



**DISCIPLINE OF PAEDIATRICS and  
DISCIPLINE OF OBSTETRICS AND GYNAECOLOGY  
SCHOOL OF PAEDIATRICS AND REPRODUCTIVE HEALTH  
FACULTY OF HEALTH SCIENCES**

**B Health Sc (Hons)  
and  
Honours degree of B Med Sc**

**Research in Paediatrics & Child Health,  
Reproductive Biology & Health**

**2009**

**School of Paediatrics & Reproductive Health Honours  
2009**

**Course Synopsis.**

Welcome to the Honours course in the disciplines of Obstetrics and Gynaecology and Paediatrics, School of Paediatrics and Reproductive Health. We hope that the coming year will present you with rewarding challenges and valuable training toward your chosen career. You will be exposed to and encouraged to develop interests in a broad range of child health and reproduction related science. The skills you will acquire during Honours are applicable to success in most professional career paths.

The intent of the program is to develop specific knowledge and skills in the student's chosen research field as well as general skills in working independently, critical reasoning, scientific writing and presentation.

**Aims of the Honours Program**

- To provide mentored training in scientific research methods.
- To develop skills for independent critical thought and learning.
- To develop logical reasoning and written and oral presentation skills.
- To encourage interest in a broad range of child health and reproduction related science.

**Objectives for Honours students to successfully complete the Honours course are:**

Overall, to demonstrate a deep understanding and interpretation of your subject area and the ability to clearly and thoroughly present the project.

Specifically:

- To conceive, develop and execute, under the guidance of your supervisor, an original approach to answer a novel research question.
- To demonstrate an appreciation of and ability to apply the scientific method.
- To master basic research techniques and demonstrate rigorous and methodical maintenance of - records, collection, storage and analysis of experimental data.
- To demonstrate critical interpretation of background literature, the approach and the results.
- To develop the capacity to identify and evaluate problems and define the important elements required to resolve them.
- To communicate scientific information clearly and concisely in written and spoken English.

One on one contact with the supervisor and other members of the research team is the main method by which students gain these skills during Honours. In addition, hands on experience,

communication from other members of the honours class, the Honours coordinator, or the disciplines in general is invaluable.

### **Discipline Seminar Series**

In addition, the School's two Disciplines hold regular seminar series, and students are expected to attend the seminars held in their Discipline. These seminars are an important component of the Honours year, as they give students a broader appreciation of work in their Discipline, as well as exposure to research leaders and the opportunity to learn some useful presentation skills from experienced researchers.

The Discipline of Obstetrics and Gynaecology holds regular weekly seminars. On Wednesdays at 12.00pm all PhD students in the Discipline present their research progress and on Fridays at 4.00pm academic members of the discipline or invited external speakers present their work. Timetables for both seminar series will be forwarded to you and **all Obstetrics and Gynaecology Honours students are expected to attend the seminars**. Externally located students may attend their local seminar series, but should be at O&G seminars when able, such as after the tutorial session.

The Discipline of Paediatrics, the Women's and Children's Health Research Institute, and the Department of Genetic Medicine at the Women's and Children's Hospital (WCH) organise the Health Research Seminar series. This series of regular bimonthly seminars is held on Tuesdays at 12.30pm in the Maxwell Seminar Room, 2nd Floor Rieger Building. At these seminars researchers at the WCH, external invited speakers and completing PhD students present their research work. Full information and timetable for the Health Research Seminars will be posted on our website at: <http://www.health.adelaide.edu.au/paediatrics/sem/hrs/> Details of the seminar will also be forwarded to you by email the week before, and **all Paediatrics Honours students are expected to attend**.

### **Course structure**

The Honours course consists of one academic year of research on a defined project under the supervision of a designated supervisor(s). This culminates with the preparation by the candidate of a thesis, written in the form of a scientific paper, describing the conduct and outcomes of the research project.

A written review of relevant literature that supports the rationale behind the research is submitted for assessment.

Students also participate in tutored discussion on the philosophical, ethical, methodological and procedural considerations of laboratory and clinical based medical science. Articles are selected and presented by the Honours students in "Journal Club" literature reading and evaluation sessions. Student's knowledge of scientific principles and techniques presented in the tutorial series is assessed by written examination. Students' comprehension and capacity to critique literature will be assessed during "journal club" excersises.

In addition, students give three seminars during the year:

- (1) an introduction/research proposal (not assessed);
- (2) a progress seminar (not assessed);
- (3) a final seminar, or thesis defence after thesis submission (assessed).

## **Research Project**

The main component of the Honours course is the research project carried out with your supervisor/s. Most, but not all, of the assessment tasks throughout the Honours year are related to the project.

### Project reviews

A brief review of the project plan is implemented as a formative opportunity for students to gain insight into the goals and methods of the project as well as its demands and challenges. The supervisor in consultation with the student and will prepare a 1 page summary of the project rationale and design. A brief response and recommendations if necessary will be returned to the student and their supervisor by the Honours committee. This will take place within the first four weeks after commencement of the project. At the completion of this process an approximate timeline and the supervisor's and student's expectations should be mutually understood and agreed upon.

From time to time students may have concerns about their project or particular difficulties (medical, financial or social) may develop which impede your rate of progress. *Please feel free to discuss any concerns about your rate of progress in your project with your supervisor or with the Honours Coordinators:*

### **Discipline of Paediatrics Honours Coordinator**

Dr David Bates  
Discipline of Paediatrics (WCH)  
Phone: 08 8161 7304  
Email: [david.bates@adelaide.edu.au](mailto:david.bates@adelaide.edu.au)

### **Discipline of Obstetrics & Gynaecology Honours Coordinator (Acting School Honours Coordinator)**

Dr Kathy Gatford  
Discipline of Obstetrics & Gynaecology (Medical School)  
Phone: 08 8303 4158  
Email: [kathy.gatford@adelaide.edu.au](mailto:kathy.gatford@adelaide.edu.au)

**Schedule of Presentations and Assessment tasks:**
**Oral Presentations**

Oral Presentation	Full-time students	Part-time students (commencing semester 1, 2009)	Venue
<b>Research Proposal</b> 20 (15+5) minutes (not assessed)	April 3, 2009	July 31, 2009	<b>Medical School, Seminar room N229</b>
<b>Progress Report</b> 20 (15+5) minutes (not assessed)	July 31, 2009	<i>Early April, 2010</i>	<b>Queen Victoria Lecture Theatre, Women's and Children's Hospital (WCH)</b>
<b>Final Presentation</b> 30 (20+10) minutes (15% of course assessment)	Nov 13, 2009	<i>November, 2010</i>	<b>Medical School, Seminar room N229</b>

**Assessment tasks**

Task	Full-time students	Part-time students (commencing semester 1, 2009)	Basis of assessment
<b>Critical Literature Review</b> and Research Plan (15% of course assessment)	June 5, 2009	October 30, 2009	Written submission - 3000 words
<b>Tutorial program</b> (5% of course assessment)	Feb – July, 2009	Feb – July, 2009 <i>unless otherwise negotiated</i>	Contribution to journal review exercises and tutorial class discussions
<b>Written Examination</b> (15% of course assessment)	July 10, 2009	July 10, 2009 <i>unless otherwise negotiated</i>	2 hours open book exam, covering the tutorial course material
<b>Final Thesis</b> (50% of course assessment)	October 30, 2009	<i>October, 2010</i>	Written submission - 5000 words, manuscript style
<b>Final Seminar</b> (15% of course assessment)	Nov 13, 2009	<i>November, 2010</i>	Oral presentation and "Defence" of the year's experimental project

**Assessment:****Overview of Honours assessment components and relative weight**

Critical literature review	15%
Examination	15%
Tutorial program participation	5%
Thesis	50%
Final Seminar	15%
Total	100%

Four points of assessment are designed to evaluate and provide feedback on students acquired skills relating to research aptitude, knowledge of their field, as well as written and verbal presentation style.

1. Critical Literature Review (written 3000 words, 15%)  
Students discuss and critically appraise the 10-15 papers most salient to their project.
2. Examination of Tutorial Course material (2 hours open book, 15%)  
Problem/scenario based open book written exam that draws on the issues discussed in the tutorial course.  
5% of course grade will be assessed on the basis of evaluation of each student's original thought and contribution in journal club and tutorial discussions.
3. Thesis (5000 words, 50%)  
Manuscript style presentation of research project results. Emphasis of assessment for this component will focus on demonstrated aptitude for problem solving, technical skills and accomplishments. Journal styles should be nominated by each student in consultation with the supervisor.
4. Final seminar (20 minutes 15%)  
Oral presentation and "Defence" of the year's experimental project.

**Course Grading:**

Grades in the honours course are not assigned according to quotas nor on a relative scale. The accumulated score from each assessment task is used to assign a grade as follows:

First class	(80-100%)
Second class division A	(70-79.9%)
Second class division B	(60-69.9%)
Third Class	(50-50.9%)
Fail	(<50%)

The Honours degree is judged at a very high standard and the First Class grade is awarded to only truly exceptional students. Division A Second Class Honours is considered an excellent achievement. Most students accepted to do Honours are considered capable of achieving a Second Class pass or better.

Honours scores are calculated using marks and weightings from each assessment task as detailed below. Cut-off points for final grades are determined at a meeting of Honours coordinators, supervisors, assessors and academic staff of the School of Paediatrics and Reproductive Health, which will follow the final seminars on November 13. Students are individually advised of their grades after this meeting.

## **Assessment criteria**

The Honours committee appoint two expert examiners (nominated by the principal supervisor), who will grade as well as provide formative comments for each presentation and assessed component (Critical Literature Review, Thesis and Final Seminar). The expert examiners judge the quality of the research work and the discourse with respect to the specific field of study. In addition common examiners will be appointed by the Honours committee to provide an assessment of the general requirements of all Honours students in the School. For each Discipline, one common examiner will assess the students within the discipline, and a third common examiner will assess ALL the Honours students in the School.

Importantly all assessors should also provide feedback comments on both graded and non-graded (research proposal and progress report) presentations. All feedback will be forwarded to the students.

Assessments for each task, including those not officially graded, will be provided in the form of a percentage grade (a score out of 100). These scores will be compiled into a final score and used to assign a grade. Each assessor's mark will be weighted equally to contribute 25% of the total score.

Students should of course seek feedback and guidance from their supervisors and other research team members for each of their submissions both written and oral. However, supervisors are asked not to use electronic editing to return feedback and changes to the students work. It is expected that supervisors would usually provide feedback on at least two drafts of each submission task.

The specific considerations for evaluation vary between each task, and are outlined in detail on each assessment sheet below.

## Grade Descriptors

All assessments take into account the relative experience of Honours candidates and the limited prior background experience in research or the field of study

The following generic grade descriptors provide a general guide to the standard of work that is expected at each grade level.

	<b>Class I</b> <b>Band (i)-(iii) Range: 80-100%</b>	<b>Class II</b> <b>Division A Range: 70-79%</b>	<b>Class II</b> <b>Division B Range: 60-69%</b>	<b>Class III</b> <b>Range: 50-59%</b>	<b>Fail</b>
<b>General description</b>	Exceptional work showing substantial intellectual originality and with few shortcomings in terms of understanding, and interpretation. Of near publishable standard	Work demonstrates a high level of understanding and a degree of originality and insight, despite some flaws in interpretation, structure, or argument	Work is sound. Some insights demonstrated, despite some major flaws in terms of interpretation, structure or argument	Work satisfies the minimum requirements and shows a limited level of achievement interpretation and structure of argument	Fails to satisfy the minimum requirements
<b>Knowledge of topic</b>	Demonstrates exceptional insight, awareness and understanding of deeper and more subtle aspects of the topic. Ability to consider topic in the broader context of the research field	Sound knowledge of principles and concepts	Knowledge of principles and concepts at least adequate to communicate effectively in the topic	Some knowledge of principles and concepts but insufficient to communicate effectively in the topic	Scant knowledge of principles and concepts
<b>Analytical and evaluative skills</b>	Highly developed and exceptional analytical and evaluative skills	Evidence of analytical and evaluative skills	Some evidence of analytical and evaluative skills	Limited evidence of analytical and evaluative skills	Very little evidence of analytical and evaluative skills
<b>Problem solving</b>	Ability to solve challenging and non-routine problems	Ability to solve difficult but routine problems	Adequate problem-solving skills	Some evidence of problem-solving skills but barely adequate	Insufficient evidence of problem-solving skills
<b>Expression and presentation appropriate to the discipline</b>	Highly developed skills in expression and presentation demonstrating stylistic flair. Accurate and consistent acknowledgment of sources	Good skills in expression and presentation. Accurate and consistent acknowledgment of sources	Adequate skills in expression and presentation. Some problems with appropriate acknowledgment of sources	Some skills in expression and presentation. Occasional inaccurate or inconsistent acknowledgment of sources	Rudimentary skills in expression and presentation. Consistently inaccurate acknowledgment of sources

**Research Proposal Seminars April 3 (full-time students)**

The purpose of the Research Proposal Seminars is to have students assimilate and introduce the subject of their research. This is not officially graded but should be used as an opportunity to refine the hypothesis, aims and experimental approach proposed with expert critical feedback and should be taken full advantage of in the formative process. *Part-time students commencing in Semester 1 2009 will present research proposals on July 31, 2009.*

The background to the study should be concisely presented giving perspective to the knowledge gap to be addressed. The hypothesis should be clearly stated. Importantly, the methodological approach and experimental design should be described and with emphasis on elaborating how the aims will be achieved and the hypothesis tested.

Presentations should be approximately 15 minutes with Powerpoint slides followed by 5 minutes of questions. Powerpoint presentations should be prepared and submitted via the Honours course electronic dropbox facility in MyUni by midnight on the day before the presentation, to allow time for these to be loaded at the presentation venue, and students should also bring a copy on a thumb drive or CD to the presentation venue.

An unofficial grade and feedback comments will be provided by expert and general assessors based on the following **evaluation criteria**:

**Background Presentation**

**30%**

- Was the research put properly into perspective?
- Was the hypothesis clearly stated?
- Are the aims of the research project clear and cohesive?
- How could the background presentation have been improved?

**Methods**

**30%**

- Were the experimental methods to be used clearly explained?
- Is the experimental design thought through in detail including
  - Attention to necessary controls?
  - Consideration of statistical requirements?
- Is the approach the most effective?
- Were potential difficulties and alternative approaches considered?

**Delivery**

**20%**

- Was the presentation organized into a logical argument?
- Was an understanding of the potential outcomes and benefits of the research shown?
- Did the student make effective use of visual aids?
- Was information presented complete and all relevant and non-redundant

**Questions**

**20%**

- Did the student answer the questions directly, accurately and with authority?

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The principles of experimental design, hypothesis construction and testing, as well as data collection and reporting, literature assessment, statistical and ethical considerations will be covered in the tutorial course.

## Examiners Assessment Guide for Project Proposal Seminars

The primary purpose of presenting their Project proposals is for students to get critiques and valuable feedback on the feasibility and scientific value of their research project so please don't just give a score to each presenter. Please give brief comments on where the student may need to rethink or give more focus in their project. If you think they are doing something right please tell them that also.

An unofficial grade will be given to each student to help indicate where their skill level currently lies in the areas of presentation, answering questions and scientific reasoning.

Attached is a set of guide points for adjudicating these presentations. You are asked to simply score each subsection on a scale of 10 so you can easily reflect your opinion of how each independent component was handled.

Take note of the following grading scale that will be used throughout the year in assessment of the final Honours class achieved by each student.

Class	Numerical score	
First	8-10	Excellent candidate gave a clear and thorough presentation, showing a deep understanding of their subject and their project
Second Division A	7-7.9	Good but not outstanding, some part may have been deficient but overall a good grasp of the subject demonstrated
Second Division B	6-6.9	Not good enough, serious flaws in the reasoning or depth of understanding
Third	5-5.9	Poorly prepared and presented, project clearly not well researched or understood.

Please use the entire breadth of the scale as appropriate i.e. everyone should not receive a grade between 6 and 6.5.

**SPRH HONOURS 2009 RESEARCH PROPOSAL ASSESSMENT SHEET**

Assessor: \_\_\_\_\_

Student \_\_\_\_\_

**Background Presentation**

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Was the research put properly into perspective?

Was the hypothesis clearly stated?

Do the aims of the research clearly and cohesively address the hypothesis?

What was missing or inadequate in the background?

Score \_\_\_\_\_ out of 10

**Methods**

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Were the experimental methods to be used clearly explained?

Is the experimental design thought through in detail including

- Attention to necessary controls?
- Consideration of statistical requirements?

Is the approach the most effective?

Were potential difficulties and alternative approaches considered?

Score \_\_\_\_\_ out of 10

**Delivery**

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Was the presentation organized into a logical argument?

Was an understanding of the potential outcomes and benefits of the research shown?

Was information presented complete, all relevant and non-redundant

Score \_\_\_\_\_ out of 10

**Questions**

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Did the student answer the questions directly and accurately?

Score \_\_\_\_\_ out of 10

## **Critical Literature Review and Research Plan**

**Due 5:00pm Friday June 5, 2009 (full-time students)**

This component is worth 15% of the final grade. PDF (preferred) or Word files should be prepared and submitted via the Honours course electronic dropbox facility in MyUni by 5:00pm on **Friday June 5** (for full-time students). *The due date for part-time students commencing in Semester 1 2009 will be Friday October 30, 2009.*

This assignment has two related components

1. Critical Literature Review
2. Research Plan

### **Critical Literature Review**

The Critical Literature Review will **review, summarise and critique literature most relevant to the research project. A limit of 10 to 15 original research articles should be assessed.** This should not be a typical literature review that seeks to present the complete body of relevant literature, but a more in depth and focussed analysis of only the most relevant literature.

**The word limit is 3000, not including references,** and you may (should) add diagrams and tables if they assist the reader. More important than counting words is to keep the text relevant and succinct while adequately presenting all necessary background to your project.

Use 12 point Times New Roman font and set line spacing to 1.5.

Citations should follow the conventions of a leading journal in your specific field, eg Biology of Reproduction, New England Journal of Medicine, or Pediatric Surgery. You are welcome to nominate the journal which is most relevant to your research area, in consultation with your supervisor.

The goal is to inform the reader of key research that relates to your project and hypothesis. **A good Critical Literature Review should be able to synthesise the presented literature into a conclusion that is complimentary to the hypothesis of the proposed research project.** The reader should be able to readily appraise what is novel and how the proposed research addresses knowledge gaps in the field. Novel or logical methodologies and approaches in the proposed project may also be addressed in the review.

**Finding the most relevant literature is part of this assignment.** Based upon wider reading the student must decide what literature is background and what is highly relevant to the project. In doing so, the student will be able to assess if their hypothesis is unique and substantiated, and whether it has been supported through other model systems etc. The submitted review document should make this clear to the reader also.

Complete knowledge and understanding of the background literature will necessitate wide additional reading beyond the key 10-15 papers and relevant reviews or other supportive literature can be referred to, but **the key papers under review should be clearly highlighted.**

Critique of the papers presented may be necessary, particularly to highlight the knowledge gap to be researched. Critique does not necessarily mean finding general faults or limitations in the way existing experiments have been carried out. It also entails assessing how strongly the existing research supports and/or tests your hypothesis.

### **Research Plan**

A two page summary of the research plan should be provided as an appendix. This will not contribute to the mark for the review but will help the reader judge the review's relevance to the research question and of the literature reviewed.

### **Additional comments and suggestions.**

**Review articles must not be used as key literature** but can be cited to direct the reader to relevant background information. Likewise you may need to cite other articles of peripheral relevance to the 10-15 key article set. A vast bibliography will not convince anyone that you are extra knowledgeable of the field. If you choose to make the bibliography of your submission larger than 10-15 articles, make the key article set **clearly highlighted** against the supporting literature.

The most relevant literature may not be directly in your research areas. It can come from other organs or species or related models, which do not specifically bear on your research, but which you are basing your research upon.

The amount of discussion devoted to each manuscript or how data is extracted from literature and presented can be flexible. Tables or Figures can often elegantly synthesise a range of literature into a simple visual point. Put simply you have approximately 3000 words to present the key logic behind the project you are doing, and how it relates to what is already known.

## Examiners Assessment Guide for Critical Literature Review

The primary purpose of presenting a Critical Literature Review is for each student to fully examine the specific background to the research topic demonstrating how existing literature tests or supports the proposed hypothesis and experimental approach. **Students should present in some detail the 10-15 most important original research papers that put their research hypothesis and design into perspective.** Individual objectives that should be met in completing this task are:

- To concisely identify the most important literature related to the proposed research.
- To review this body of literature with emphasis on presenting the background to their research project, unanswered questions, conflicts between studies, flaws or shortcomings in selected studies, demonstration of the feasibility of their proposed experiments.
- To highlight the knowledge gap that is addressed in the hypothesis and aims of the proposed research.
- To demonstrate a general knowledge of the wider literature base relevant to their research area.

Examiners are asked to assess the student's accomplishment in each of these areas. It would be expected that some students may show excellence in some areas but not others, and assessors should arrive at a mark, which reflects the balance of their achievements in the important aspects of the literature review.

The standard should be that expected from recent graduates who are in training in critical analysis and research methodologies, but who are not experienced or independent researchers in their own right.

It is not a requirement for the authors to "poke holes" in the methodology or conclusions of each paper under review unless there is a reasonable case for doing so. However, a competent understanding of each paper's methods and conclusions should be demonstrated.

The exact presentation style of this essay is at the discretion of the author but should take the general form of unambiguously highlighting the important aspects of the "core" papers. Additional supportive literature can also be cited, but this does not need to achieve complete coverage of the whole field.

### Referencing

Referencing should be in the style of a nominated appropriate journal.

### Research plan

A 1-2 page research plan must be attached as an appendix. This is not to be considered in the final assessment, but serves as a guide in assessing the focus, necessary elements and depth of the literature analysis.

The following scores and descriptors are used in grading Honours students.

Class	Numerical score	Description
First	80-100%	A clear and thorough presentation, showing a deep understanding and interpretation of their subject and their project
Second Division A	70-79%	Good but not outstanding, some part may have been deficient but overall a good grasp of the subject demonstrated
Second Division B	60-69%	Uneven in completeness and/or in presentation, satisfies the requirements, but shows flaws in reasoning or insight
Third	50-59%	Poorly prepared and presented, project clearly not well researched or understood.

Please use consideration for this grading scale and score each student according to the **entire breadth of the scale** as appropriate

Please provide some comments that explain the reasoning behind your grade, the comments will be returned to the students to help them address deficiencies if necessary, or affirm relative strengths.

**Exam July 10 1:30-3:30pm (all students)**

This component is worth 15% of the final grade, and consists of a 2 hr open book designed “exam”. *Part-time students commencing in Semester 1 2009 will also participate in 2009 tutorials throughout February-July 2009 and will sit the exam on Friday July 10, unless otherwise negotiated with the School Honours Coordinator.*

This should not be as painful an exercise as it sounds! Questions will be drawn from the material presented during the tutorial course or further set reading. Separate exams will be set for students in each Discipline, which will include material drawn from the tutorials specific to Obstetrics & Gynaecology or Paediatric students as well as from the joint tutorials. Students will be asked to choose from a selection of questions and discuss briefly in one page or less relevant issues surrounding the problem presented.

**Tutorial program participation (all students)**

Tutorial program participation will be awarded 5% of final grade. *Part-time students commencing in Semester 1 2009 will also participate in 2009 tutorials throughout February-July 2009, unless otherwise negotiated with the School Honours Coordinator.*

5% of the assessment will be awarded for the student’s contribution throughout the tutorial program. This is to encourage students to do prior reading on each subject before attending the Friday tutorials and to contribute their ideas, interesting questions and general discussion. Some tutors may assign prior reading, if so this will be posted on MyUni in sufficient time to be read before the class.

**Progress Report Seminars July 31 (full-time students)**

The progress of each Research Project will be presented in a 15 minute oral presentation followed by 5 minutes of questions. *Part-time students commencing in Semester 1 2009 will present progress seminars in the first week of April 2010.*

This seminar is not formally assessed but informal grades and comments will be made available for students to gauge and assimilate feedback on their progress. This is also an important opportunity to practice presentation style and argument construction for the final seminar as well as address questions of concerns raised by the expert audience. It is not uncommon to feel short of convincing results at this stage since the first half of the year is likely to have involved set up and evaluation of methods as well as gaining a comfort zone in the lab. This seminar should be used to justify to yourself and the School that you are on a promising path. If unforeseen problems have arisen, use the opportunity to justify a change of approach or justify sticking with the original design.

Powerpoint presentations should be prepared and submitted via the Honours course electronic dropbox facility in MyUni by midnight on the day before the presentation, to allow time for these to be loaded at the presentation venue, and students should also bring a copy on a thumb drive or CD to the presentation venue.

**Evaluation Criteria:**

<b>Background</b>	<b>10%</b>
Was the research question put into perspective?	
Were the hypothesis and aims clearly stated?	
How could the background presentation have been improved?	
 <b>Methods</b>	 <b>10%</b>
Were the experimental methods used clearly explained?	
Do the experiments efficiently address the aims?	
Are difficulties or shortcomings of the methods being reasonably addressed?	
 <b>Results</b>	 <b>30%</b>
Were results presented in a clear fashion	
Was appropriate use made of graphs and statistics	
Was analysis adequate	
Appropriate controls etc	
 <b>Discussion</b>	 <b>30%</b>
Were results synthesised into a logical discussion including:	
Summation of the accomplishments to date	
Importance of the outcomes	
Future directions and improvements	
Were conclusions appropriate to the results	
 <b>Delivery</b>	 <b>10%</b>
Did the student make effective use of visual aids?	
Was information presented complete, all relevant and non-redundant	
 <b>Questions</b>	 <b>10%</b>
Did the student answer the questions directly, accurately and with authority?	

## Examiners Assessment Guide for Project Progress Report Seminars

The primary purpose of presenting their Progress Reports is for students to receive constructive feedback on their progress to date, methods and results etc. Importantly, this is an opportunity to alert the student to flaws in interpretation or design of their experiments so that these can be addressed in the last part of the course. This also serves as a practice for their thesis defense presentation. So please don't just give a score to each presenter, please give brief comments on where the student may need to rethink or give more focus in their project. If you think they are doing something right please tell them that also.

An unofficial grade will be given to each student to help indicate where their skill level currently lies in the areas of presentation, answering questions and scientific reasoning.

Attached is a set of guide points for adjudicating these presentations. You are asked to simply score each subsection on a scale of 10 so you can easily reflect your opinion of how each independent component was handled according to the following grading scale.

Take note of the following grading scale that will be used throughout the year in assessment of the final Honours class achieved by each student.

Class	Numerical score	
First	8-10	Excellent candidate gave a clear and thorough presentation, showing a deep understanding of their subject and their project
Second Division A	7-7.9	Good but not outstanding, some part may have been deficient but overall a good grasp of the subject demonstrated
Second Division B	6-6.9	Not good enough, serious flaws in the reasoning or depth of understanding
Third	5-5.9	Poorly prepared and presented, project clearly not well researched or understood.

Please use the entire breadth of the scale as appropriate

**SPRH HONOURS 2009 PROGRESS REPORT ASSESSMENT SHEET**

Assessor: \_\_\_\_\_

Student \_\_\_\_\_

**Background Presentation**

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Was the research put properly into perspective?

Was the hypothesis clearly stated?

Are the aims of the research project clear and cohesive?

Score \_\_\_\_\_ out of 10

**Methods**

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Were the experimental methods clearly explained?

Is the experimental design thought through in detail including

- Attention to necessary controls?
- Consideration of statistical requirements?

Score \_\_\_\_\_ out of 10

**Results**

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Were the results well presented; appropriate graphs, tables, statistics etc.

Are the interpretations reasonable and accurate.

Where necessary were alternative approaches considered?

Score \_\_\_\_\_ out of 10

**Delivery**

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Was the presentation organized into a logical argument?

Was an understanding of the potential benefits and future directions of the research shown?

Score \_\_\_\_\_ out of 10

**Questions**

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Did the student answer the questions directly, accurately showing knowledge of background information?

Score \_\_\_\_\_ out of 10

**Thesis**

**Due 5:00pm Friday October 30 (full-time students)**

This component is worth 50% of the final grade. PDF (preferred) or Word files should be prepared and submitted via the Honours course electronic dropbox facility in MyUni by 5:00pm on **Friday October 30** (for full-time students). *Part-time students commencing in Semester 1 2009 will submit theses in October 2010.*

The final report of the research is to be presented in the style of a manuscript for publication. This manuscript may be as long as reasonably necessary, but no more than 5000 words should be needed. Excessive length of any section will be penalised.

The thesis should conform to the guidelines for submission of a manuscript for publication in a journal which is appropriate for the research field. An appropriate journal should be nominated by each student in consultation with the supervisor, and a copy of the style guide should be attached to the submitted thesis.

Examples of journals that have previously been nominated include; “Biology of Reproduction” or “Journal of Biological Chemistry” for laboratory-based projects, “The Lancet”, “The British Journal of Obstetrics and Gynaecology” or “Pediatric Surgery” for clinical projects or “American Journal of Epidemiology” for epidemiological studies.

Take note and conform to of the required citation style but by now you should be using EndNote to manage your bibliography. Also note the manuscript submission style. For submission purposes figures are generally attached after the manuscript text not embedded into the document. For this submission figure legends can be included on the figure page.

Material that does not conform to a manuscript style (eg questionnaire, method development or evaluation) should be added as appendices.

**The work presented in each thesis MUST be original work by the student except where clear due reference is made. Results from other projects or lab members should usually be cited without being reproduced.**

The contents included in the following order should be:	<b>Mark allocation</b>
Title page and declaration	
Abstract	<b>5%</b>
Introduction / background (not the critical literature assessment)	<b>10%</b>
Materials and Methods	<b>10%</b>
Results	<b>35%</b>
Discussion	<b>35%</b>
Acknowledgements	-
References	-
Figures with legends	-
 Overall presentation:	 <b>5%</b>
ie appropriate use of figures and tables with adequate figure legends, clear text and language, smooth flowing layout, appropriate use references.	

## Examiners Assessment Guide for Honours Theses

**Please return assessments by email to the School Honours Coordinator, Dr Kathy Gattford, [kathy.gattford@adelaide.edu.au](mailto:kathy.gattford@adelaide.edu.au) before the student's final seminar (please inform me if you will be unable to attend the final seminar)**

The thesis submission must successfully address many criteria including, introducing the research question and its background literature, properly presenting the methods and results, placing the research into perspective and interpreting the outcomes.

Students are expected to submit a manuscript style thesis of approximately 5000 words in length. In most cases the style should be in accordance with the instructions to authors for Biology of Reproduction, but some students may nominate another journal more suitable to the type of research or data concerned (e.g. Journal of Biological Chemistry, The Lancet or The British Journal of Obstetrics and Gynaecology). The overall rules for manuscript submission should apply, but minor stylistic variations such as interleaving the figures with the text, are acceptable.

Some criteria to apply to the assessment of each section of the manuscript are outlined below. Examiners are asked to assess the authors accomplishment in each section with the relative weighting indicated. It would be expected that some students may show excellence in some areas but not others, and by judging each section individually examiners should arrive at a mark which reflects the balance of achievement in the overall research project and written thesis.

Remember that this thesis represents these students first experience in independent research activity. The standard should be that expected from recent graduates who are in training in laboratory practices, critical analysis and research methodologies, but who are not experienced or independent researchers in their own right.

The success or volume of experimental results need not affect the overall grade if evidence of critical reasoning, creativity and diligence are clearly shown and all other criteria are well met. Be aware that time limitations may have prevented a fully complete study being achieved. Appropriate acknowledgement of where shortcomings are or where further work or replicates are needed may be sufficient to demonstrate the students understanding of the research.

### **Referencing**

Key statements should be supported with appropriate references which should be in the style of a nominated relevant journal.

**Final Seminar November 13**

This component is worth 15% of the final grade. The major findings and achievements of the Research Project will be presented in an oral presentation of 20 minutes duration, followed by 10 minutes of questions. *Part-time students commencing in Semester 1 2009 will present final seminars in November 2010.*

The background to the study should be concisely presented giving perspective to the knowledge gap which has been addressed. The hypothesis should be clearly stated. The methodological approach and experimental design should be concisely presented, and the results of the study clearly described. Importantly, students should discuss their results in the context of their hypotheses, and indicate the importance of their findings, for example, their broader relevance to the field and/or clinical implications.

Presentations should be approximately 20 minutes with Powerpoint slides followed by 10 minutes of questions. Powerpoint presentations should be prepared and submitted via the Honours course electronic dropbox facility in MyUni by midnight on the day before the presentation, to allow time for these to be loaded at the presentation venue, and students should also bring a copy on a thumb drive or CD to the presentation venue.

**Evaluation Criteria:**

<b>Background</b>	<b>10%</b>
Was the research question put into perspective?	
Were the hypothesis and aims clearly stated?	
How could the background presentation have been improved?	
<b>Methods</b>	<b>10%</b>
Were the experimental methods used clearly explained?	
Do the experiments efficiently address the aims?	
Are difficulties or shortcomings of the methods being reasonably addressed?	
<b>Results</b>	<b>30%</b>
Were results presented in a clear fashion	
Was appropriate use made of graphs and statistics	
Was analysis adequate	
Appropriate controls etc	
<b>Discussion</b>	<b>30%</b>
Were results synthesised into a logical discussion including:	
Summation of the accomplishments to date	
Importance of the outcomes	
Future directions and improvements	
Were conclusions appropriate to the results	
<b>Delivery</b>	<b>10%</b>
Did the student make effective use of visual aids?	
Was information presented complete, all relevant and non-redundant	
<b>Questions</b>	<b>10%</b>
Did the student answer the questions directly, accurately and with authority?	

**SPRH HONOURS THESIS DEFENCE ASSESSMENT SHEET**

**Examiner:** \_\_\_\_\_

**Student** \_\_\_\_\_

**Background Presentation**

Was the research put properly into perspective?

Was the hypothesis clearly stated?

Are the aims of the research project clear and cohesive?

**Score** \_\_\_\_\_ **out of 10**

**Methods**

Were the experimental methods clearly explained?

Do the experiments efficiently address the aims?

Are difficulties or shortcomings of the methods reasonably addressed?

**Score** \_\_\_\_\_ **out of 10**

**Results**

Were the results well presented; appropriate graphs, tables, statistics etc.

Are the interpretations reasonable and accurate.

Where necessary were alternative approaches considered?

**Score** \_\_\_\_\_ **out of 30**

60%=18, 70%=21, 80%=24, 90%=27

**Discussion**

Were results synthesised into a logical discussion including:

Summation of the accomplishments to date

Importance of the outcomes

Future directions and improvements

Were conclusions appropriate to the results

**Score** \_\_\_\_\_ **out of 30**

60%=18, 70%=21, 80%=24, 90%=27

**Delivery**

Was the presentation organized into a clear and logical argument?

Was an understanding of the potential benefits and future directions of the research shown?

**Score** \_\_\_\_\_ **out of 10**

**Questions**

Did the student answer the questions directly, accurately and with authority?

**Score** \_\_\_\_\_ **out of 10**

## Tutorial Program Schedule 2009.

Weekly interactive tutorials will focus on discussion of the practical philosophy, procedure, physiology and methodology on which good science is founded.

Date	Time	Topic	Details/location
<i><b>All Honours students are expected to attend and participate in the following tutorials, which cover the 'foundation' principles of medical research</b></i>			
<b>Tuesday Feb 10<sup>th</sup></b>	<b>9.30-4.00</b>	Orientation	commences at 9:30 am, Lecture Theatre, Level 1, Queen Victoria Building, Women's and Children's Hospital
Friday Feb 13 <sup>th</sup>	2.30-3.30	Principals of medical research <b><u>Kathy Gatford</u></b>	Medical School, Seminar room N229
Friday Feb 20 <sup>th</sup>	<b>1.30-3.30</b>	Using the Library and Online Literature resources <b><u>Mick Draper</u></b> (Uni Library)	Students assemble at the Barr Smith Library Information Desk
Friday Feb 27 <sup>th</sup>		Online Research Education and Development Module: <b>Plagiarism and independent research writing &amp; Writing a Research Proposal</b>	Access through MYUNI: * Writing and speaking at Uni/Researcher Education and development/RED for students
<b>Thursday March 5<sup>th</sup></b>	<b>9am-4pm</b>	The use of animals in science: ethical and practical considerations	<b>Students MUST register</b> 9am-4pm National Wine Centre Lunch provided
<b>Thursday March 12<sup>th</sup></b>	2.30-3.30	Design and analysis of Clinical trials. <b><u>Helen Marshall</u></b>	Maxwell Seminar Room, Level 2, Rieger Building, Women's and Children's Hospital.
Friday March 20 <sup>th</sup>	2.30-3.30	Laboratory Experimental design <b><u>Rob Gilchrist</u></b>	Medical School, Seminar room N229
Friday March 27 <sup>th</sup>	2.30-3.30	Statistical Analysis. <b><u>Michelle Lane</u></b>	Medical School, Seminar room N229 Application of Statistics before and after data collection
Thursday April 2 <sup>nd</sup> & Friday April 3 <sup>rd</sup>		<b>Research Proposal Oral Presentations (full-time students only)</b>	Medical School, Seminar room N229
Friday April 10 <sup>th</sup>		<b>Good Friday</b>	
Friday April 17 <sup>th</sup>		Online Research Education and Development Module: <b>Citation is more than referencing</b>	Access through MYUNI: * Writing and speaking at Uni/Researcher Education and development/RED for students
Friday April 24 <sup>th</sup>	2.30-3.30	Data collection, recording and reporting <b><u>Denise Furness</u></b>	Medical School, Seminar room N229
Friday May 1 <sup>st</sup>	2.30-3.30	Extrapolating laboratory data to medicine and human health <b><u>Michelle Lane</u></b>	Medical School, Seminar room N229
Friday May 8 <sup>th</sup>	2.30-3.30	Online Research Education and Development Module: <b>Writing a Thesis or Dissertation in your Discipline</b>	Access through MYUNI: * Writing and speaking at Uni/Researcher Education and development/RED for students
Friday June 5 <sup>th</sup>		<b>Literature review + Research Plan due 5pm (full-time students only)</b>	.

Date	Time	Topic	Details/location
Friday June 19 <sup>th</sup>		No tutorial	
Friday June 26 <sup>th</sup>	2.30-3.30	Journal Club	Medical School, Seminar room N229
Friday July 3 <sup>rd</sup>	2.30-3.30	Journal Club	Medical School, Seminar room N229
Friday July 10 <sup>th</sup>	1.30-3.30	Exam 2hr open book	Medical School, Seminar room N229
<b><i>ONLY Discipline of Obstetrics &amp; Gynaecology Honours students are expected to attend and participate in the following tutorials during May &amp; June, which cover a brief but intensive course in the physiology of female reproduction.</i></b>			
Friday May 15 <sup>th</sup>	2.30-3.30	Ovarian physiology <b>Ray Rodgers</b>	Medical School, Seminar room N229
Friday May 22 <sup>nd</sup>	2.30-3.30	Female reproductive physiology Implantation-placentation & gestation <b>Claire Roberts</b>	Medical School, Seminar room N229
Friday May 29 <sup>th</sup>	2.30-3.30	Female reproductive physiology CNS control of reproductive processes <b>Dave Kennaway</b>	Medical School, Seminar room N229
Friday June 12 <sup>th</sup>	2.30-3.30	Female reproductive physiology Embryo development <b>Jeremy Thompson</b>	Medical School, Seminar room N229
<b><i>These Statistics Primer seminars during Feb-June cover principles of statistics, are COMPULSORY for Discipline of Paediatrics Honours students to attend and participate in, and are RECOMMENDED for Obstetrics &amp; Gynaecology Honours students, as they will provide valuable guidance for analysing your data.</i></b>			
Thursday Feb 26 <sup>th</sup>	1.00-2.00	Understanding hypothesis testing <b>Peter Baghurst</b>	Maxwell Seminar Room, Level 2, Rieger Building, Women's and Children's Hospital
Thursday Apr 16 <sup>th</sup>	1.00-2.00	The principles of calculating a sample size <b>Peter Baghurst</b>	Maxwell Seminar Room, Level 2, Rieger Building, Women's and Children's Hospital
Thursday May 7 <sup>th</sup>	1.00-2.00	The importance of choosing the right distribution <b>Peter Baghurst</b>	Maxwell Seminar Room, Level 2, Rieger Building, Women's and Children's Hospital
Thursday May 21 <sup>st</sup>	1.00-2.00	Introduction to linear models <b>Peter Baghurst</b>	Maxwell Seminar Room, Level 2, Rieger Building, Women's and Children's Hospital
Thursday Jun 11 <sup>th</sup>	1.00-2.00	Introduction to non-parametric statistics <b>Peter Baghurst</b>	Maxwell Seminar Room, Level 2, Rieger Building, Women's and Children's Hospital