UQ Physics Honours/MSc Thesis Assessment 2015

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Assessment procedure

- Each thesis is examined by the Supervisor plus two Examiners.
- An oral defence with the student, Supervisor, Examiners, and honours coordinator, will be arranged to take place sometime during the examination period. Typically, most of the discussions take place between the Examiners and the student, with the Supervisor as an observer.
- Following the oral defence, each examiner and supervisor submits a separate mark and report. The report, but not the individual marks, will be given to the student after the release of results.
- Please divide your report into two sections:
 - A: Report on the thesis (will be returned to the student)
 - **B: Grade** (as a percentage) and brief justification if necessary.
- The reports should be emailed as plain text (or LaTeX, if needed) to the honours coordinator within a week of the oral exam (or before the end of the examination period, whichever is sooner).
- The Supervisor mark and report can take into account a wider perspective than the thesis itself, such as how well the student worked throughout the year, detailed knowledge of the problems faced by the student, and any unusual assistance he/she may have received.
- The Supervisor's and combined Examiners' marks usually carry equal weight.
- At the Examiner's Meeting the marks will be reviewed and discussed before a final grade out of 7 is awarded.

In the assessment, comparison should be made not with other students within the year, but with previous students and with standards at other Australian and overseas universities, having in mind that honours results should reflect not only an assessment of achievements within the honours year, but also a judgement on the potential of students to carry out independent research work in the future. Some criteria to consider (some may not be applicable to some projects, and some Examiner's may not be able to judge all of the criteria):

1. Conceptual

- Insight of the problem
- Applicability of the methods used

2. Originality

- Did the student come up with new ideas or novel methods?
- Modifications and adaptations of existing methods?

3. Research skills

- Use and knowledge of relevant literature
- Design and execution of the investigation
- Critical judgement of data and results, and their significance
- Technical skills in using experimental / mathematical / computational methods

4. Effort

- Organisation of time
- independence; how much assistance from the Supervisor and other group members?

5. Presentation

- Clarity of the presentation
- Appropriate length (typically up to 50 pages)
- informative introduction and conclusion

6. Oral

- Able to communicate effectively with the Examiners
- Do the responses to questions demonstrate originality and insight?

For an Honours degree, the final award is determined by the weighted percentage of the thesis and coursework, according to the standard cut-offs (First Class is an average of 6.200 and above, Upper Second 5.650-6.199, Lower Second 5.000-5.649, Upper Third Class 4.000-4.999, Lower Third Class <4.000). Note that if a student fails a course they will need to repeat it (or do another) to pass the requirements for honours, but the first attempt always stands when calculating the final honours grade. For more details see https://ppl.app.uq.edu.au/content/3.50.12-award-honours#Policy

For Masters theses, the grading criteria are the same as for Honours. An #8 unit MSc project is graded exactly as for an Honours project. There are also #6, #4 and #2 unit MSc projects, for which the amount of work required is proportionately less, and therefore the possible scope for demonstrating originality and other skills is reduced. Typically, #2 unit projects are literature reviews and might not contain original research. #4 and #6 unit projects should contain at least some original research component.

As a guideline, the amount of work required is:

#2 units 10-15 pages (excluding title pages & bibliography)

#4 units 25-30 pages #6 units 35-40 pages

#8 units up to approx 50 pages

This is a rough guide only. A densely written report may be able to convey the required content in fewer pages. Conversely, a thesis containing many pages of waffle with little information content is not going to demonstrate the required work.

Students are strongly urged to submit a draft of their report to their supervisor for feedback well before the due date!

There will be an immediate penalty of 5% applied for late submission, and then an additional 2% for every additional 24 hour period. If the student is having trouble printing their thesis, they should ensure that an electronic PDF version is emailed to the program coordinator prior to the deadline.

If the student feels they are unlikely to be able to complete their thesis on time and have extenuating circumstances, then they should speak to both their supervisor and honours coordinator as soon as this is apparent. Requests for extensions should be made well in advance of the due date.

UQ Physics – Honours / Masters Report Assessment Guidelines

Percentage	Hons Class	UQ Grade	Comments
96-100	I	7	This is truly an outstanding thesis . The candidate is one of the best that UQ has seen and should be nominated for a medal within the University or/and with the relevant professional learned society (AIP; ASA). The results and writing are of a standard appropriate for publication in a peer review journal.
91-95	I	7	An outstanding thesis. It shows consistent evidence of substantial originality and critical insight in identifying, generating and communicating competing arguments, perspectives or problem solving approaches; critically evaluates problems, their solutions and implications; integrates findings in the big picture of the research area with relevant theories and previous research. With some minor extra work, the results would be of a standard appropriate for publication in a peer review journal.
85-90	I	7	An excellent thesis. It shows evidence of substantial originality and critical insight in identifying, generating and communicating competing arguments, perspectives or problem solving approaches; critically evaluates problems, their solutions and implications; integrates findings in the big picture of the research area with relevant theories and previous research. The thesis contains only minor weakness, offset by excellence in almost all other areas. Some potential for publication, and is recommended as a good introduction for future students working in the same area.
80-84	I/IIA	6	A very good thesis. The candidate shows frequent evidence of originality in defining and analysing issues or problems and in creating solutions; uses a level, style and means of communication appropriate to the discipline and the audience. The thesis will make a good introduction for future students working in the same area, with perhaps some minor caveats. Level I (GPA 6.2) would typically receive an APA or similar for entry to a Ph.D.
75-79	IIA	6	The candidate shows evidence of originality in defining and analysing issues or problems and in creating solutions; uses a level, style and means of communication appropriate to the discipline and the audience. The thesis has some weaknesses and a number of areas of excellence.
70-74	IIA / IIB	5	The candidate demonstrates substantial understanding of fundamental concepts of the field of study and ability to apply these concepts in a variety of contexts; develops or adapts convincing arguments and provides coherent justification; communicates information and ideas clearly and fluently in terms of the conventions of the discipline. The thesis will have a few areas of excellence and may exhibit weaknesses or a couple of minor flaws. Level IIA (GPA 5.650) is the normal minimum entry grade into a Ph.D. program.
65-69	IIB	5	A sound thesis. The candidate demonstrates substantial understanding of fundamental concepts of the field of study and ability to apply these concepts in a variety of contexts; develops or adapts convincing arguments and provides coherent justification; communicates information and ideas clearly and fluently in terms of the conventions of the discipline. The thesis will have few areas of excellence and will exhibit several weaknesses and minor flaws. Some sections of the thesis may be relevant for future students working in the same area, however the thesis as a whole is not a good introduction to the field.
60-64	IIIA	4	An adequate thesis. It demonstrates adequate understanding and application of the fundamental concepts of the field of study; develops routine arguments or decisions and provides acceptable justification; communicates information and ideas adequately in terms of the conventions of the discipline. The thesis will exhibit a number of minor flaws and weaknesses that are not offset by excellence in other areas. The thesis is not useful as an introduction to students new to the field.
50-59	IIIA	4	A poor thesis that achieves the minimum pass required for a UQ Honours thesis. It demonstrates adequate understanding and application of the fundamental concepts of the field of study; develops routine arguments or decisions and provides acceptable justification; communicates information and ideas adequately in terms of the conventions of the discipline. There are minor flaws (e.g. misconceptions and inconsistencies) throughout the thesis.
45-49	IIIB	3	Demonstrates superficial or partial or faulty understanding of the fundamental concepts of the field of study and limited ability to apply these concepts; presents undeveloped or inappropriate or unsupported arguments; communicates information or ideas with lack of clarity and inconsistent adherence to the conventions of the discipline.
20-44	IIIB	2	Demonstrates clear deficiencies in understanding and applying fundamental concepts; communicates information or ideas in ways that are frequently incomplete or confusing and give little attention to the conventions of the discipline.
0-19	IIIB	1	Fails to demonstrate most or all of the basic requirements of the course.