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Honours Handbook 2017-2018

www.uq.edu.au/sbms/honours-program

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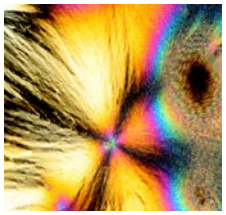
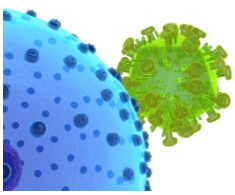

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

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This handbook is intended to give information on the Honours program in the School of Biomedical Sciences. This information is advisory and does not in any way supersede The University of Queensland Calendar & electronic course profile.

Enrolment Checklist

1. Check if you meet entry requirements. For BSc graduates, the minimum requirement is a GPA of at least 4.5 in the most relevant 8 units of third level (or advanced) study and an overall GPA of 4 (minimum) for the BSc degree. In some circumstances, and subject to the approval of the Head of School and Executive Dean, BSc graduates who do not fulfil the above requirements may be permitted to enter the Honours program if they have a high GPA in other science courses and if their proposed project fits well with their background. Bachelor of Biomedical Science students can check their eligibility to enrol in honours by reading the program rules and requirements here.

2. Chose a research area you would like to work in and discuss potential projects with a range of possible supervisors. Research profiles of our academics can be found on the SBMS Honours site (http://www.uq.edu.au/sbms/programs/all) and UQ websites. You can also find a list of available Honours projects at: http://www.uq.edu.au/sbms/honours-program

3. Select supervisor(s) and project and ensure your supervisor has agreed to enrolment.

4. Return completed application to the SBMS Honours administrator (Email: sbms.hons@uq.edu.au or Room 312, Skerman Building (#65)).

   Important: All BSc Honours applicants and new to UQ students must also complete the UQ Online application form

   Deadline: 17 June for commencement in Semester 2 2017
   8 December for commencement in Semester 1 2018

5. We check that you meet the GPA requirement sand application details.

6. You will receive notification advising which courses you need to add in mySI-net. You need to enrol in these courses before the census date (census dates are indicated on the University calendars). If awaiting results, students are not enrolled until the results are released.

7. Official starting date for Honours (**can vary by a week**):

   Third week in July for commencement in Semester 2
   First week in February for commencement in Semester 1

8. The Honours calendar of events and deadlines will be finalised before commencement of your Honours program. It will be emailed to you as well as posted on the SBMS Honours website (http://www.uq.edu.au/sbms/honours-program).

9. The Honours calendar of events and deadlines will be finalised before commencement of your Honours program. It will be emailed to you as well as posted on the SBMS Honours website (http://www.uq.edu.au/sbms/honours-program).

- *Steps 1-3 should be completed well before the proposed commencement date*

General Information

After completing your Bachelors of Science or equivalent degree, Honours will be the most intensive – and for many the first - contact with original research. Through Honours you will experience the different facets of research: the excitement of discovering something new, the satisfaction that comes with being an expert in your chosen field as well as frustrations, problem-solving and communication of your findings. You will be part of a research team, learning from more experienced researchers around you, such as your supervisors and other members of the laboratory.

Whether you consider Honours a stepping stone to a Masters or PhD and onto a career as a researcher, or a vital research experience giving you credibility in science and research-associated careers, you will find the course will add significantly to your training as a Science graduate.

Honours with SBMS

The Honours year with SBMS is a hands-on experience in research and associated skills. This includes the development of technical skills in scientific methodology as well as intellectual skills in experimental design, critical appraisal of scientific literature and assessment of the impact of your original data on current knowledge. Research projects are selected by negotiation between you and supervisor(s) and are reviewed by the SBMS Honours Committee. We encourage you to seek contact with staff members to discuss likely research projects early in your Level 3 studies.

In order to find a supervisor and suitable project we advise you identify research areas you are interested in and approach staff working in these areas. Our staff at the School of Biomedical Sciences research and teach in a wide range of areas from the genomic level through to the structure and function of intact humans and other organisms. We have a strong focus on molecular, cellular and structural biology. Students who want to study physiology will focus their research on how organ systems, tissues, cells and molecules function together; those who concentrate on anatomical studies will investigate how structures are created and how they function whilst pharmacology/toxicology students will research how drugs and toxins modify or affect biological functions.

The School and its associated centres and companies are heavily involved in cutting edge biomedical research and most of our academics have an active research program with projects available for Honours students. More details can be found at http://www.uq.edu.au/sbms/programs/all. The research areas of SBMS staff members are grouped under the following programs:

- Therapeutic Development and Translation
- Functional Morphology
- Cellular Signalling and Function
- Innovation in Biomedical Education
- Tissue Injury and Repair
- Brain Development and Function

Collaborative projects may also be available with several University Institutes such as the Queensland Brain Institute (QBI), the Institute for Molecular Bioscience (IMB), The Australian Institute for Bioengineering and Nanotechnology (AIBN), the Diamantina Institute and the National Research Centre for Environmental Toxicology (EnTox). We also participate in projects with the Departments of Medicine and Obstetrics & Gynaecology and the School of Pharmacy. More information about these institutes and centres can be found on their respective UQ websites.

Bachelor of Biotechnology (Drug Design and Development)

Laboratories within SBMS frequently host students who are engaged in the Biotechnology degree program. Details regarding this program and its requirements can be obtained from the following website: http://scmb.uq.edu.au/biotech

Information for Students of other Faculties

The School is within the Faculty of Medicine and most of our Honours students are enrolled in either Bachelor of Science or Bachelor of Biomedical Science. However, there are avenues for students enrolled in Medicine, Veterinary Science, Dentistry and other professional courses to undertake research studies with us. Students enrolled in professional courses may obtain more detailed information from their relevant faculty and discuss their interest with the Chair of the Honours committee.

The main focus of this handbook is for Honours in Biomedical Science. Students wishing to pursue similar degrees with us should also contact the faculty in which they are enrolled.

Careers

An Honours degree is the qualification most often required for employment in research positions and industry. Numerous career opportunities await students with backgrounds in biomedical science, where universities and research institutions are the major employers. Many students have opted to study biomedical sciences as a prelude to careers in professional disciplines such as medicine, dentistry and speech therapy. Increasingly an Honours degree is a minimum requirement for entry-level employment in industry.

Candidates who obtain Honours I or Honours IIA may proceed directly to studies for the degree of Doctor of Philosophy (PhD). An Honours IIB is the minimum requirement for entry to the degree of Master of Science (MSc). The path for students aspiring to careers as academics or research scientists is usually the PhD.

Honours Enrolment Requirements

Entry Criteria

For entry into Honours, SBMS requires a satisfactory background in Level 2 and 3 relevant courses. For BSc and BBiomedSc graduates, the minimum requirement is a GPA of at least 4.5 in the "most relevant 8 units of third level (or advanced) study". In addition, an overall GPA of 4 (minimum) for the BSc degree (or for the first three years of the BBiomedSc degree) is required. In some circumstances, and subject to the approval of the Head of School and Executive Dean, BSc graduates and BBiomedSc students who do not fulfil the above requirements may be permitted to enter the Honours program if they have a high GPA in other science courses and if their proposed project fits well with their background.

Commencement of Study

Studies may commence on the following dates: (slight variations are possible if there is any change in the UQ Academic Year).

1st Semester enrolments (can vary by a week)

Application Due: 8th December 2017

Start Date: First week in February 2018

2nd Semester enrolments (can vary by a week)

Application Due: 17th June 2017

Start Date: Third week in July 2017

Program Description

General Information

- The Honours program consists of a research project with associated research proposal, research report, seminars, journal clubs and evaluation of laboratory performance.

- It is very important for students and supervisors to be aware that the research report represents the bulk of the year's work and is therefore the primary indicator of the level of the student's research and communication skills.

- On receiving the application, the Honours committee will evaluate the candidate and the project descriptions. Any questions or concerns will be discussed with the supervisor or candidate before approval is given. Any subsequent major changes to the research project throughout the Honours year will require approval from the SBMS Honours Committee chairperson.

Assessment Items

- **Journal Club:** This component involves the presentation and contribution to discussion of a research paper amongst your peers.

- **Research Proposal**: Submitted as a document of 4000 words (maximum) outlining and justifying the proposed project and introducing the background literature.

- **Proposal Seminar:** Students will give a 10 minute oral presentation (with 5 minutes of questions) on the background and rationale for their study. This will include a statement of aims and hypotheses along with research methods to be used.

- **Research Report**: Submitted as a document of 8000 words (maximum) describing and critically appraising the research work undertaken during the Honours year.

- **Seminar Diary**: Students will attend at least 12 seminars (these can be external to SBMS) given by academic/research staff or invited speakers.

- **Supervisor's Report: Supervisors will provide a report based on the student's performance over the course of the Honours year.**

- **Final Research Seminar**: This component includes the final seminar presented at the end of the year (15 minute talk & 10 minutes for questions).

Assessment Marking

- Two examiners are invited by the SBMS Honours Committee to assess the research proposal and research report. Their feedback will be made available to the students, although examiners have the option of remaining anonymous. If appropriate, examiners may be from another department or institution.

- Seminars are examined by two members of the SBMS Honours Committee or appropriate proxies.

- Templates of marking sheets used by examiners for the assessment of items of work can be found in the learning resources section of the Blackboard site.

- Students will be informed of the grading of any item's assessment at the end of each semester. Students should direct any queries in relation to marks to the Honours Coordinators or Committee.

- Final results are recommended by the SBMS Honours Committee to the Head of School, who advises the Executive Dean. The award of various classes of Honours is also made by the Head of School and relevant Executive Dean.

- Criteria marking sheets for all Honours assessment items will be posted on Blackboard sites for the courses.

Assessment Summary BSc and BBiomedSc Honours

Subject Code	Subject Title	Credit Unit
BIOM6191 or BIOM6192	Research Project in Biomedical Sciences	16
BIOM6501 or BIOM6502	Research Project in Biomedical Sciences	16

Assessment Task	Weighting
Journal Journal Club Presentation and Participation	5%
Seminar Research Proposal Seminar	5%
Report Research Proposal	10%*
Diary Seminar Diary	Mandatory
Report Research Report	55%*
Report Supervisor's Report	5%
Seminar Final Research Seminar	20%

** submission of final version via Turnitin*

Classes of Honours

Please ensure that the Electronic Course Profile is referred to for official due dates, assessment information and relevant policies, these are guidelines only.

The final grade will be accredited in the form of *Classes of Honours.* The minimum overall percentage for the various classes of Honours is:

Grade 1 – a cumulative score of less than 30% OR a cumulative score of at least 30% and less than 30% for the research report – Honours Class IIIB

Grade 2 – a cumulative score of 30%-39% and at least 30% for the research report OR a cumulative score of at least 40% and 30%-39% for the research report – Honours Class IIIB

Grade 3 – a cumulative score of 40%-49% and at least 40% for the research report OR a cumulative score of at least 50% and 40%-49% for the research report and does not submit the seminar diary – Honours Class IIIB

Grade 4 – a cumulative score of 50%-59% and at least 50% for the research report and seminar diary OR a cumulative score of at least 60% and 50%-59% for the research report – Honours Class IIIA

Grade 5 – a cumulative score of 60%-69% and at least 60% for the research report OR a cumulative score of at least 70% and 60%-69% for the research report – Honours Class IIB

Grade 6 – a cumulative score of 70%-79% and at least 70% for the research report OR a cumulative score of at least 80% and 70%-79% for the research report – Honours Class IIA

Grade 7 – a cumulative score of 80%-100% and at least 80% for the research report – Honours Class I

Other requirements: Students must meet the indicated hurdle in the research report assessment, in addition to the required cumulative score, to achieve each grade and class of Honours, as detailed above.

Students must also complete and submit the Seminar Diary in order to pass the course. If a student obtains an overall percentage greater than the cut-offs set to achieve a 4 or higher for the course based on marks from a combination of all assessment tasks and the student does not complete and submit the Seminar Diary, they are unable to achieve a grade higher than a 3 (failing grade) for the course and are ineligible to obtain an Honours Class I, IIA, IIB or IIIA.

Scientific Ethics

Scientific ethics describes a broad range of issues. Professional conduct is expected from all students and includes all areas from the humane treatment of experimental animals, human subjects, integrity

of data collection, presentation, scientific writing, and keeping of due dates. It is very important that you understand various aspects of scientific ethics before commencing the work for your degree.

Students using animals as part of their project must also attend training run by the relevant animal house required for their project.

Plagiarism

The University has adopted the following definition of plagiarism:

> Plagiarism is the act of misrepresenting as one's own original work the ideas, interpretations, words or creative works of another. These include published and unpublished documents, designs, music, sounds, images, photographs, computer codes and ideas gained through working in a group. These ideas, interpretations, words or works may be found in print and/or electronic media.

Students are encouraged to read the UQ Student Integrity and Misconduct policy (http://ppl.app.uq.edu.au/content/3.60.04-student-integrity-and-misconduct) which makes a comprehensive statement about the University's approach to plagiarism, including the approved use of plagiarism detection software, the consequences of plagiarism and the principles associated with preventing plagiarism.

Extensions

Late submission of intra-semester assessment items (after the due date and time), without a prior authorised extension or beyond the extension date, will result in a penalty by deduction from the marks received for that assessment item at the per day rate of 5% of the maximum marks achievable.

Submission of Application for Extension of Progressive Assessment Forms should be made to Student Services Office, Level 3, Skerman Building 65 or via email to sbms.hons@uq.edu.au.

Honours Administration

The Honours program is administered by the SBMS Honours Committee, which is comprised of members of academic staff plus PhD student representatives and one administrator.

The SBMS Honours Committee:

- administers the Honours program;
- makes recommendations to the Head of School on grades after consultation with the examiners. The SBMS Honours Committee ensures that the assessment of each candidate is fair and appropriate. All assessment may be subject to moderation by the committee if deemed necessary;
- ensures that candidate and supervisor are aware of all aspects of the program and assessment requirements;
- help and advise students as necessary;
- recommends to the Head of School the winner of the Douglas HK Lee Honours and Michael F Hickey Honours Prizes for each year (see www.uq.edu.au/sbms/honours-program under prizes); and
- adjudicates in any disputes that may arise involving Honours students.

Honours Committee Members Contact Details

Name	Room	Phone	E-mail
Dr Richard Clark (BSc Hons and BBiomedSc Hons Coordinator and Co-Chair)	316 Skerman	3365 1527	richard.clark@uq.edu.au
Dr David Simmons	411 MacGregor	3365 1962	d.simmons@uq.edu.au
Dr Emma Hamilton-Williams	Diamantina Institute	3443 6989	e.hamiltonwilliams@uq.edu.au
Dr James Hudson	511 MacGregor	3365 2957	j.hudson@uq.edu.au
Dr Mary-Louise Roy Manchadi	421 Skerman	3365 6978	m.roymanchadi@uq.edu.au
Dr Oliver Rawashdeh	Otto Hirschfeld	3365 2706	o.rawashdeh@uq.edu.au
Dr Pascal Duijf	Diamantina Institute	3443 6937	p.duijf@uq.edu.au
Dr Victor Anggono	QBI	3346 6326	v.anggono@uq.edu.au
Sarah Kerwin	Student Rep		sarah.kerwin@uqconnect.edu.au
Christian Than	Student Rep		christian.than@uqconnect.edu.au
Honours Administrator	312 Skerman	3365 4833	sbms.hons@uq.edu.au

Student –supervisor responsibilities

The role of your supervisor is to provide you with advice, guidance and criticism to assist you in the successful completion of your thesis. The thesis should ultimately be your own work for which you must take responsibility for the final results.

To help guide you in your interactions with your supervisor here are some of the expectations of what the student-supervisor roles entail.

Responsibilities of the supervisor

- Assist in the development of a study plan for the year's thesis work setting goals and monitoring progress. Advising student when progress is unsatisfactory.
- Provide guidance in the selection and application of appropriate literature, data collection and analysis procedures.
- Foster writing skills by way of constructive commentary.
- Meet regularly to discuss each stage of the project.
- Provide prompt feedback on drafts (no line-editing) and read the entire thesis before it is prepared for submission.

Responsibilities of the student

- Work with the supervisor in the development of a study plan which is suitable to both parties.
- Consider advice seriously.
- Maintain regular contact with your supervisor as per an agreed timetable. The student and supervisor should be considerate of each other's time and their dealings with one another should be reasonable.
- Proof-read written material before submitting to your supervisor. If the supervisor is forewarned that their input is required, this will lessen delays in receiving feedback.
- Write your own thesis, including drafts. Supervisors must not write or re-write your thesis.
- If you experience difficulties you should first attempt to resolve them with your supervisor/s as quickly as possible to avoid significant time wastage. If this does not work or you feel that you cannot approach your supervisor/s you should consult with the Honours Coordinator. If the matter remains unresolved you should contact the Head of School.

Further information on the student-supervisor relationship can be found at http://www.uq.edu.au/student-services/learning/supervision. While this is primarily for research higher degree students, much of the information is equally applicable to the honours year.

The student charter is available in the UQ Policy and Procedures library at https://ppl.app.uq.edu.au/content/3.60.01-student-charter, and sets out the general rights and responsibilities of students at the University of Queensland.

Statement of Authorship

{Research Report Title}: {Subtitle}

{Candidate's full name}

A {insert type: Research Report / Research Proposal} submitted for the degree of Bachelor of (Biomedical) Science (Honours) at

The University of Queensland in {month} {year}

School of Biomedical Sciences

Declaration by author

This research report is composed of my original work, and contains no material previously published or written by another person.

{Free text section to insert the contribution of others}

I have clearly stated the contribution of others to my research report as a whole, including statistical assistance, survey design, data analysis, significant technical procedures, professional editorial advice, and any other original research work used or reported in my report. The content of my report is the result of work I have carried out since the commencement of my honours research project.

Acknowledgements

{free text section for you to record your acknowledgment and gratitude for the more general academic input and support of your supervisor and colleagues; financial support from grants and scholarships; and the non-academic support you have received during the course of your candidature.}

Signature of Author: _____ Date: _____

{please note that as part of the supervisor report, your supervisor will be asked whether they read the final report and whether they agree with the student's declaration}

Guidelines for Students & Examiners

Written Research Proposal – Guidelines for Students

This is the first major piece of work assessed in the honours program. The Research Proposal should provide a comprehensive review of the literature relevant to the project, leading to a statement of the major experimental aims/hypotheses of your project and the rationale underlying the planned experiments. Detailed explanations of the experimental methods are not required, although you must show a general understanding of methods to be used. It is essential that you outline the experiments to be carried out, how the data will be analysed, and show that the experiments are appropriate in the light of both previous research in the area and the aims of your project. Finally you should address the expected outcomes and significance of your research. The proposal should be an original, learned and critical appraisal of the literature on the topic and not simply a summary of the literature. It should illustrate that you have a personal insight into the area of your research project. It should be written such that the content is intelligible to the non-specialist reader. Jargon should be avoided and all abbreviations must be defined.

The research proposal is to be presented as a written assignment, which must be typed and submitted as described below. All text (including in-text citations) with the exception of the declaration, table of contents, figure legends, tables, the list of references and any appendices must not exceed 4,000 words. If the word count is exceeded a penalty of 1% will be applied to the thesis (i.e. if the thesis is awarded 80% it will score 79% if over the word limit). Text should be double-spaced, on A4 paper with 2.5 cm margins and in 12 point font. Tables and Figures should have clear legends that stand alone (i.e. they do not require referral to the main body of text for their interpretation).

Supervisors and laboratory members are permitted to read and comment on your proposal, however they must not undertake in-depth editing.

References to the sources of the material in the proposal, where relevant, should be cited in the text at the end of the relevant phrase or sentence using a style from a well known journal in your field. The references should be listed alphabetically by author name or in numerical order at the end of the proposal, in a format used in a well known journal in your area of study and must include the full title and list of authors of each paper. *Published sources quoted verbatim must be placed within quotation marks and cited appropriately*. The citations and references list should be prepared with the aid of a referencing database, such as Endnote, (which is supplied free of charge by the library) to avoid both a time-consuming task and the inevitable errors. You should seek advice from your supervisor about this soon after you commence Honours. UQ Library offer courses in the use of Endnote, you can register for training at the following site: https://www.library.uq.edu.au/training/. Students are required to use the software program TURNITIN to avoid plagiarism and for submission.

The format consists of:

- Title Page
- Declaration (as per page 13 of this handbook) which must include

  (i) a statement that the work is yours except as acknowledged;
  (ii) the word count of the text (note limits provided elsewhere);
  (iii) your signature and the date

- Table of Contents
- List of abbreviations
- Introduction (which should provide a suitable introduction for the non-specialist reader)
- Various sections as appropriate to the topic including:
- a critical review of relevant literature (~60% of length of report)
- the aims/hypotheses of your research proposal
- the research plan and methods for the research project (including anticipated data analysis and a timetable)
- expected outcomes and significance of the project
- References (a bibliography in alphabetical order)

Deadline and copies

An electronic copy (in both pdf and Word format) of the report must be submitted to Turnitin by 3.00pm on the specified date as per the electronic course profile. Any candidate who submits their report late without a formal extension granted by the Chair of the Honours Committee will be penalised. Your report will be sent electronically to your examiners for marking. You will not be required to submit any hard copies of the report.

Please be aware that Turnitin has a maximum file upload size of 20MB.

Scientific quality of the project should NOT contribute to assessment of the seminar as this has usually been generated by the supervisor. We are judging the student's approach to the project.

Research Proposal Seminar – Guidelines for Students

The research proposal seminar is scheduled 1–2 weeks after the due date for the research proposal. It is likely to be your first ever seminar, so good preparation and practicing your seminar will go a long way to help with nerves. The structure of the seminar is 10 minutes presentation and 5 minutes discussion. Ideally, the seminar should comprise a ~3-4 minute resumé of the background to the project and reasons for doing it. The remaining ~7 minutes should deal with the "nitty gritty" of the project: methods, experimental design, possible results and their significance. This will enable the audience and Committee to spot any project deficiencies which might compromise your progress. You should be able to illustrate a thorough understanding of the background literature in both the seminar and answers to questions.

Intellectual content of the seminar [understanding project and methodology, significance of possible results, organisation of topic, ability to handle discussion] should constitute 80% of the assessment, and quality of the presentation [timing, use of overheads, audibility, style] will contribute 20% to the mark. Any student running over time by >1 minute can be penalised.

On the day of your seminar, you will be required to have your presentation ready on a usb drive, compatible with Windows/PC program. You must load your presentation onto the supplied PC/Laptop prior to your seminar session commencing.

Data already generated in your project **MUST NOT** be presented in this seminar; it should be reserved for the final seminar. ***Scientific quality of the project should NOT contribute to assessment of the seminar as this has usually been generated by the supervisor. The examiners are judging your approach to the project***.

You are required to attend ALL Honours seminars (or one set of sessions if there are concurrent talks) to support your peers.

Templates of the examiner's report can be found on blackboard.

Effective Scientific Communication

All students will be able to participate in workshops to further develop scientific communication skills required for Honours seminars, written work and other forms of scientific presentations. Workshops of 2-3 hour duration will prepare you for the major assessment tasks, highlighting the important aspects of:

- Scientific writing, emphasizing key principles and strategies,
- Oral presentations, and
- Discussing with peers your research, its central arguments, questions and your approach.

Written Research Proposal – Guidelines for Examiners

This document should be considered as the introduction to the research report (except that it is submitted some months before the report!). The literature background should be focused on the area of the research report and should lead to a delineation and justification of the project design as a research proposal. That is, it should provide a **comprehensive review of the relevant literature.** It should also provide a **statement of the major experimental aims/hypothesis** and the **rationale underlying the planned experiments**. It should outline the data analysis as well as expected possible results and a timetable. It should *not* include detailed explanations of the experimental methods to be undertaken. This document contributes 10% of the student's final mark.

The background to the project should be an original, learned and critical appraisal of the literature on the topic and *not simply a summary of the literature*. Understanding of the subject matter, any intelligent attempt at criticism and showing an understanding of the relationship of the planned experiments to the literature background are of *prime* importance and should be rewarded accordingly. Organisation of the topic and literacy should be of a high standard. It should be written such that the content is intelligible to the non-specialist reader. Jargon should be avoided and all abbreviations defined. Published sources quoted verbatim should be used rarely and placed within quotation marks.

Penalties for excessive length and late submission will be applied by the Honours committee, not the examiner.

Care should be taken by the student in all aspects of the presentation, including correct spelling, punctuation, grammar and format. Citations and bibliography should be of a consistent and common format.

The approach should be appropriate to the area(s) of recent advances in the topic. **However, as the examiner, you should not allow any research bias to influence your assessment**. **Also, remember that the supervisor has largely determined the project design,** so the student should be marked for his/her understanding of the relationship of the planned experiments to the literature, **but NOT on the actual project design.** The possible input of the supervisor should be considered in the marking of all aspects of the document.

Your report will be made available to the student, the supervisor and your co-examiner(s). It should highlight both the deficiencies and strengths of the review, provide constructive criticism and be consistent with your mark.

Please return the examiners report and the research proposal in an envelope marked "CONFIDENTIAL" to SBMS Honours Administrator, C/- of the School Office or to the SBMS Honours Administrator at sbms.hons@uq.edu.au. If you cannot meet the deadline or if unexpected problems arise in assessment, please contact either Dr Richard Clark on Ext. 51527 or SBMS Honours Administrator on Ext. 54833 or email sbms.hons@uq.edu.au immediately.

Journal Club – Guidelines for Students

Journal club groups and leaders will be organised by the Honours committee during the honours year. Announcements will be made on Blackboard once these groups have been finalised.

The presentation is intended to provide you with the opportunity to communicate scientific research material to an audience, to discuss the findings and conclusions of the material with the members of the audience and to practice some core skills in scientific communication. Although it is not easy, try and relax during your presentation. We all have to learn these skills and the more we practice the easier it becomes and the more we feel comfortable about answering and asking questions.

Core Skills:

- Enhanced confidence for public speaking
- Personal and group organizational skills
- Visual aid development skills
- Skills associated with analysing and responding to spontaneous questions

The Process:

All club members will have read the papers to be presented each week and should be prepared to both ask and answer questions from the presenters and from other members of the club. The club leader CAN ask ANY student to pose a question for any of the group presenters.

Time Allowed:

Duration:	Approx 30 to 35 min
Questions-Discussion:	Approx 10 to 15 min

Assessment:

The presentation will be based on points in the following checklist, which will be graded A to D according to the criteria marking sheet. Each checklist section has the weightings shown. All assessments will be moderated by the course coordinator before a final mark out of 40 is awarded. This mark will be moderated by the Course Coordinator against marks from other journal clubs, and then converted into a mark out of 5% of your Honours mark.

Participation at journal club sessions is necessary and is worth 5% of your mark for Honours. Participation includes active interaction in the journal club, such as asking questions of other presenters and participating in discussions. Hence this assumes that all members read the paper before the Journal Club meeting. A register of attendance will be kept for all Journal Club sessions. Students must attend all sessions unless they have obtained an exemption from their journal club leader and Honours coordinator (e.g. illness).

Checklist for Oral Presentation Marking Criteria:

- *Introduction & background material, Statement of aims of presentation*

  -Does introduction appropriately explain broader background for presentation ("has the scene been set?")

  - Why is presented work interesting/relevant to field ("why should we care?")

  - What are specific aims of presentation ("what am I/ are we going to talk about?")

- *Accuracy and completeness of content, Clarity and logic of the presentation*

  - Is relevant content of work presented accurately and completely? ("did you get all the important facts and findings and tell us about them!")

  - Are points of presentation being made clearly and in a logical order? ("did your audience get it?")

  - Have you shown that you have personal insight into relevant aspects of work ("what did you think about the work and why?")

- *Quality of oral communication and use of presentation aids*

  - Are you using appropriate language and vocabulary for a scientific presentation to an intelligent but inexpert audience? ("keep it clear and simple, but explain the big words and concepts when needed")

  - Is your language engaging and persuasive ("did you keep your audience awake and interested?")

  - Are you using appropriate text materials, outlines, graphs, pictures, examples etc., and are they legible, visible, interesting, well organized? ("great notes, good pictures!")

- *Length of the presentation*

  - Does the presentation fall within the time period allowed? ("did you keep to the point?")

- *Handling questions*

  - Are the group/individuals responding to questions positively? ("all questions need respect!")

  - Are your responses short, to the point and answering or attempting to answer the question? ("keep it moving")

  - Are you prepared to say you did not know? ("know your limits and acknowledge them")

- *Group interactions (integration and answering questions)*

  - Is there good communication between group members? ("do you know the others exist?")

  - Do you utilize the other presenters in the group if required to answer questions? ("someone may know more than you"

Research Report – Guidelines for Students

This report is the main piece of work comprising the presentation of all aspects of your research. This is reflected in the high weighting it has as one of the assessments for Honours. Results of the research are prepared in the form of a research report. All text (including in-text citations) with the exception of figure legends, tables, the list of references, any appendices and initial pages incorporating the declaration, acknowledgments, table of contents, abstract, etc. **must not exceed 8,000 words**. If the word count is exceeded a penalty of 1% will be applied to the thesis (i.e. if the thesis is awarded 80% it will score 79% if over the word limit)). Text should be double-spaced, on A4 paper with 2.5 cm margins and in 12 point font. Should you include data that was jointly generated with another member of the laboratory, this should be declared in the 'Statement of authorship' (see page 10) as well as the relevant Figure legend(s). If you wish to describe work that is not your own (e.g. data generated by another member of the laboratory working on the project) that provides context for the results/discussion, these must be placed as an appendix and appropriately acknowledged. Appendices may also be used to provide additional methodological details where appropriate (i.e. such that the examiner can determine whether the methods are robust and appropriate; excessive length is not rewarded). Supervisors and laboratory members are permitted to read and comment on your report, however they must not undertake in-depth editing.

- The format of the research report consists of:
- Title Page
- Declaration (from page 10 of this handbook) which must include

  (i) a statement that the work is yours except as acknowledged;
  (ii) the word count of the text (note limit and rules provided elsewhere);
  (iii) the location of your laboratory notebooks and files of your experimental results;
  (iv) your signature and the date

- Table of contents
- List of abbreviations
- Abstract (a summary of the project in not more than 2 pages, focusing on what you did)
- Acknowledgments
- Introduction (a very brief summary of the key literature which leads up to the rationale of the experiments and a statement of the aims/hypotheses)
- Methods (succinct description of techniques used and sources of materials)
- Results (experimental data with sufficient explanation to make the data in figures and tables comprehendible; appropriate statistical analysis of data)
- Discussion (interpretation of results and a critical review of these results in relation to the published body of knowledge)
- References (a bibliography in alphabetical order)
- Appendices (Large amounts of data should be included in Appendices with brief summary tables in Results)

Notes

As the literature background and research proposal submitted earlier in the year will have already provided an extensive review of the published work in the area, the research report introduction will be much shorter. It is permissible to re-use suitable sections of your proposal for the thesis (i.e. this

will not be viewed as plagiarism). The **recommended** lengths of the other report components are:

- Methods 5-10 pages
- Results 10 pages
- Discussion 5-10 pages

References should be cited in the text at the end of the relevant phrase or sentence using a style from a well known journal in your field.. The references should be listed alphabetically by author name or in numerical order at the end of the proposal, in a format used in a well known journal in your area of study and must include the full title and list of authors of each paper. The citations and references list should be prepared with the aid of a referencing database, such as Endnote, as for your research proposal.

Tables and Figures should be on *separate pages interleaved with the text*. Tables, Figures and Diagrams should have clear legends that stand alone (i.e. that do not require referral to the main body of text for their interpretation).

To avoid Plagiarism students will be required to submit both a draft and final copy via the software program Turnitin.

For overall format and presentation style/standard, it is highly recommended that you peruse some recent successful Honours theses (available from the School Office). You should look at relevant theses well before writing your report, not only to start formulating your ideas early, but also to avoid the risk of theses being unavailable in the rush at the end of the year.

Material from work that has been done, by the student, before commencement of the Honours year cannot be included in the body of the report. However, a short report of such material may be incorporated as an Appendix and reference made to this Appendix in the report. Any results obtained by others or other help must be specifically and clearly acknowledged in the Declaration.

Deadline and copies

An electronic copy (in both pdf and Word format) of the report must be submitted to Turnitin by 3.00pm on the specified date as per the electronic course profile. Please be aware that Turnitin has a maximum file size of 20MB. Any candidate who submits their report late without a formal extension granted by the Chair of the Honours Committee will be penalised. Your report will be sent electronically to your examiners for marking. You will not be required to submit any hard copies of the report.

More detailed information about extensions can be found on the electronic course profile. Please note extensions will only be granted in exceptional circumstances.

Laboratory Performance Evaluation

This component of your assessment will be based on a report from your principal supervisor. On completion of your Honours project your supervisor will assess your performance and this score will contribute to your mark.

Laboratory notebooks

All experiments must be recorded in an official laboratory notebook and in a manner appropriate for experimental science. These notebooks must be handed in to your supervisor at the time of submission of the Research Report and they must be in a location as stated in the Declaration of your report such that they can be readily accessed by the Committee during the examining process.

Scientific quality of the project should NOT contribute to assessment of the seminar as this has usually been generated by the supervisor. We are judging the student's approach to the project.

Research Report – Guidelines for Examiners

The introduction to the Report including a comprehensive literature background, the aims and hypotheses of the project and the rationale underlying the project was submitted by the student as the Literature Background and Research Proposal at the end of the first semester of study. There is a short introduction to the report which will include the key points from the original document. You will also receive the copy of the student's research proposal that was marked earlier in the honours year.

The major objective of the research report is to assess research skills. Therefore, close attention should be given to the student's

- Understanding of the problem: Does the short introduction to the report adequately summarise the relevant information and provide a rationale for the experiments?
- Approach to providing a solution:
  - are the aims and hypotheses clearly stated?
  - were methods understood and clearly described?
  - were important controls included?

- Technical ability:
  - reproducibility of data
  - scatter of data points (keep in mind type of research involved)
  - quality of micrographs, etc
  - degree of difficulty of techniques in relation to quantity and quality of results

- Presentation and analysis:
  - are data presented in the most appropriate and organised form? (there should be no need to decipher graphs or tables)
  - have appropriate statistical analysis been carried out? (All data should indicate mean, SD (or SE), number of animals/experiments)
  - are the legends and figures comprehensive?

- Discussion:
  - does the student know what the results mean?
  - does the student know where further research should go?
  - does the student know the limitations of their own research?

Care should be taken by the student in all aspects of presentation, including correct spelling, punctuation, grammar and format. Citations and bibliography should be of a consistent and common format. This assignment has an 8000 word limit. Excessive length or brevity should NOT be rewarded. Should insufficient or inadequate data be obtained, then the reasons for this should be carefully explained. Penalties for excessive length and late submission will be applied by the Honours committee, not the examiner.

A judgment of the scientific quality of the project should NOT contribute to the assessment since the project has usually been generated by the supervisor. It is the student's approach to and execution of the project that is being examined. Your report should be prepared using the rubric provided, highlight both deficiencies and strengths of the research report, provide constructive criticism and be consistent with your mark. Your report (but not the mark) will be made available to the student, the supervisor and co-examiner(s).

The research report contributes 55% to the final mark for the student's Honours assessment. *This mark is critical in determining the candidate's career prospects and should accurately reflect the student's performance.*

The thesis examiner is not required to examine the seminar but we strongly encourage you to attend or send questions for the student to answer.

Please return your examiners report and the research report in an envelope marked "CONFIDENTIAL" to SBMS Honours Administrator, c/- SCHOOL OF BIOMEDICAL SCIENCES OFFICE or by **email** sbms.hons@uq.edu.au. Failure to adhere to the deadline severely compromises the finalisation of the student's results and, in many cases, their application for higher degrees or employment.

If unexpected problems in assessment arise, please contact either Dr Richard Clark on Ext. 51527 or the SBMS Honours Administrator on Ext. 54833 or via email sbms.hons@uq.edu.au immediately.

Final Research Seminar & Seminar Diary – Guidelines for Students

Seminar Diary

A compulsory component of Honours is attendance of at least 12 seminars. Your summary should contain seminars given by academic and research staff, or invited speakers. The seminars may be outside SBMS but it is expected that students attend seminars in SBMS as a priority. Students will keep a reflective diary of the seminar attended in a notebook which has date, title, speaker's name, seminar series title and notes taken during the seminar. A paragraph summarising your thoughts on the seminar has to be included. **Printed notes are not acceptable**. This notebook must at all times be accessible to your supervisor.

Final Research Seminar

This seminar is held about 10 days after the due date of the research report and gives you a chance to present your research and its results to a wider audience while using a presentation format used frequently in scientific conferences.

The seminar allows for 15 minutes presentation and 10 minutes discussion. The time will not permit you to cover all aspects of your research. Any limitation of the scope should be explained in the introduction.

The seminar should regard the audience as intelligent but ignorant of your research area. You should be able to:

- demonstrate understanding of methodology used and any limitations of that methodology
- demonstrate ability to summarise, analyse and describe your own results [this is of paramount importance]
- demonstrate awareness of the limitations of their experiments and factors which might have influenced the results
- demonstrate ability to critically discuss the significance of your results: Do you support the original hypothesis--if not, why not; Do you suggest alternative hypotheses?
- handle discussion and questions from the audience.

Intellectual content of the seminar should contribute 80% and quality of presentation [both defined above] contributes 20%. Running over time by >1 minute will be penalised.

On the day of your seminar, you will be required to have your presentation ready on a usb drive, compatible with Windows/PC program. You must load your presentation onto the supplied PC/Laptop prior to your seminar session commencing.

You are required to attend ALL Honours seminars (or one set of sessions if there are concurrent talks) to support your peers.

Scientific quality of the project should NOT contribute to assessment of the seminar as this has usually been generated by the supervisor. We are judging the student's approach to the project

Final Seminar – Guidelines for Examiners

The seminar allows for 15 minutes presentation and 10 minutes discussion. The time will not permit a student to cover all aspects of their research. Any limitation of the scope should be explained in the introduction.

Intellectual content of the seminar should contribute 60%, quality of presentation [both defined above] contributes 20%, and ability to answer questions contributes 20%. A student deviating more than 1 minute from the allocated time, should be penalised.

The introduction should regard the audience as intelligent but ignorant of your research area. The student should be able to:

- demonstrate understanding of methodology used and any limitations of that methodology
- demonstrate ability to summarise, analyse and describe their own results [this is of paramount importance]
- demonstrate awareness of the limitations of their experiments and factors which might have influenced the results
- demonstrate ability to critically discuss the significance of their results: Do they support the original hypothesis--if not, why not; Do they suggest alternative hypotheses?
- handle discussion and questions from the audience.

Data that was not generated by the student should NOT be shown during the results section of the seminar. All data generated by others must be appropriately acknowledged.

Scientific quality of the project should NOT contribute to assessment of the seminar as this has usually been generated by the supervisor. We are judging the student's approach to the project.

Prizes

The Douglas H.K. Lee Honours Prize is offered to Honours students only enrolled in the discipline of Physiology or Pharmacology and awarded to the student with the highest overall percentage in their Honours year. This prize was established in 1997 in honour of Emeritus Professor Douglas H.K. Lee who retired from lecturing in the Department of Physiology & Pharmacology in 1999 at the age of 94. This prize is maintained annually by the School of Biomedical Sciences.

Value: $250

The Michael F. Hickey Honours Prize is offered to Honours students only enrolled in Anatomy and Developmental Biology (or equivalent) and awarded to the student with the highest overall percentage in their Honours year. This prize was established in 2005 in honour of Professor Michael Francis Hickey who joined the Department of Anatomy at the University of Queensland in 1942 as a full-time lecturer and was Chair of Anatomy from 1959 until 1968. In 1962 he introduced three Anatomy courses for Science students and in doing so, he paved the way for the enrolment of future postgraduate research students. This prize is maintained annually by the School of Biomedical Sciences.

Value: $250