THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

School of Mathematics and Physics Honours Handbook 2009

Important Dates for 2009

First Semester

Orientation	Monday 23 February - Friday 27 February
Classes	Monday 2 March - Thursday 9 April
Mid-semester break	Monday 13 April - Saturday 18 April
Classes	Monday 20 April – Saturday 6 June
Revision period	Monday 8 June - Friday 12 June
Examination period	Saturday 13 June - Saturday 27 June
Semester ends	Saturday 27 June

Second Semester

Orientation	Monday 20 July - Friday 24 July
Classes	Monday 27 July - Saturday 26 September
Mid-semester break	Monday 28 September – Saturday 3 October
Classes	Monday 5 October - Saturday 31 October
Revision period	Monday 2 November - Friday 6 November
Examination period	Saturday 7 November - Sat 21 November
Semester ends	Saturday 21 November

Summer Semester

Classes	Monday 30 November - Saturday 13 February 2010

Public Holidays

New Year's Day	Thursday 1 January
Australia Day	Monday 26 January
Good Friday	Friday 10 April
Easter Monday	Monday 13 April
Anzac Day	Saturday 25 April
Labour Day	Monday 4 May
Queen's Birthday	Monday 8 June
Exhibition Day	Wednesday 12 August
Christmas Day	Friday 25 December
Boxing Day	Saturday 26 December

The information provided in this handbook supplements, but does not replace the information on rules and procedures published in the official 2009 Program and Course Information Webpages. The myAdvisor wesite contains information on the University's academic policies and procedures www.uq.edu.au/myAdvisor. The official rules and procedures are also contained on the UQ website. Students are expected to acquaint themselves with these.

Full descriptions of courses are available on mySI-net www.uq.edu.au/mySI-net. As policies are amended, this website is updated.

Whilst all due care has been taken in compiling this publication, any conflict between the information provided in this handbook and the information provided in the Official University of Queensland publications, the latter will take precedence.

Contents

Welcome

Welcome to your Honours year in the School of Mathematics and Physics. We hope that you will find your studies in the School challenging and rewarding. This handbook has been written to provide information for prospective and current Honours students undertaking Honours in the School of Mathematics and Physics.

This handbook has several purposes:

- it explains the structure of programs within the School;
- it identifies key members within each Discipline; and
- it advises you on whom to see if you have any difficulties.

The Honours program is a transitional degree from undergraduate to postgraduate studies. The Honours year is a crucial year in higher education, opening up many career options not available to pass graduates. An Honours degree is tangible proof of your capacity for sustained independent work at a high level.

The benefits of undertaking an Honours year include:

- the opportunity to pursue further study in one specialist area in more depth than is possible with a pass degree;
- developing and enhancing research skills relevant to your area of specialisation;
- developing a base of knowledge and technical skills sufficient for enrolment in postgraduate research degrees, or for a specialist career;
- entry leading to an academic career;
- entry leading to a professional career where higher level research skills are required;
- facilitating progression to PhD for students attaining Honours Class I or IIA.

Honours and Postgraduate students are held in high regard throughout the School as they impart knowledge and contribute to the rich array of events, research, tutoring and general life within the School. Many Honours students have distinguished themselves with University medals and awards and have gone on to rewarding careers in a wide variety of occupations, with many holding university appointments here in Australia and abroad.

The Honours program requires hard work and commitment. We hope that you find the experience to be both rewarding and enjoyable.

The School of Mathematics and Physics

The School of Physical Sciences comprises the disciplines of Mathematics and Physics, and is responsible for managing the related academic programs. The School highly regards present Honours students and encourages enrolments from within undergraduate programs whilst also welcoming students from outside the University.

The academic staff supervising Honours students are involved in many areas of fundamental and applied research. The School supports a strong research interaction with many other university schools and research centres, plus off-campus organisations and industries.

School Locations and Members of Staff

Finance Office Building: Ground Level, Physics Annexe (6).

Student Administration Building: Level 3, Priestley Building (67).

Telephone: +61 (0) 7 3346 7681
Facsimile: +61 (0) 7 3365 3328
Email: student@smp.uq.edu.au

Office Hours: Mon–Fri: 8.30am–4.30pm

Mailing Address:

School of Mathematics and Physics
The University of Queensland
St Lucia Queensland 4072
AUSTRALIA

Web Page: www.smp.uq.edu.au

Head of School - Professor of Physics

Professor Halina Rubinsztein-Dunlop (#53139)
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School Manager

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Student Administration

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Finance

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Systems Programming Manager

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Personnel

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Human Resource Officer
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Email: j.ryan@uq.edu.au

Communications and Marketing Officer

Lynelle Ross (#69935)
Telephone: +61 (0) 7 3346 9935
Email: l.ross@smp.uq.edu.au

Discipline Locations

Mathematics

Located in the Priestley Building (67).

Honours Coordinator: Dr Victor Scharaschkin (victors@maths.uq.edu.au)
Secretary: Ms Kathy Lyons
Phone: +61 (0) 7 3365 3277
Fax: +61 (0) 7 3365 1477
Email: k.lyons@smp.uq.edu.au
Web: www.maths.uq.edu.au

Physics

Located in the Physics Annexe (Building 6).

Honours Coordinator: A/Prof Matthew Davis (mdavis@physics.uq.edu.au)

Secretary: Mrs Jennifer Robinson
Phone: +61 (0) 7 3365 3424
Fax: +61 (0) 7 3365 1242
Email: robinson@physics.uq.edu.au
Web: www.physics.uq.edu.au

Admission Requirements

Admission to Honours is open to students who demonstrate superior achievement in their undergraduate studies. To be eligible, a student should hold:

- a Bachelor of Science degree or an award recognised by the Executive Dean as equivalent, and;
- a GPA of at least 4.5 over #8 from late-year courses from Part A of the BSc list considered by the Head of School to be relevant to the proposed program of study.

In addition to the above, the requirements for entry to Honours in Physics stipulate that students must have successfully completed the following third level courses:

- PHYS3020; and
- PHYS3040; and
- PHYS3050; and
- PHYS3071; and
- at least one of PHYS3810 and PHYS3820

If you do not meet the above requirements, but are interested in applying, please see the Honours coordinator in Physics, Dr Matthew Davis, who must endorse your application. An Honours application from the School website (www.smp.uq.edu.au/student/honours.html) must be submitted to the School of Mathematics and Physics Student Administration Office. All applications for admission to Honours require approval by the Head of School.

Application Process

- Find a supervisor and decide on a project area before completing the form, so you are strongly encouraged to start looking for a supervisor before the end of your third year.
- Complete the School of Mathematics and Physics Honours application form. This application form is available from www.smp.uq.edu.au/documents/Students/HonsApp.pdf
- This form should be completed after the results for your last semester of third year are released. If you are starting Honours in second semester, it is recommended that you do this very soon after the release of results.
- Applications should be submitted to the School Student Administration Office. Applicants who are successful will be notified by email by the School.
- You are then responsible for enrolling yourself in the courses you wish to study as well as your Honours project.

An Honours Degree

To be awarded an Honours degree, you must complete #16 which is made of up of a thesis and coursework. See the relevant discipline section for more information on how each program is weighted.

The Honours Thesis

The aim of the Honours thesis is to provide students with the opportunity to carry out a set piece of research in an environment and in a way that develops their research skills. Skills developed include the ability to identify a research opportunity and to define and refine a research question, to demonstrate how the question is related to existing knowledge, to identify the research tools needed to investigate the question, to prosecute the research and to analyse and write-up the results in appropriate language in a coherent, logically structured report.

Your Honours Thesis will consume a large fraction of the available time for the full academic year. A typed thesis must be submitted at the end of two full semesters and assessment will be on the basis of this thesis, a brief seminar on the thesis topic and an oral examination on the thesis material, as well as the judgment of the project supervisor. Projects are restricted to problems on which one or more staff members have the expertise and interest necessary to give detailed supervision and for which facilities are immediately available. In practice this means that the projects are closely tied to the on-going research in the discipline. A list of projects can be obtained from the relevant Honours Coordinator. This is not necessarily an exclusive list; intending Honours students may wish to suggest different projects or approach staff members not listed as project supervisors.

Such suggestions can be accepted only when we are satisfied that they will lead to viable projects. You can find information about research currently happening in the School by visiting our website at www.smp.uq.edu.au.

Once a project has been assigned, the student is expected to consult widely and regularly with his/her supervisor so that satisfactory progress occurs. Early in the project students should develop a plan, in consultation with their supervisor, for the progression of work that might need to be carried out by the Mechanical and Electronic workshops. These sections work to schedules and are not always able to accommodate last minutes rushes. Supervisors also expect a draft copy of a report/thesis well before the final submission date in order to advise students of potential problems.

The projects are open-ended and students will be judged on what they can make out of a project than on whether specific goals are met.

In order to graduate with an Honours degree and to determine what grade of Honours you receive at the end of your Honours program, a mark and percentage will need to be recorded for each course that you study in your Honours year. To pass each course you will need to achieve a grade of 4 or higher in each course as this is considered the lowest grade for a pass.

The exact nature and expected content of the thesis, the desired length, and in particular, the amount of original research required, will vary according to the discipline. Students should consult the individual discipline guidelines for further details. Details and deadlines for the submission of preliminary reports, as well as the requirements for a seminar and/or oral examinations (“thesis defense”) associated the Honours Thesis, are also discipline

specific and will be discussed in the relevant subsection.

The Honours thesis will normally be examined by two members of the relevant discipline's academic staff who will be appointed after consultation with the Honours Coordinator and/or your supervisor.

The TEDI page on research theses http://www.tedi.uq.edu.au/teaching/postgraduate/resources.html is primarily directed to research higher degree students but much of it is applicable, and useful, at an Honours level too.

Level of Honours (Assessment)

Honours are awarded as Honours Class I, Honours Class IIA, Honours Class IIB and Honours Class III and are determined by the aggregate percentage results of the Honours courses.

The Honours grade is formulated on the basis of the following score equivalents.

Weighted Percentage	Honours Level
80.00% and over	I
70.00% - 79.99%	IIA
60.00% - 69.99%	IIB
50.00% - 59.99%	III
Below 50.00%	Fail

Examination of the Thesis

In accordance with University guidelines for all project 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 judgment on the potential of students to carry out independent research work in the future.

There are 5 components to the assessment of your Honours thesis. These components are:

- a preliminary research proposal (due early in the first semester of Honours);
- a written progress report (due early in your second Semester);
- an oral presentation or presentations (the Honours seminar);
- the written report (the thesis);
- an oral examination on the thesis.

The specific requirements and weightings given to each component are determined by the individual Discipline and the students should consult the relevant course profiles.

Plagiarism

Plagiarism involves the use of other peoples' ideas and works without acknowledging the source of the information. To avoid plagiarism, you must give credit whenever you:

- quote from a person's actual spoken or written words;
- use another person's ideas, opinions or theories in an assignment etc.;
- paraphrase another person's spoken or written word.

To avoid unintentional plagiarism you can:

- use quotation marks around everything that comes directly from a text or article;
- summarise ideas and arguments in your own words;
- check that you have correctly paraphrased the original ideas;
- check your summary against the original text.

For a full description of plagiarism, please refer to the Handbook of University Policies & Procedures (HUPP) at http://www.uq.edu.au/hupp/index.html?page=25128&pid=25075

Ethics Clearance

The University of Queensland has stringent policies and guidelines for research involving 'human experimentation' which is defined widely to include all research involving human participants. See www.uq.edu.au/research/rrtd/human-ethics for details. Consult your supervisor if you believe your Honours project requires ethical clearance.

Your Honours Supervisor

Choosing a topic and your supervisor

Choosing a supervisor and a thesis topic is a critical step in the successful completion of the Honours program. The selection of an appropriate topic and supervisor are the responsibility of the student. The following steps offer your some guidance in this process:

- to assist with choosing a specialised area of interest, review reports and theses of previous students (Honours, PhD & MPhil), examine the research profiles of the School's academic staff, talk with other students and also review the work assignments from your undergraduate studies.
- identify proposed course areas well before the first semester of commencing your Honours program so that a suitable supervisor may be approached.
- select two or three academics whose research interests coincide with your proposed thesis topic. Approach and discuss your proposed topic with each of the academics your have identified.
- if you are having difficulties selecting the topic or supervisor discuss the issues with the Discipline Honours Coordinator.
- having selected an appropriate supervisor, define the topic as soon as possible to ensure the thesis can be completed by the submission date.

The role of your Supervisor

The role of the supervisor is to:

- assist in the development of a study plan ensuring that it is scientifically sound and possible to implement with the resources likely to be available;
- be available for consultation on a regular basis for an appropriate period of time;
- encourage completion of the thesis;
- regularly discuss progress and assist in the development of appropriate research habits;
- read drafts of the thesis as each section is produced and read the entire thesis before it is prepared for submission;
- provide appropriate feedback on work throughout the year;
- help you choose and refine your topic and field area;
- provide advice about the scope of the thesis;
- help locate and identify appropriate reading;
- help set goals and monitor progress;
- guide your field and laboratory work if appropriate;
- ensure that your work is satisfactorily written up and presented.

Working with your supervisor

You should arrange periodic meetings with your supervisor to discuss the progress and direction of your work. It is not the supervisor's role to pursue you in order to monitor your progress.

Although your supervisor will assist you with style and with the initial editing of your thesis providing prompt feedback on drafts of submitted work, you should not expect him or her to read thesis material that you have not already edited. Remember that your supervisor has other students and duties and cannot be expected to read a thesis draft at short notice. You should attempt to get a draft of your introductory chapters to your supervisor well ahead of the deadline for submission, so that problems with style and grammar can be identified and rectified at an early stage. If you are dissatisfied with your supervisor you may present a case in the first instance to the Honours Coordinator for a change in supervisor. Such a request will be treated confidentially.

As an Honours student you will be expected to:

- formulate with the help of your supervisor, a concise statement of the aims of the project, and to layout a rough timetable for the work required. This is part of the process of learning to conduct research;
- work out with your supervisor a preferred timetable and method of working which is suitable to both. Of course the timetable may need to alter as pressures mount or recede during the year, or as other commitments must be taken into account. But a regular schedule of meetings with supervisors is as critical to success as a schedule for lectures in a lecture-driven course;
- write your own thesis including drafts. Learning to write an extended report in clear concise language in an appropriate professional style forms a fundamental part of research training;
- proof read written material before submitting it to your supervisor and keep scheduled meetings.

The student charter, available on the UQ website under the Handbook of Policies and Procedures (Policy 3.40.1) sets out the general rights and responsibilities of the students at the University of Queensland http://www.uq.edu.au/hupp/index.html?page=25116&pid=25075

Honours is a demanding year. Success requires a high level of dedication. It is important to achieve a balance between time spent on your thesis and time spent on your coursework. At the same time, it is important to participate in the broader intellectual life of the School and of the University. Honours students are expected to attend not only the seminars presented by their peers, but also the Research Seminars held in their areas as well as the School Colloquia on a regular basis. These talks form an integral part of your training as a research scholar and attendance is expected. It is also important to participate in other activities that occur within the School such as outreach events, recruitment activities, lead positions in clubs and societies and the annual School Postgraduate Poster Day.

Your Honours Coordinators

The Honours Coordinator in each discipline is responsible for the overall management and administration of their Discipline's Honours Program. The coordinator monitors program requirements, provides academic counselling, appoints examiners, chairs the oral discussions of theses, and schedules Honours seminars. The Honours Coordinator should be your first port of call for information regarding any aspects of your Honours Program.

Contact details for each discipline Honours Coordinator can be found within the relevant discipline information contained in this Handbook.

Administration, Equipment and Facilities

Please contact the Secretary in your relevant discipline for information on:

- after-hours building access;
- common room;
- computer accounts;
- desk allocation and furniture;
- facsimile;
- keys;
- mail;
- stationery;
- photocopying;
- telephones.

Accommodation and Building access

Desk space will be arranged by the Honours Coordinators in conjunction with the Discipline secretaries. Keys to Honours offices are available from the Secretary in each Discipline on a refundable deposit of $50.00.

Honours offices are intended as quiet rooms and in particular should not be used for food. Please use the designated tea rooms.

Mathematics students who wish to remain in Priestley Building (#67) after official working hours may negotiate access through the Mathematics secretary.

Photocopying

As an Honours student you have access to the photocopier. You may have to obtain a PIN number from the office of your discipline.

Mailbox

University and other notices directed toward Honours students, telephone messages and regular mail will be placed in the appropriate marked mailbox areas of your discipline.

Computing

Computers, scanners and printers are available for student use in the Computer Laboratories of the Disciplines.

Students will be allocated an account at the start of their Honours year. Details of printing allocation and other administrative matters will be provided at the start of your Honours year. Students are reminded that their computer usage is governed by the University's Handbook of Policy and Procedures at the following weblink (www.uq.edu.au/hupp/index.html?page=25322&pid=25320)

All software must be legal and students must conform to the University of Queensland bylaws regarding computer and internet use.

Tutoring

If you wish to be considered for appointment to casual tutoring to first year classes please apply through the School website (http://www.smp.uq.edu.au/). It is never clear until shortly before semester begins how much tutoring will be available for Honours students, but there are generally at least a few positions. To be eligible for tutoring you much have completed the School Tutor Training course which is held at the beginning of Semester 1 each year.

Library

The Dorothy Hill Physical Sciences and Engineering Library contains the most extensive Physical Sciences collection in the southern hemisphere. The Physical Sciences Liaison Librarian is Ms Gisela Possin (g.possin@library.uq.edu.au).

Mathematics

Mathematics Honours Program

The Mathematics Honours thesis component is weighted at #6 with the remaining #10 as coursework electives. The table below explains in brief the structure and weighting for the remaining components of the Honours year. For further details, please see the course profiles.

Component	Weighting	Comments
Thesis	#6	MATH6010 (commencing Semester 1) MATH6020 (commencing Semester 2)
Coursework Electives	#10	at least #6 from PART A (listed on next page) plus at most #4 from other appropriate advanced level courses approved by the Head of Mathematics
Total	#16	

Statistics Honours Program

The Statistics Honours Thesis component is weighted at #6 with the remaining #10 as coursework electives. The table below explains in brief the structure and weighting for the remaining components of the Honours year. For further details, please see the course profiles.

Component	**Weighting**	**Comments**
Thesis	#6	STAT6010 (commencing Semester 1) STAT6020 (commencing Semester 2)
Compulsory	#4	From LIST B (listed on the next page)
Electives	#6	Select from courses listed in PART A (listed on the next page) or other appropriate advanced level courses, approved by the Head of Mathematics
Total	**#16**	

Mathematics and Statistics PART A

Semester 1

MATH4091	Financial Calculus
MATH6006	Special Topics A (both semester 1 and 2)
MATH6007	Special Topics B (both semester 1 and 2)

Odd Years

MATH4302	Combinatorial Designs
MATH4401	Advanced Analysis
MATH4403	Partial Differential Equations III/IVH
STAT4402	Advanced Statistics II

Even Years

MATH4202	Advanced Techniques in Numerical Linear Algebra
MATH4206	Issues in Computational Biology & Bioinformatics
MATH4303	Advanced Combinatorics
MATH4402	Ordinary Differential Equations III/IVH
STAT4401	Advanced Statistics I

Semester 2

MATH4090	Computation in Financial Mathematics
MATH4107	Advanced Mathematical Methods and Models B
MATH6006	Special Topics A (both semester 1 and 2)
MATH6007	Special Topics B (both semester 1 and 2)

Odd Years

MATH3103	Algebraic Methods of Mathematical Physics
MATH3301	Graph Theory and Geometry
MATH4104	Advanced Hamiltonian Dynamics & Chaos
MATH4201	Applications of Scientific Computing
MATH4301	Advanced Algebra
MATH4404	Functional Analysis III/IVH
STAT4404	Advanced Probability & Stochastic Processes II

Even Years

MATH3306	Set Theory & Mathematical Logic
MATH4105	General Relativity
MATH4106	Advanced Mathematical Methods and Models A
MATH4205	Advances in Scientific Visualisation and Graphics
MATH4304	Number Theory
MATH4405	Measure Theory
MATH4406	Control Theory III/IVH
STAT4403	Advanced Probability & Stochastic Processes I

Mathematics and Statistics PART B

Odd Years

STAT4402 Advanced Statistics II
STAT4404 Advanced Probability & Stochastic Processes II

Even Years

STAT4401 Advanced Statistics I
STAT4403 Advanced Probability & Stochastic Processes I

Level of Honours

The Honours thesis is undertaken as one of the courses MATH6010/STAT6010 (if you start in first semester) and MATH6020/STAT6020 (starting in second semester). As such, the precise and current details of aims, assessment and associated procedures are to be found in the associated course profiles.

Component	Weighting	Comments
Presentation	Feedback only	
Progress report	10%	5-10 pages. Due beginning of semester two
Written thesis	90%	20,000 – 30, 000 words. Two copies. Due end of semester two.
Oral defense		To be conducted on Monday of the second examination week in your second semester.

In the Honours thesis, a novel presentation of the research in the chosen area is encouraged, and might involve new proofs of known results, extra calculation, some numerical experimentation, etc. The thesis should be written in the style of an extended research paper, and should present a coherent account of the material studied. A thesis of around 20,000 - 30,000 words would normally be expected.

The Mathematics discipline requires you to submit to the examiners on the Monday of first week of second semester a written progress report on your research, including a review of relevant literature of 5-10 pages in length. This requirement is to protect you against any misunderstandings that could arise, and to ensure that the project you undertake will be achievable by the end of the year.

The thesis itself (two copies) is required by 9am on the Monday of first week of examinations, in your second semester. An oral defense of the thesis conducted with the student and the examiners will be held before the thesis is graded. The oral defense will be conducted on Monday of the second examination week in your second semester.

Laboratories and Equipment

Specialist laboratories are not generally an issue for Honours students in mathematics unless they are doing combined Honours. Specialist computing requirements (for example time-intensive numerical calculations or specific graphics requirements) can generally be accommodated and should be discussed with your project supervisor.

Honours Coordinator

Dr Victor Scharaschkin (#52321)
Mathematics Honours Coordinator
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Physics

Physics Honours Program

The Physics Honours thesis component is weighted at #8 with the remaining #8 consisting of compulsory coursework and electives. The table below explains in brief the structure and weighting for the remaining components of the Honours year. For further details, please see the course profiles.

Component	Weighting	Comments
Thesis	#8	PHYS6487 (commencing Semester 1) PHYS6488 (commencing Semester 2)
Compulsory (all in Semester 1)	#4	See Physics PART A
Coursework (all in Semester 2)	#6	See Physics PART B
Total	#16	

The fourth year physics lecture courses offered (each nominally of 32 lecture hours (#2) on selected topics, with various third level pre-requisites) are listed below.

Physics PART A

PHYS6041 Advanced Quantum Theory
PHYS6050 Advanced Electromagnetic Theory

Physics PART B

These courses are all #2 and are presented in Semester 2.

Even Years
MATH4105 General Relativity
PHYS4060 Laser Physics & Atom-Light Interaction
PHYS4070 Advanced Computational Physics
PHYS4090 Quantum Optics & Stochastic Processes

Odd Years
MATH3103 Algebraic Methods of Mathematical Physics
MATH4104 Advanced Hamiltonian Dynamics & Chaos
PHYS4030 Condensed Matter Physics: Electronic properties of crystals
PHYS4072 Techniques of Experimental Physics & Data Analysis

Level of Honours

The Physics Honours project is undertaken as one of the compulsory courses PHYS6487 (first semester start) or PHYS7488 (second semester start). The precise current details of aims, assessment and associated procedures are to be found in the corresponding course profiles.

Component	Weighting	
Seminar	Feedback only	20 minute seminar to discipline. End of semester one.
Written progress report	10%	4000 words; summary of findings and progress to date; assessed by supervisor(s) and one or two others. End of semester one.
Second seminar		20 minute seminar to discipline. End of semester two. Seminar is not marked separately however failure to present seminar will suffer a penalty of 10%.
Written Report	90%	50 pages in length, three copies
Oral examination		Attended by two assessors who have read the report and attended the seminars plus supervisor

The project is worth #8 and can be theoretical or experimental. The work is normally carried out in association with one of the research groups in Physics and original novel outcomes are expected, in many cases leading to publication in refereed journals. Students normally base their project on a topic from a list available near the end of the previous year, and are expected to make arrangements with a supervisor.

After one semester of work, each student will present a 20 minute seminar to the discipline on the project. Each student will also submit a brief written progress report, including a literature review, to his/her supervisor. The supervisor will assess this report that will contribute 10% to the final mark for the project. The student will also receive feedback from the seminar audience and should discuss this and their interim assessment with him/her.

At the end of the second semester of work, each student will present a second seminar to the discipline, submit a written report of around 50 pages in length, and attend an oral examination by two assessors who have read the report and attended the seminar. The supervisor will also be present. Although the seminar is not marked separately, students who fail to present a seminar will suffer a penalty of 10%. The assessors will be appointed by the Honours Coordinator with the intention that one will have expertise in the general area of the project, while the other will not. They will be provided with a form (see course profile) to assist their assessments of the report and oral examination. After discussion they will submit a joint % mark confirming to the stand guidelines for grades of Honours. The supervisor will also submit a mark, taking into account more subjective factors, and their detailed knowledge of the problems faced by the student, and any unusual assistance the student may have received. At an examiners' meeting the two marks will be reviewed and discussed before a final mark is awarded. The default is that the supervisor's mark and the assessors' mark should carry equal weight.

Project reports (3 copies) must be submitted by a deadline set out in the course profile, normally the end of the semester 2 lecture periods, and oral examinations will be held during the normal examination period. Students must be available during the whole of this period for their oral. In scientific report writing, verbosity is a vice that will be penalised. The ideal report length is less than 50 typed pages, although appendices with large diagrams, computer programs, detailed derivations etc. may be added to the number. The discipline does not pay the cost of typing, but for reports of normal length the production of multiple copies may be done, without charge, on the discipline photocopier.

Laboratories and Equipment

Consult the electronic workshop for assistance with high voltage circuits. Take appropriate precautions with other equipment (eg gas cylinders, hot or very cold items, chemical containers). Report any mishaps immediately to your supervisor. Note that no person is permitted to work in SPS laser laboratories unless they have received Laser Safety training and had their eyes tested for damage. This will be arranged in the first week of classes.

Honours Coordinator

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