor can edit hard copy of this first draft but only very broadly. Grammar, spelling corrections, and other typographical errors are the responsibility of the student. Supervisors should NOT CIRCULATE draft versions of the thesis to staff, other than the co-supervisor, for detailed comments. Supervisors and co-supervisors must comment on exactly the same version of the thesis. Supervisors should never write any part of the thesis themselves. **Supervisors are not permitted to edit the thesis draft using track changes**. This is important since the thesis must be original work that is clearly identified as the student's effort and not that of the supervisor. Note that drafts cannot be circulated by the student to any other staff members, postdoctoral fellows, research assistants or to postgraduate students. Note that supervisors and co-supervisors will not be examiners of the thesis written by their own students.

## Tips and tricks for thesis preparation

1. Make sure that you keep multiple copies of computer discs and **always** backup all your work. Always save any alteration that you make to your thesis draft. Computer CRASH cannot be used as grounds for seeking an extension. Avoid the last minute rush in case of hardware/software faults and human exhaustion.
2. Use your spell check programs (or for scientific/medical reference the internet dictionary at: www.dictionary.com). Avail yourself of them if you have any doubt of your capabilities. Assessors get very upset when they see too many spelling errors.
3. Figures and tables must be referenced from the text and must be appropriately captioned.
4. Failure to include cited references in the bibliography is an unacceptable error.
5. All information, which is not your own work, must be referenced to its source.
6. Quality rather than quantity is the measure of achievement!

## Journal articles arising from Honours project

Submission of Honours work in the format of the journal article manuscript is not acceptable. If you are lucky enough to have produced results that can be written up as a journal article, you cannot submit the journal article manuscript as your thesis; i.e. you need to follow thesis guidelines as outlined and after submission you may then harass your supervisor about a manuscript!

## Extent of the work included in your thesis

Only work undertaken during your Honours degree year (February – October) can be included in your thesis for examination. Work conducted prior to the start of the Honours degree cannot be included in your thesis (e.g. work undertaken during a Summer Vacation Scholarship period or as part of a “Research in Action” unit).

## What to do if all your results are negative?

Don't panic. While it is obviously better for your esteem and your thesis to be able to report on an excellent set of data, it sometimes happens, for reasons not of your own making, that well conceived and executed studies produce negative results, despite your best efforts. If you find yourself in this situation, it is important that you provide a convincing discussion of why the results were negative (obviously, lack of diligence or care is not a good defence). Give a logical appraisal of how the protocols and experimental approach may be changed in a future study to achieve your original aims. If your project is not working, see the School Coordinator or Departmental Honours Coordinator as soon as possible.

## Final check of your thesis before submission

The following questions are provided to assist you before submitting your thesis. This is what each assessor will be looking for:

### Organisation and presentation

* Are the ideas lucid, clearly expressed and well presented?
* Are all graphs, tables and diagrams clearly presented and legible and supported by a detailed heading or caption?
* Is the thesis layout and general presentation well structured?
* Is the bibliography complete and comprehensive, and cited correctly?
* Has the student satisfactorily completed all the requirements for the thesis?

**Abstract**

* Does the abstract clearly summarise all the important findings of the project?
* Do the conclusions provided give an accurate interpretation of the results?

**Understanding of the topic**

* Are the aims of the study and the hypotheses to be tested by the experimental design clearly defined?
* Does the background clearly give context and explain the study?

**Methodology and experimental design**

* Are the methods sound and used appropriately, and is the experimental strategy appropriate?
* Has the student provided sufficient details of the methods used?
* Have all relevant procedures been considered in the experimental design?
* How innovative or novel is the design of the experiments?

**Data collection, treatment and analysis**

* Are the results relevant and have they been displayed in a clear and appropriate manner?
* Does the text of the results section(s) draw to the reader's attention to the important features of the data?

**Discussion**

* Has the candidate demonstrated the capacity to interpret the results in a clear, effective, critical and logical manner?
* Is the capacity for intellectual originality demonstrated?
* Is the discussion systematic and relevant and has the significance of the findings been made clear?
* Has future direction for the research been suggested and is it appropriate?

**Word limit:** 10,000 **-** 15,000 maximum

**Presentation requirements:** Minimum 11 point Arial font. Double-spacing.

## ASSESSMENT OF HONOURS THESES
## (What are examiners looking for?)

All theses will be examined by two examiners selected from the pool of supervisors and academic scientists from the departments and institutes of AMREP. An additional examiner will be enlisted if marks differ widely. No supervisor is to be involved in the examination of his/her student's thesis. If appropriate, comments on the thesis by the supervisor will be requested by the chief examiner. An assessment cover sheet will need to be completed and submitted with your theses. See page 41 for cover sheet.

**Please note that late submission will incur a penalty of 5% per day or part thereof. This is to ensure fairness to all involved.**

**Criteria for Marking:**

The Honours thesis assessment is based on the following criteria:

(a) a clear understanding of the research topic and the relevant background literature,
(b) a logical sequence of experiments from which a set of appropriate conclusions are drawn,
(c) demonstrated skills in and understanding of experimental planning and design, experimental procedures and equipment used in the project,
(d) placement of the findings of the research project into an accurate and appropriate scientific context,
(e) a thesis that is well prepared and organised, and presented clearly and concisely.

## A GUIDE TO HONOURS GRADES FOR THESIS

**FIRST CLASS (H1) -** This grade is for an excellent thesis that achieves a mark of 80% or above.

**SECOND CLASS (H2A) -** This grade is for a very good thesis that achieves a mark between 70% and 79%.

**SECOND CLASS (H2B) -** This grade is for a good thesis that achieves a mark between 60% and 69%.

**THIRD CLASS (H3) -** For a satisfactory thesis which achieves a mark between 50% and 59%.

**FAILED (F) -** Very seldom. For an unsatisfactory thesis which does not achieve at least 50%.

The BSc Honours thesis rubric is on the next page.

| Criteria | High HD (85+) | HD (80) | D (70) | C (60) | P (50) | N (<50) |
|---|---|---|---|---|---|---|
| **Introduction and statement of the problem (15 marks)**<br>Is the research problem clearly explained and in context? | Outstanding insight and understanding of the literature and the questions that need to be answered. | Excellent understanding of the literature and the questions posed with only a few errors/omissions that are largely minor and understandable. | Overall has a good understanding of the field and questions but lacks insight into some of the issues. | Has some insight into the field and literature but fails to grasp some of the basic and/or important issues. | Very patchy grasp of field and seems to have made only marginal effort to understand the issues. | Weak,<br>largely irrelevant, little or no understanding. Hardly any, or no, evidence of reading or organization. Expression, style, grammar and referencing very poor. Aims not clearly defined. |
| Are the aims of the student's experimental program explained clearly and simply? | Experimental program is clearly and correctly explained with accurate interpretation of meaning and context. | Experimental program is clearly and correctly explained with accurate interpretation of meaning and context. There may be few minor errors that overall are of little consequence. | Overall explanation of experimental program is show a good understanding but lacks some insight into/misinterprets some of the minor areas. | Overall explanation of experimental program is shows a good understanding but fails to grasp some of the basic and/or important issues. | Very patchy explanation of experimental program. | |
| **Results, data treatment and analysis (40 marks)**<br>Clear, lucid presentation and explanation of experiments conducted (including the use of graphs, tables and figures as appropriate). | Clear, lucid presentation and explanation of experiments conducted, all graphs, tables and figures are clear and accurate. | Clear, lucid presentation and explanation of experiments conducted, all graphs, tables and figures are clear and accurate. | Presentation and explanation of experiments conducted in not clear and lucid or, graphs, tables and figures may be lacking in clarity and accuracy. | Presentation and explanation of experiments conducted not clear and lucid, graphs, tables and figures are not always clear and not always accurate. | Presentation and explanation of experiments conducted, graphs, tables and figures is haphazard, not clear and not always accurate. | Weak. Lacking evidence of preparation, evaluation or accuracy. |
| Is the data presented relevant, | Only relevant data is presented. Presentation is always | Only relevant data is presented. Presentation is always | A small amount of irrelevant data is presented. | Mainly relevant data is presented. Presentation is | Mainly relevant data is presented. Presentation is | Poor presentation of figures. |

| | | | | | | |
|---|---|---|---|---|---|---|
| intelligible and accurate?<br><br>Does the text bring the salient points to the attention of the reader? | intelligible and accurate.<br><br>The text always accurately describes the findings and brings the all the salient points to the attention of the reader. | intelligible and accurate.<br><br>The text always accurately describes the findings and brings most salient points to the attention of the reader. | Presentation is mainly intelligible and accurate.<br><br>Most of the time the text accurately describes the findings and but only sometimes brings the salient points to the attention of the reader. | lacking in intelligibility and accuracy.<br><br>Most of the time the text accurately describes the findings but does not bring the salient points to the attention of the reader. | lacking in intelligibility and accuracy.<br><br>The text does not accurately describe the findings and does not bring the salient points to the attention of the reader. | Description of data is poor, not clear to the reader. |
| **Discussion and conclusions (30 marks)**<br>Has the student demonstrated an ability to think critically about their own work? | The student has demonstrated an outstanding ability to think critically about their own work. | The student has demonstrated an excellent ability to think critically about their own work. | The student has demonstrated a good ability to think critically about their own work. | The student has demonstrated a reasonable ability to think critically about their own work. | The student has not demonstrated a reasonable ability to think critically about their own work. | No real evidence of critical analysis of the data or critical thinking. |
| Relevance and completeness of the conclusions drawn; have alternative explanations been considered (if appropriate)? If speculative conclusions have been drawn are they within the bounds of possibility? | The conclusions drawn are relevant and comprehensive; alternative explanations that show insight, critical thinking and are within the bounds of possibility have been described. | The conclusions drawn are relevant and comprehensive; alternative explanations that show some insight, critical thinking and are within the bounds of possibility have been described. | The conclusions drawn are mostly relevant and comprehensive; alternative explanations show some insight and critical thinking but are but are generally lacking in applicability. | The conclusions drawn are mostly relevant, but lacking in comprehensiveness; alternative explanations lack insight and critical thinking. | The conclusions drawn are somewhat relevant, but lacking in comprehensiveness; no alternative explanations are given. | Relevant conclusions not drawn,<br>Not comprehensive. |
| Have future research directions been suggested? | Clearly understands and indicates where the field is heading and is | Understands broad direction of research and impact of own | Has been able to define the role and significance of own | Has some, albeit incomplete idea of the likely direction of | Only moderate understanding of how their work has | No future research directions outlined. |

| | | | | | | |
|---|---|---|---|---|---|---|
| Is the significance of any findings made clear? | able to accurately express own opinion as to where the field is heading. Has accurately defined the role and significance of own work/findings in the broad context of the field. | work, but may not indicate by own opinion that understanding is outstanding. Has accurately defined the role and significance of own work/findings in the broad context of the field. | work/findings in the broad context of the field but with some relatively minor lack of focus or direction. | research or impact of their work; there is little clear or real insight. | advanced the field and what kind of direction future research may take. | |
| **Organisation and presentation (15 marks)** Has thought been given to layout and general presentation (within the constraints of guidelines)? | Layout and general presentation of thesis is well structured, logical and clear. | Layout and general presentation of thesis is generally well structured, logical and clear. | Layout and general presentation of thesis is mostly well structured and logical. | Layout and general presentation of thesis is lacking in structure. | Layout and general presentation of thesis is cumbersome and difficult to read. | Thesis is poorly organized and poorly presented, Many mistakes. |
| Are ideas well organised and clearly expressed? | Reads well, with few if any errors in spelling, grammar. | Occasional errors and difficulties in sentence construction but well written. | Passages that read well but other areas with difficult to follow expressions. | Some attempts at structure and grammar but errors and significant areas of the editorial with poor expression. | Poor attention to detail, grammar and spelling but some structure and appropriate use of language. | Very poor grammar and spelling. |
| Quality of the figures and other visual aids. | Outstanding quality of the figures and other visual aids. | Excellent quality of the figures and other visual aids. | Good quality of the figures and other visual aids. | Reasonable quality of the figures and other visual aids. | Inconsistent quality of the figures and other visual aids. | Figures badly presented. |
| Is the reference list or bibliography appropriately presented? | Citing of all references in bibliography is accurate and in text citation is always accurate. | Citing of all references in bibliography is accurate and in text citation is always accurate. | Citing of most references in bibliography is accurate and most in text citation is accurate. | Citing of most references in bibliography is accurate and most in text citation is accurate. | Citing of many references in bibliography is inaccurate and in text citation may be inaccurate. | Little citation or Inaccurate referencing. |

# 2016 Bachelor of Science Honours Course

## BMS4100

## Thesis Assessment Sheet

**Student Name:** _____

**Title of Thesis:** _____

**Comments:** *(this section may be returned to the student)*

Use an additional page if necessary

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**PLEASE PROVIDE A MARK IN EACH COLUMN**

| Introduction and statement of problem (15) | Results, data treatment & analysis (40) | Discussions & conclusions (30) | Organisation & Presentation (15) | TOTAL SCORE (out of 100) |
|---|---|---|---|---|
| | | | | |

**Name of Assessor:** _____

**Signature:** _____

**Date:** _____

**INDICATIVE Scores for Honours grades**:
**H1** 80+ **H2A** 70 - 79 **H2B** 60 - 69 **H3** 50 - 59 **Fail** <49

## Reconciling mark discrepancies

If the difference between the two examiners marks is less than 10%, the final mark will be the mean of the two marks.

If the difference is in the range 10 - 19%, the following actions shall be taken:

1. The markers will seek to reduce the difference to less than 10% by discussing their reasons for awarding their marks. If this succeeds, the mark awarded shall be the mean of the two

2. If the above procedure does not result in sufficient agreement (i.e. the difference remains greater than 10% but less than 20%), a third marker shall be appointed and the mean of the three marks shall be the final mark

3. If the difference is 20% or greater, a third marker will be appointed. The three markers will then discuss their reasons for awarding their marks. As one outcome may be two similar marks and an outlier, it is important to allow for input from the outlying marker rather than taking a simple average or ignoring the outlier.

   This may entail:

   - Examining written comments for fairness and accuracy and/or
   - Considering the experience and tendency of the markers for "hard" or "easy" marking at other times, and/or
   - Using any other information (e.g. from the supervisor) that may assist in determining the reason for the unacceptably large difference

4. In cases of irreconcilable disagreement, a fourth examiner will be appointed

## Supervisor's report

- Supervisors may be requested to submit a frank written assessment of the thesis and/or student

# THESIS DEFENCE

1. This is an opportunity for examiners to discuss specific or general issues with the students. Each student will be questioned by the two examiners (and the Chief Examiner) for 10-15 minutes. If the Chief Examiner is one of the thesis examiners then another staff member will be enlisted so that the number of examiners is three. Questioning will take place in a round table environment. Supervisors and other examiners are encouraged to be present in the room but may not participate.

2. At the conclusion of the examination, students will be given the opportunity to discuss any problems they encountered, including those related to supervision - this will be in strict confidence and not in the presence of the supervisor. Any helpful comments may be passed onto the supervisor at the discretion of the Chief Examiner. At this time any special consideration issues will be discussed.

3. After the student has left the room the examiners will discuss the oral defence of the student and finalise their thesis marks.

4. Finally, supervisors will be invited back and asked their opinion of the student's progress and the grade that they would consider fair. Special consideration issues will be raised with the supervisor at this time.

## FINAL MARKS

1. After the last oral examination, the Board of Examiners will reconvene to review the rank order and overall marks. At this time Special Considerations will be discussed and marks adjusted if required (see below).

2. There will be a "cooling-off" period of 1 day during which time theses can be re-examined by any, or all, of the Board of Examiners and any problems discussed including dissatisfaction with the supervisor. The marks will then be finalised by the Board of Examiners. After finalising the marks there will be no more discussion of the matter.

3. The rank order used for scholarship allocation will take into consideration the final Honours result list together with performance in your undergraduate years.

## SPECIAL CONSIDERATION

If you feel you have reasons for special consideration throughout the year, please contact the Honours Coordinator. Documentation such as medical certificates will be required. http://www.sci.monash.edu.au/undergrad/specialcon.html

Students are advised to discuss any issues that arise throughout the year with their supervisors or lab colleagues. As mentioned, there are a number of “neutral” people to act in this capacity if the lab option is not viable; this has worked well in the past.

Students are encouraged to discuss any issues that may have significantly affected their progress with their Chief Examiner. If the issues are of a serious nature then a written application for special consideration should be submitted. Otherwise, at the oral examination the examiners will discuss the matter of Special Consideration with the student and the supervisor(s) (see above). At the meeting of the Honours Examiners which occurs after the oral examinations the panel will consider the situation and decide if, and to what extent, the student’s mark should be adjusted to take into account any disadvantage. The supervisor will be consulted at this time or subsequently to determine if they consider the outcome to be fair to the student in question and the other Honours students. This procedure draws upon the experience of several supervisors who have had experience in collectively supervising and assessing a numerous Honours students. Hence, we are confident that the process results in a fair outcome for all.

## POSTGRADUATE SCHOLARSHIP RANKING

Postgraduate scholarships have become increasingly competitive as the number of students wishing to continue their studies increases. While you should not become preoccupied with this and let it distract you, your performance in the Honours year will have a major impact on your competitiveness. However, failure to secure a scholarship does not mean you cannot pursue further study. The rank order used for scholarship allocation will take into consideration the final Honours result together with performance in your undergrad years. It should be stressed that students applying for a scholarship should think seriously whether they will take up the scholarship if awarded. For more information contact the Student Services Officer.

# PLAGIARISM

The issue of plagiarism has become a major issue in recent times and all efforts will be made by staff to ensure that it does not occur. University policy defines plagiarism and cheating as:

**Plagiarism** – To take and use another person's ideas and or manner of expressing them and to pass them off as one's own by failing to give appropriate acknowledgement.

**Cheating** – Seeking to obtain an unfair advantage in an examination or in other written or practical work required to be submitted or completed by a student for assessment.

It is your responsibility to ensure that your work cannot be accused of plagiarism or cheating.

Further information can be found on the following university web site:
http://www.monash.edu.au/lls/llonline/writing/general/plagiarism/index.xml

**A COMPLETED AND SIGNED COPY OF THE ASSESSMENT COVER SHEET (please refer to next page) SHOULD BE INCLUDED WITH EACH ASSESSMENT TASK SUBMITTED**

# ANIMAL EXPERIMENTATION

It is a Monash University policy that all new staff and students that are to handle animals as part of their work or studies are to have appropriate training in animal handling. At the minimum, there is a compulsory theory module which must be completed. Failure to do so may jeopardise your group's ability to continue animal experimentation.

You have already been exposed to the mandatory animal training scheme; however additional training is available. Please discuss with your supervisor any requirement you may have for these courses.

# FACULTY OF MEDICINE, NURSING & HEALTH SCIENCES
# ASSESSMENT COVER SHEET

| |
|---|
| **Surname:**<br><br>**Given names:** |

| |
|---|
| **I.D. number:**<br>**Email address:** |

| |
|---|
| **Unit name and code:** |

| |
|---|
| **Title of assignment:** |

| |
|---|
| **Name of Honours Coordinator(s):**<br><br>**Name of Supervisor(s):** |

| |
|---|
| **Department/Institute for research project:** |

| | |
|---|---|
| **Due date:** | **Date submitted:** |

All work must be submitted by the due date. If an extension of work is granted this must be specified with the signature of the Honours Coordinator.

Extension granted until (date): _____

Signature of Honours Coordinator: _____

Please note that it is your responsibility to retain copies of your assessments.

***Plagiarism and Collusion are methods of cheating for the purposes of Monash Statute 4.2 – Discipline***

**Plagiarism**: Plagiarism means to take and use another person's ideas or work and pass these off as one's own by failing to give appropriate acknowledgement This includes material from any source – published and unpublished works, staff or students, the Internet.

For further information see: http://www.monash.edu.au/lls/llonline/writing/general/plagiarism/index.xml

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**Student's statement:**
*I certify that I have not plagiarised the work of others or participated in unauthorised collusion when preparing this assignment.*

**Signature:** _____

## Further information

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