

THE SCHOOL OF MEDICINE

University of Adelaide

Honours Program – 2010

The School of Medicine – who, what, and where?

Welcome to the University of Adelaide School of Medicine Honours Program. Embarking on an Honours year represents a new phase in your personal and professional development. It is a commitment which you are likely to find challenging, but at the same time rewarding. Since 2008, there has been a single Honours program that encompasses all six Disciplines that comprise the School of Medicine - Medicine, Surgery, Orthopaedics & Trauma, Ophthalmology, Psychiatry, and Anaesthesia & Intensive Care. The School of Medicine spans several campuses, and Projects are on offer at the *Royal Adelaide Hospital* campus, which includes the Hanson Institute and Institute of Medical and Veterinary Science (IMVS), and the *Queen Elizabeth Hospital*, which includes the Basil Hetzel Institute. These diverse projects cover the spectrum from basic science to clinical research, and many involve investigators who are international leaders in their fields. As a consequence, the School is highly productive in terms of significant publications. As an Honours student you will enjoy a sense of being an active member of the scientific community – taking on the status of a colleague among a team of investigators. You may also have the opportunity to engage in some of the School's numerous links with international collaborators.

Why do an Honours year?

The Honours year enables you to undertake hands-on research that you have had a major role in planning, under the supervision of an experienced investigator. For many students, it is the logical next step to a career in science, and serves as the gateway to a PhD, with the goal of becoming an independent researcher. More broadly, the Honours Program is designed to provide a sound training in critical thinking skills, scientific communication, and personal organisation. As such, an Honours year equips graduates for a range of other fields, including sports medicine, nutrition and dietetics, and the corporate sector, particularly the biomedical and pharmaceutical industries.

Eligibility

To commence an Honours year, candidates will have completed a Bachelor's Degree in the biological or health sciences, preferably with a credit or above, having taken subjects appropriate to their project of interest. The Honours course may also be undertaken by medical students at the end of their third year, for the degree of Bachelor of Medical Science (Honours), and may appeal to students eager to

explore the process of medical research without necessarily committing to a long-term academic career.

Elements of the Course

The Honours year consists of two main components, (i) the Research Project – including background reading, planning, experimental studies, analysis and writing a thesis in the form of a scientific manuscript, and (ii) the Structured Program of training in research skills and professional development. Details of the components, timing, and assessment of the Honours Program are provided on subsequent pages.

Full time / Part time enrolment

The School of Medicine Honours course is designed primarily as a full time commitment, to be undertaken during the course of one academic year. For this reason, entry at Semester 2 is not possible. Requests for part time enrolment, ie. spreading the course over 2 years, may be considered, but will require the approval of both your project supervisor and the Honours Coordinators, and will be contingent on you being able to accommodate attendance at all the Resource Sessions and assessment activities over the two year period.

Choosing a project

A **School of Medicine Research Information Evening** will be held on 31 July 2009, from 5 to 7 pm, in the WP Rogers Room in Union House on the University of Adelaide North Terrace Campus; this event occurs in conjunction with the University's Postgraduate Information Night – details will be posted on the website below. You are encouraged to attend this event, which will provide more detail about the School and the different research programs being undertaken. Representatives of key research groups will be in attendance. A booklet containing a detailed description of research projects offered can be downloaded from the web at:

http://www.health.adelaide.edu.au/school_medicine/

You are encouraged to choose several projects that may be of interest, and to contact the relevant supervisors to arrange a meeting. Some students may have their own ideas for research which differs from the projects listed. In most circumstances, supervisors would welcome an approach to discuss whether these proposals can be accommodated. Current and past Honours and PhD students can also be approached as a helpful source of advice.

Next steps

Having selected one or more projects of interest to you, and discussed them with the relevant supervisors, you should register your interest by contacting the Honours Coordinator for the School of Medicine, Associate Professor Chris Rayner (chris.rayner@adelaide.edu.au) and provide the following details:

1. **Full name:**
2. **Student number:**
3. **Contact address:**
4. **Phone number:**
5. **Email address:**
6. **Present enrolled degree:**
7. **Date of first enrollment:**
8. **List of intended Supervisors and Projects in order of preference:**

Ideally, you should **register your interest by the end of October 2009**, because some of the scholarships for which you may be eligible have **closing dates in early November**. Expressions of interest will still be accepted after this date, but opportunities for scholarship funding may be more limited.

After registering your interest and reaching agreement with the Honours Coordinator and your intended Supervisor, you can then make a formal **Application** to the Faculty of Health Sciences to enroll in the School of Medicine Honours Program. To do this, go to the web page:

<http://www.adelaide.edu.au/health/research/ugresearch/honours/>

Look under the section "Admission to Honours" and download the Application Form, complete it, arrange to meet with the Honours Coordinator to have it signed, and then submit it to the Faculty of Health Sciences office in the Medical School.

Scholarships

A number of scholarships may be available to assist students financially during their course of study, on both the RAH/Hanson campus (enquiries to research.secretariat@imvs.sa.gov.au, telephone (08) 8222 5650) and the QEH/Basil Hetzel campus (<http://www.tqehrf.com.au/our-research/research-funding.asp>). Details about scholarships specific to your area of study may be sought from potential supervisors.

Questions

Please feel free to contact the School of Medicine Honours Program Co-ordinators if you have any queries about the program:

Discipline of Medicine

Royal Adelaide Hospital

A/Prof Chris Rayner

Telephone 8222 2916

chris.rayner@adelaide.edu.au

A/Prof Christine Feinle-Bisset

Telephone 8222 5247

christine.feinle@adelaide.edu.au

Queen Elizabeth Hospital

Dr Ravi Krishnan

Telephone

ravi.krishnan@adelaide.edu.au

Discipline of Surgery

Royal Adelaide Hospital

Neville De Young

Telephone 8222 4155

neville.deyoung@adelaide.edu.au

Queen Elizabeth Hospital

Dr Prue Cowled

Telephone 8222 7541

prue.cowled@adelaide.edu.au

Discipline of Ophthalmology

A/Prof Robert Casson

Telephone 8222 2729

robert.casson@adelaide.edu.au

Discipline of Orthopaedics & Trauma

Dr Oksana Holubowycz

Telephone 8222 5760

oksana.holubowycz@adelaide.edu.au

Discipline of Psychiatry

Dr Shona Crabb

Telephone 82225134

shona.crabb@adelaide.edu.au

Discipline of Anaesthesia & Intensive Care

Dr Jennifer (Jenny) Ong

Telephone 83035163

jennifer.ong@adelaide.edu.au

Provisional Timetable 2010

February 1	Start of course	4 - 5 pm, Conference Room Level 6, Eleanor Harrald Building
------------	-----------------	---

April 16	Literature Review/Research proposal due	5 pm
----------	---	------

May 10	Seminar 1 – Presentation of proposed research	9.00 am - 5 pm Location will be announced
--------	---	--

July/August	Critical review of publication	Arrangements within each Discipline
-------------	--------------------------------	-------------------------------------

September 17	Submission of thesis draft (formative assessment only)	5 pm
--------------	--	------

October 18	Submission of thesis (electronic version)	5 pm
------------	---	------

November 1	Seminar 2 – Presentation of Research	9.00 am - 5 pm Location will be announced
------------	--------------------------------------	--

November 15	Final bound copies of thesis must be submitted by this date	Secretary, Discipline of Medicine Level 6, Eleanor Harrald Building
-------------	---	--

Please note:

The Honours Coordinators will communicate with all students by e-mail in most instances. We will assume that you check your e-mail regularly. From time to time, telephone or mail contact may be necessary, so please advise us of any changes to your telephone numbers or mailing address.

We have tried to produce guidelines that apply to all Disciplines in the School, but for each assessment activity, you should check with your Discipline's Honours Coordinator for any Discipline-specific variations.

Structured Programme

Throughout the year, a series of “Resource Sessions” will be scheduled, where students will take part in tutorial-style learning on a range of topics. The aim is to provide a foundation of skills essential to a career in science. These sessions are facilitated by a variety of experts on the campus, who generously provide their time and experience. Attendance is mandatory, and inability to attend needs to be discussed with the Honours Coordinators in advance. Feedback will be sought from students about the content and structure of this program, and this feedback plays a major role in the evolution of the program from year to year.

Components of the Structured Programme

- Formulation of research proposals
- Ethics and research
- Laboratory safety/occupational health
- Literature search
- Evaluating literature/evidence
- Presentation skills
- Statistics
- Grant writing
- Careers in science

Locations and times

These will be provided well in advance of the sessions.

Assessment process

- Literature review/research proposal 10 %
- Seminar 1 – presentation of proposed research formative
- Critical review of a publication 10 %
- Supervisor assessment 15 %
(incl research and practical skills and overall supervisory assessment incl thesis)
- Thesis 45 %
(marked by two external examiners)
- Seminar 2 – presentation of research 20 %
(consisting of an 18 min presentation + 10 min questions/oral defense)

Literature review / research proposal – 10 %

(Word limit 3000)

This component of the course is a critical review of the literature relevant to your research project, and a summary of your proposed research. Our aim in setting such an assignment is to assist you, early in the year, to plan your research project and become familiar with the background to it. The literature review is a key component of the learning process and aids in the preparation of your research. It should also help with your scientific writing skills. You should ask for, and expect to be given, plenty of feedback on this exercise and the experience should be useful later, especially when compiling the Thesis.

The primary objective is to review the background to your work but you must also include a short and concise statement (approximately 500 words) of the aims of your project and how you propose to carry it out. These statements assist in judging the relevance of the literature review to your project. Bear in mind that a scientific literature review is not simply a general summary of relevant background literature. It should be **selective** in the sense that it summarises the key background research that forms a “chain of progress” towards gaining an understanding of some area of science, and **critical** in the sense that it identifies strengths and weaknesses in previous work (experimental design, data analysis, interpretation of results, etc.) and suggests ways to overcome any such deficiencies.

The initial assessment of your literature review will count 10 % towards the final mark. This is not a large component of the assessment because it will have been completed early in the year at a time when you lack experience in writing critical reviews.

- The document should be formatted in 12 point font, double spaced on A4 pages.
- Referencing should be according to the guidelines of the American Journal of Physiology for students enrolled in the Discipline of Medicine:
http://www.the-aps.org/publications/i4a/prep_manuscript.htm
- Students in other Disciplines should check with their Discipline Coordinator as to the journal style to use; this should be the same as what you will use in your final thesis.
- Figures can be incorporated into the text or inserted at the end. Figure legends are not included in the word count.
- The review needs to be submitted by email to the Honours Coordinator. You must submit both a Word version, and a PDF version. The latter ensures that a version can be sent to assessors that looks exactly as you intended. It is your responsibility to use appropriate software to produce your PDF version. Difficulties with this aspect of the process are not an excuse for late submission since they should be worked out well in advance.
- In sending the files, make sure that neither is more than 2 MB in size. If your Word document is larger than this due to complex figures, you may omit them from the Word version, since this is mainly used to verify the word count. Label your files "SURNAME_LitRev2010.doc" (or .docx) and "SURNAME_LitRev2010.pdf".

Seminar 1 – Presentation of proposed research

(not formally assessed - 15 min presentation plus 5 min discussion)

After completion of the literature review, we ask you to present a short seminar on your planned research. The seminar should contain sufficient background information to enable the audience to appreciate the nature of your project, but the emphasis should be on the project itself, the aims and the experimental approaches you plan to adopt. This seminar allows members of the course to become familiar with your planned research and thereby assist you in achieving your aims. During and after the seminar you should be prepared to enter into discussion and answer questions.

While no formal assessment is made on this seminar, you will receive some written feedback from 2 members of the Faculty, and we strongly advise you to seek critical comments from your supervisor

and other members of the Discipline. Such feedback will help with future oral presentations that are assessed.

The more common deficiencies in seminars given by past Honours students have been:

- reading long passages directly from written notes or projected images,
- having excessive amounts of information displayed on projected images,
- failing to “engage” the audience’s interest,
- providing insufficient background to enable the audience to appreciate the main points you wish to make,
- showing a lack of a deep understanding of the topic by being unable to answer questions,
- giving insufficient attention to the structure of the talk - ideally the main components should follow a logical progression so that the audience can identify a developing theme,
- not keeping within the time allocated

Critical review of a scientific publication (10 %)

During your Honours year, you are expected to gain skills and experience in the critical assimilation of the scientific literature and in the art of presenting complex scientific information in a clear and understandable form. In July/August we will ask you to demonstrate your ability to read and assimilate a published paper. The paper should be chosen from the recent peer-reviewed literature in discussion with your Supervisor, and presented at a Journal Club or similar meeting within your Discipline. You will be given the nominated paper two weeks in advance of the presentation date. Over 20 minutes, you should present a summary and critique of the paper, with a further 5 minutes to respond to questions. This presentation will be assessed by two members of the academic staff of the Discipline, according to the following guidelines:

Assessment criteria

20% - Overall presentation style

20% - Is the article clearly written?– are the background, hypothesis and aims, results and discussion well presented?

20% - Are the major findings significant and are the conclusions supported by the results presented?

20% - What new knowledge has been gained from the research, and what subsequent studies should be done?

20% - Response to questions

Please note that the critique of a scientific manuscript will form the basis of one of the Resource Sessions as part of the Structured Program.

Seminar 2 – presentation of research (20 %)

(18 min presentation + 10 min questions/oral defense)

In this seminar students will present the results of the research project and indicate how their work has contributed to a greater understanding of the research area. You are allocated 28 minutes for this seminar. You should aim to talk for 18 minutes, allowing 10 minutes for questions. This seminar is allocated 20 % of the total Honours mark. Note that Seminar 2 is presented *after* final submission of the thesis.

The seminars are assessed by a panel of independent examiners. The assessment criteria are provided at the end of this document and should give you some insight into this process. Please note that the art of giving an oral presentation will be the focus of a seminar as part of the Structured Program, scheduled before the first seminar.

Supervisor assessment (15 %)

The supervisor(s) will assess the practical work (laboratory skills or data collection and analysis) of each student. This assessment will focus on the mastery of techniques by the student and the diligence and commitment of the student to quality control. The supervisor will also assess the student's development as an independent and critical scientist. This assessment will be carried out at the end of the second semester.

Thesis (45 %)

(marked by two independent examiners)

Each student will prepare a thesis describing her or his research. The thesis must be written in the form of a manuscript to be submitted a scientific journal. In the Discipline of Medicine, the "Instructions to Authors" for the American Journal of Physiology should be followed:

(http://www.the-aps.org/publications/i4a/prepare_manuscript.htm).

Student enrolled in other Disciplines should check which journal guidelines apply, with the Honours University of Adelaide School of Medicine Honours booklet – version date 07.07.09

Coordinator for that Discipline.

The thesis must be typed *double-spaced* for A4 paper. Figures and tables should be inserted into the text document. The word count should be no more than 5000 words. This limit must not be exceeded unless:

- (i) You and your supervisor feel that an adequate description of the methodology cannot be provided within the word limit; in this instance, the “Methods” section should contain a brief description, and full details should be provided as an Appendix - the latter will not be included in the word count

OR:

- (ii) You and your supervisor jointly apply to the Honours Coordinator in your Discipline for an extension of the word limit to 7500 words, providing a written justification (in 300 words or less). This request must be received at least 2 weeks prior to the deadline for submission of the thesis draft.

You can use your word processor to calculate the number of words in your document if you are unsure of the length. Figure legends, tables, summary (abstract), acknowledgements and references are not included in the word or character limits. Follow the "Instructions to Authors" when deciding the page layout of the thesis. Use a font size of 12 and ensure that you have reasonable size margins on each page to allow for binding.

The only deviations that you will be allowed to make from the “Instructions to Authors” will be in (i) the title page (see below), and (ii) the presentation of Tables and Figures - these can be interleaved with the text pages if you feel that this makes your thesis easier to follow.

In preparing your thesis (this also relates to the literature review and research proposal), you should aim to reach the standard expected of good scientific writing. Care should be taken with English expression and grammar. A common problem is that students cite review articles or textbooks that are essentially "second-hand" references to pieces of original research work. Use primary sources and draw your own conclusions, which could well be different from those of a third party. It is essential that references and/or acknowledgments are made to any work that is not your own. Although direct quotation from the writings of others would not normally be used in scientific writing, if you do choose to use quotations, they must be indicated with quotation marks and a reference cited. Published work accessed from the scientific literature should be appropriately referenced, in the correct journal style. Unpublished work should be used sparingly and referred to only with the explicit approval of the individual(s) concerned.

The thesis is the student's own original work. However, writing the thesis is also part of the student's learning and hence requires adequate supervision. Therefore, the question "What is an acceptable level of help from other individuals?" is an important one to consider. An essential component of the learning process during the Honours course, and one that we fully encourage, is that you test your ideas, written and verbal skills, by consulting with your supervisor, members of your research group, or other individuals within or outside the Discipline. However, we expect the work you submit for assessment to accurately reflect your own ideas and skills; if this is not the case, the assessment procedure becomes unfair. It is difficult to define the point at which the level of "outside" help unduly biases assessment. Nevertheless, the following general guidelines for submitted written material should be adhered to. For the preliminary version of the Literature Review it is acceptable to obtain detailed feedback from other individuals and, after careful consideration, to incorporate into your work those suggestions that you think will improve it. Such feedback may be of a detailed editorial nature and could include suggestions related to grammar, setting out, incorporation or deletion of material, etc.

For your thesis, while we encourage you to approach others (including your supervisor) for comment, such comment should be of a more general nature. For example, it may be suggested that sections are unclear and need rewriting, or that certain arguments are illogical or unconvincing. However, such feedback should not be at a level of editorial detail that incorporates actual suggestions for re-wording or details of new ideas.

Supervisors should not be limited in the number of times they review written work, as often significant learning takes place through students interacting with and learning from their supervisors. However, supervisors should limit themselves to "insert comments" editing and should avoid rewriting sections of the manuscript. The number of drafts to be reviewed should be negotiated between the student and the supervisor.

A draft thesis is to be submitted by all students by **17 September 2010** for formative feedback on the presentation of results in particular, by an experienced assessor. This will be in electronic format, and we will ask you to submit the entire thesis in both Word and PDF formats. It is your responsibility to convert your Word file to a PDF document using appropriate software. If the inclusion of complex graphics makes the Word file very large (>2 MB), you may omit these from the Word version, which we use primarily to verify the word count. Label your files "SURNAME_Thesisdraft2010.doc" (or .docx) and "SURNAME_Thesisdraft2010.pdf".. For the final version, both Word and PDF electronic

versions are to be submitted by **18 October 2010**, and should be named "SURNAME_Thesisfinal2010.doc" (or .docx) and "SURNAME_Thesisfinal2010.pdf". A hard copy of the thesis, corrected as directed by the supervisor (in the light of the assessment by the examiners), must then be submitted to the Secretary of the Discipline of Medicine before you can obtain your final result. This must be done by **15 November 2010** at the latest. See more details in the section "Thesis submission 2010" at the end of this document.

Grading

The gradings at the end of the year will be:

First Class	Band I/i	90 and above
	Band I/ii	85 - 89
	Band I/iii	80 - 84
Second Class	II/A	70 - 79
Second Class	II/B	60 - 69
Third Class	50 - 59	
or Fail	below 50	

The grading represents a level of overall achievement as assessed according to the criteria described above for each assessment task.

It is expected that the majority of students who we accept into the Honours Program will be *capable* of achieving Second Class Division A, and we hope that you will all strive to achieve this. To do this, you will need to perform at a consistent, very high standard, judged at an Honours level rather than at an undergraduate standard. Second Class Division B will be awarded to students who perform well but show weakness in some area(s). First Class Honours is reserved for excellent to exceptional students who show a consistent first class understanding of their subject area, well-developed skills in scientific communication and a high degree of initiative and originality, in addition to the characteristics that would win a Second Class Division A award. First Class Honours has been graded in subdivisions i – iii as outlined above. It is anticipated that over a 5 year average, about one third of First Class students will fall into each subdivision. These grades have implications for subsequent scholarship applications. Please remember that a Second Class Division A award should always be viewed as an excellent achievement.

Penalties

Deadlines for handing in written material must be strictly observed. The Honours Coordinators will only grant extensions to these deadlines in very special circumstances such as illness (for which you will need a medical certificate). Work handed in late will incur the following penalties of the total marks awarded for a given assessment:

1 day beyond deadline: 1 % off the mark

2 days beyond deadline: 3 % off the mark

3 days beyond the deadline: 6 % off the mark

> 3 days beyond the deadline: assignment not accepted for assessment

The Honours Coordinators are responsible for judging whether the circumstances merit an extension, so inform the Coordinators as soon as any problem that might affect your date of submission arises.

There will also be a penalty for not adhering to word limits in written assignments:

up to 10 % over the word limit: 5 % off the mark

10 – 20 % over the word limit: 15 % off the mark

> 20 % over the word limit: assignment not accepted for assessment

In the following, we will give you information regarding the assessment criteria for the various assignments in the course.

Assessment of research proposal

Information for assessors

All Honours students in the School of Medicine are required to complete a research proposal including a detailed and critical literature review of the area of their research project. Students have been instructed that the research proposal must not be more than 3000 words (excluding the References) and they have attended an Honours Seminar where the elements of a good research proposal have been identified and discussed.

We would like you to assess the research proposal using the criteria listed. Please use your judgement to select the grouping of criteria which most closely describe the research proposal. It is expected that some of the research proposal may have some but not all of the elements listed within one group of criteria. You are asked, however, to allocate a mark within the specified range for each research proposal and this allows you to indicate whether the research proposal was at the upper or lower end of the nominated group. For feedback it would also be helpful if you circled those elements within each grouping that best reflect the quality of the research proposal. Related elements can be marked in more than one grouping to reflect a range.

We have also provided a separate Feedback section for each research proposal where you can provide (anonymous) written feedback to the student about the strengths and weaknesses of their research proposal. Constructive and detailed feedback is extremely important as it enables the students to identify areas for further improvement.

Please do not adjust your rating on the basis that the research proposal has exceeded the word limit, or has been submitted late, as the Honours Coordinators will deduct marks for all overlong, or late, research proposal, as detailed on pages 13/14, after the marks have been returned and collated.

Assessment criteria for research proposal 2010

Student name: _____ Proposal examiner: _____

RESEARCH PROPOSAL - CRITERIA	MARK RANGE	GRADE	ALLOCATED MARK
<ul style="list-style-type: none"> • No clear introduction of topic or research question • Superficial, poorly written account of literature • Writer apparently unfamiliar with terminology • No logical structure or clear links between sections • Careless preparation-typos/poor referencing 	< 50	Fail	_____
<ul style="list-style-type: none"> • Topic introduced • Writer apparently unfamiliar with terminology • Superficial, poorly written account of literature • Structure of Review unbalanced and quality patchy • No evidence of critical appraisal of field • Poor written expression throughout • Adequate presentation - references complete 	50 - 59	Third	_____
<ul style="list-style-type: none"> • Topic introduced • Superficial account of literature • Unbalanced structure and patchy quality • No evidence of critical appraisal of field • Adequate written expression • Reasonable/good presentation - references complete 	60 - 69	IIB	_____
<ul style="list-style-type: none"> • Topic or underlying research question introduced • Reasonable coverage of literature but lacks sufficient description of experimental detail • Reasonable structure but occasional gaps or poorly developed links between sections • Some evidence of critical ability • Good written expression • Reasonable/good presentation - references complete 	70 - 79	IIA	_____
<ul style="list-style-type: none"> • Topic or underlying research question introduced • Excellent or very good coverage of literature with inclusion of experimental detail • Rationale for project clear to reader • Logical structure and well developed links between sections • Evidence of critical skills - controversies or non resolved research areas highlighted • Good written expression • Good presentation and references accurate and complete 	80 - 84 85 - 89	I/iii I/ii	_____
<ul style="list-style-type: none"> • Outstanding Research Proposal • Excellent account of the literature - rationale for project clear to reader • Excellent structure - logical, balanced • All relevant experimental detail included • Highly developed critical skills evident - attempt to resolve controversies • Excellent written expression/references complete/accurate 	90 - 100	I/i	_____

Assessment of seminar 1
“Assessment of proposed research”
2010

Student name: _____ **Examiner:** _____

	Mark	%total mark	Actual mark
Structure and Content of Seminar			
Was the seminar well structured (clearly stated hypotheses/aims and logical presentation of background and methods)?	/100	30%	___
Was the material put appropriately into the context of the broader research field?	/100	20%	___
Presentation			
Was the quality and presentation of the seminar material adequate to illustrate the main points?	/100	20%	___
Did the student make good use of pointer/speak clearly/emphasise key points?	/100	10%	___
Discussion			
Did the student demonstrate a clear understanding of the question and subject material?	/100	20%	___
	Total	100%	___

(Note: these marks are for formative feedback only and will not be part of the final Honours mark; a guide to the marks associated with various grades of Honours is shown on page 12)

Comments to student:

Assessment of seminar 2
“Presentation of research”
2010

Student name: _____ **Examiner:** _____

	Mark	%total mark	Actual mark
Structure and Content of Seminar			
Was the seminar well structured (clearly stated hypotheses/aims and logical presentation of background and methods)?	/100	30%	___
Was the material put appropriately into the context of the broader research field?	/100	20%	___
Presentation			
Was the quality and presentation of the seminar material adequate to illustrate the main points?	/100	20%	___
Did the student make good use of pointer/speak clearly/emphasise key points?	/100	10%	___
Discussion			
Did the student demonstrate a clear understanding of the question and subject material?	/100	20%	___
	Total	100%	___

Comments to student:

Assessment of Critical Review of a Scientific Publication

2010

Student name: _____ Assessor: _____

		Mark
Overall presentation style	/20	___
Is the article clearly written? – are the background, hypothesis and aims, results and discussion well presented?	/20	___
Are the major findings significant and are the conclusions supported by the results presented?	/20	___
What new knowledge has been gained from the research, and what subsequent studies should be done?	/20	___
Response to questions	/20	___
	Total	100% ___

Comments to student:

Supervisor assessment

2010

Student name: _____ Supervisor: _____

As a supervisor of an Honours student we seek your input in the assessment of the student's laboratory or practical skills performance and research potential. We would like you to rate the student's skills in a number of categories on the attached form. The Supervisor's Assessment accounts for 15 % of the total mark in the Honours course.

As a general guide to the overall grading scheme, it is expected that the majority of students who we accept for Honours will be *capable* of achieving Second Class Division A standard. Second Class Division B will be awarded to students who perform well but show weakness in some area(s). First Class Honours is a grading reserved for exceptional students who show a consistent first class understanding of their subject area, well-developed skills in scientific communication and a high degree of initiative and originality, in addition to the characteristics that would win a Second Class Division A award. For this component of the assessment, please, rate your student's skills out of 10 in each of the categories listed on the attached form overleaf. We ask you to grade your student in relation to your experience of other students at a similar level of research training. The following may serve as a guide to the mark you award:

Mark	Performance
------	-------------

**10	A truly outstanding and rare level of achievement. A clear First Class result. In the top 5% of all Honours level students for this category.
------	---

**> 9	A very high level of achievement. A clear First Class result. In the top 10% of all Honours level students for this category.
-------	---

8.0 to 8.9	A high level of achievement expected of a First Class Honours student.
------------	--

7.0 to 7.9	A very good level of achievement expected of a IIA Honours student.
------------	---

6.0 to 6.9	A good level of achievement expected of a IIB Honours student.
------------	--

5.0 to 5.9	A satisfactory level of achievement expected of a III Honours student.
------------	--

**< 5	A level of achievement below that considered appropriate for an Honours level student.
-------	--

** If you award a mark in any category of 9 or higher, or less than 5, please provide the reasons for your assessment in the space provided:
(continues over)

Assessment of research and practical skills

Student name: _____ Supervisor: _____

Please complete Section A and Section B for each of your Honours students.

SECTION A: Data collection, analytical and problem solving skills

Please rate your student's skills **out of 10** in each of the categories listed below:

- Development of new methodology/optimisation of existing methodology _____
- Maintenance of quality control and understanding of the need for precision, accuracy and reproducibility in any experimental methodology _____
- Rigorous & methodical approach to the maintenance of research records _____
- Cooperative and positive member of a research team with appropriate communication skills in the research team _____
- Can be relied on to seek help when appropriate with technical matters _____
- Capacity to identify and evaluate a technical or methodological problem and define the important elements required for its solution _____
- Clear insight into the steps required for appropriate analysis of experimental data (including the statistical treatment of data) _____

SECTION A TOTAL _____
(out of 70)

SECTION B: Research potential

Please rate your student's skills **out of 10** in each of the categories listed below:

- Has demonstrated an original and critical approach in the assimilation of the current state of knowledge in this particular field of research _____
 - Understands the gaps or flaws in understanding in this particular research field _____
 - Has independently put forward ideas for future empirical investigation in this research area _____
 - Has shown interest and curiosity in scientific questions beyond the confines of the current project _____
 - Has shown the overall ability to use the skills required to perform original scientific research _____
- SECTION B TOTAL** _____
(out of 50)

Assessment of Honours thesis 2010

Instructions to assessors and assessment criteria

All Honours students in the School of Medicine are required to complete a thesis describing their research project. The thesis is written in the form of a scientific journal paper. The format of the thesis is to be based on the “instructions for authors” for a journal specific to each Discipline. In the Discipline of Medicine, the style is that required for submission to the American Journal of Physiology.

Students will have attended an Honours Seminar where the elements of a good thesis have been identified and discussed. Students will have discussed the contents of the thesis with their Supervisors, but Supervisors are not permitted to read the thesis prior to examination.

We would like you to assess the thesis using the following criteria, in relation to your experience of other students at a similar level of research training.

The thesis should demonstrate:

- that the student has a comprehensive grasp of the current state of knowledge in their research area. Such evidence will normally be evident in the Introduction and Discussion sections of the thesis.
- a high level of competence in the techniques of data collection, analysis and presentation, as evidenced by the Methods and Results section of the thesis.
- an ability to evaluate and interpret the student's own work, and the work of others, in a critical manner with a high degree of reliability and insight. Such evidence will normally be evident in the Discussion section of the thesis.
- a high level of competence in the ability to summarise, in a clear and concise manner, the issues addressed in the study and its outcome. Such evidence will normally be evident in the Summary or Abstract section of the thesis.
- a high level of competence in the written communication of scientific material. The style, presentation and readability of the thesis are to be generally of a standard that would be expected by editors of scientific journals.

Please use the attached assessment sheet to rate the thesis against these criteria. More detail on the points we would like you to consider when assessing the various components of the thesis is provided overleaf. Please refer to this when evaluating the thesis.

We have also provided a separate Feedback section for each thesis where you can provide (anonymous) written feedback to the student about the strengths and weaknesses of their thesis. Constructive feedback is important as it enables the students to identify areas for improvement. As a general guide to the overall grading scheme, it is expected that the majority of students who we accept for Honours will be *capable* of achieving Second Class Division A standard. A grade of **First Class Honours** indicates a high level of achievement in the criteria listed above. A grade of **IIA Honours** for the thesis indicates that the work was very good but lacking in several of the aspects listed above. A grade of **IIB Honours** for the thesis indicates that the work was satisfactory, but lacked application, depth, presentation and/or interpretation. A grade of **Third Class Honours** for the thesis indicates a poor performance overall judged against the assessment criteria. A **FAIL** grade indicates an unsatisfactory performance overall judged against the assessment criteria.

Honours thesis assessment 2010

THESIS COMPONENTS

POINTS TO CONSIDER

Title & Summary

- The Title is clear and concise, and alerts the reader to the main point of the study.
- The Summary or Abstract outlines in a concise and accurate manner: the reasons for doing the experiments; how they were performed; the main findings; the principal conclusions from the results.
- The format of the Summary corresponds to the convention used by the chosen journal.

Introduction

- The hypothesis is clearly stated.
- Supporting information provided in the Introduction displays logical thought, and serves to present the hypothesis as a reasonable scientific proposal (i.e., the hypothesis fits the known facts and is testable).
- The Introduction makes it clear what the experiments are about, and how they will contribute to answering the problem or question that has been outlined in this section.

Materials & Methods

- Materials and Methods are described accurately, and with sufficient detail that a reasonably knowledgeable colleague could repeat the experiments using this description.
- Novel techniques or deviations from standard practice are described in detail.
- Brief descriptions and appropriate references are provided for established techniques.
- Statistical treatment of the data is appropriate, and adequately explained.
- The design of the study, as described, is suitable to test the stated hypothesis.

Results

- Material presented in the Results section is relevant to the hypothesis.
- Tables and Figures used are appropriate to illustrate the data and aid in its interpretation.
- Tables and Figures are presented in a scientifically acceptable form.
- Tables and Figures with their legends are capable of being understood without reference to the text.
- The same data are not duplicated in both Tables and Figures.

Discussion

- The main findings are clearly stated.
- The Discussion interprets the results (not merely recapitulates them) and matches the outcomes with the expectations based on the hypothesis.
- The Discussion displays a clear and logical development of arguments and conclusions about the meaning of the results.
- The arguments presented in the Discussion clarify the relevance, usefulness, possibilities and limitations of the experiments and the results obtained.
- If limitations are identified, solutions to overcoming these are suggested.
- Interpretation of the findings is rigorous, and conclusions are logically consistent with the known facts (including the present findings).
- Implications of the study for current understanding in the area and future research are summarised appropriately. If speculative comments are made, they should fit the known facts.

- The Discussion is not overly long, and does not contain material that is of marginal relevance to the results obtained, or the original hypothesis.
- All literature cited has the function of supporting arguments used to interpret the findings, and is appropriate to the statement being supported (preferably the original source of the information).

**Style,
presentation
& readability**

- The grammar, punctuation and spelling demonstrate a proficiency in the English language that allows effective written communication of scientific material.
 - The thesis is written in a style that displays precision and avoids ambiguities.
 - The writing style is clear. Sentences and paragraphs are capable of being easily understood after being read at a single pass.
 - The writing style avoids unnecessary repetition.
 - The thesis does not contain excessive use of abbreviations or acronyms, which detract from readability.
 - The thesis lacks careless errors and/or inconsistencies.
 - Citations are used appropriately, and are complete and accurate.
 - Citations in the References section correspond exactly with those in the text.
 - The format of the thesis, including citations, corresponds to the convention used by the chosen journal.
-

HONOURS THESIS ASSESSMENT 2010

Student: _____ Examiner: _____

ASSESSMENT CRITERIA FOR THE THESIS	GUIDE TO MARK ALLOCATION	MARK AWARDED
Demonstrates that the student has a comprehensive grasp of the current state of knowledge in their research area . Such evidence will normally be evident in the Introduction and Discussion sections of the thesis. <i>(20% of total)</i>	I = 16 or above IIA = 14 - 15.9 IIB = 12 - 13.9 Third = 10 - 11.9 Fail = below 10	/20
Demonstrates a high level of competence in the techniques of data collection, analysis and presentation , as evidenced by the Methods and Results section of the thesis. <i>(30% of total)</i>	I = 24 or above IIA = 21 - 23.9 IIB = 18 - 20.9 Third = 15 - 17.9 Fail = below 15	/30
Demonstrates an ability to evaluate and interpret one's own work, and the work of others, in a critical manner with a high degree of reliability and insight . Such evidence will normally be evident in the Discussion section of the thesis. <i>(20% of total)</i>	I = 16 or above IIA = 14 - 15.9 IIB = 12 - 13.9 Third = 10 - 11.9 Fail = below 10	/20
Demonstrates a high level of competence in the ability to summarise, in a clear and concise manner, the issues addressed in the study and its outcome . Such evidence will normally be evident in the Summary or Abstract section of the thesis. <i>(10% of total)</i>	I = 8 or above IIA = 7 - 7.9 IIB = 6 - 6.9 Third = 5 - 5.9 Fail = below 5	/10
Demonstrates a high level of competence in the written communication of scientific material . The style, presentation and readability of the thesis are generally of a standard that would be expected by editors of scientific journals * <i>(20% of total)</i>	I = 16 or above IIA = 14 - 15.9 IIB = 12 - 13.9 Third = 10 - 11.9 Fail = below 10	/20
TOTAL	I/i = 90 or above I/ii = 85 - 89 I/iii = 80 - 84 IIA = 70 - 79 IIB = 60 - 69 Third = 50 - 59 Fail = below 50	/100

(* To an extent consistent with a standard achievable by a graduate in their first year of advanced research training)

Thesis submission 2010

Students are asked to submit their thesis electronically (by email) in both Word and PDF formats by the nominated submission date, **October 18, 2010**.

After receiving the comments from the examiners, the student is asked to correct and submit two bound copies of the final version of the thesis, by **November 15, 2010 at the latest**, according to instructions provided on the next page.

School of Medicine 2010

Submission of the final version of the Honours thesis

Please note that two bound copies of the final corrected version of your Honours thesis must be received by the Discipline before you can receive any notification of your final Honours mark.

The following guidelines should be adhered to when correcting and submitting your thesis.

A. THESIS CORRECTIONS

1. All students will receive a List of Essential Corrections to be made to their thesis.
2. It is important to note that students may **only** make the following corrections to their thesis:
 - (a) the essential corrections identified on the List
 - (b) corrections of minor typographical or numerical errors which were not identified by their assessors.

Students must not undertake major revisions of their theses beyond these corrections.

Whilst some of these annotations may be helpful in the context of preparing a scientific manuscript, students may **not** revise their theses in light of these comments beyond those corrections identified on the List.

3. Formal feedback from assessors on the thesis and a mark for the thesis and the final seminar will be sent to each student.

B. THESIS SUBMISSION

1. All theses should be bound professionally in a hard cover and colour chosen by the student. The spine of the thesis should contain the following information, preferably in gold:

Name of Student (in style preferred by student) and Title of Thesis

2. A minimum of four copies of the thesis are expected to be bound - two of these are submitted to the Faculty (one for the Barr Smith Library and one for the Faculty's Thesis Library). A third is normally provided for the supervisor, and you should retain at least one bound copy for your own use.

3. All theses should contain the following information on the first page:

TITLE OF THESIS

A thesis submitted in partial fulfilment of the
HONOURS DEGREE of BACHELOR OF XXXXX

in

The Discipline of YYYYY, School of Medicine
Faculty of Health Sciences
The University of Adelaide

by

Name of Student

November 2010

4. All theses should contain the following Declaration on the next page:

I declare that this thesis is a record of original work and contains no material which has been accepted for the award of any other degree or diploma in any university. To the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text.

The statement should be signed (in all copies) over a typed version of your name and dated November 2010.

5. The two bound theses are submitted to the Secretary of the Discipline of Medicine, Level 6, Eleanor Harrald Building (Tel. 8222 5501), after which you will be given your final Honours grade.

Please do not hesitate to contact the Honours Coordinators if there are any difficulties or queries relating to the correction and submission of your thesis.