

Handbook 2020

Coursecode

H1257

BACHELOR OF SCIENCE HONOURS

Murdoch University

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Cancellation of Courses, Majors, Minors and Units

The University reserves the right to cancel, without notice, any course, major, minor or unit if the number of students enrolled falls below limits set by the University or in other unforeseen circumstances.

Alternative Formats

Handbook home page:

<http://handbook.murdoch.edu.au>

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<http://goto.murdoch.edu.au/EquitySocialInclusion>

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Group	Course	Offerings
Biotechnology	Biotechnology Honours (BSc(Hons))	<ul style="list-style-type: none"> • Murdoch campus (internal) • Murdoch campus (external)

BIOTECHNOLOGY

BIOTECHNOLOGY HONOURS (BSC(HONS))

College of Science, Health, Engineering and Education

Bachelor of Science Honours (BSc(Hons)) in Biotechnology

Course Codes: H1257

Duration: 1 year full-time or part-time equivalent

Availability:

- Murdoch campus (internal)
Murdoch campus (external)

The aim of the Honours year is to extend the student's grasp of the principles and practice of their subject, to develop ability for independent research, and to facilitate their entry into industry employment.

An Honours qualification of at least 2A is normally required for admission to higher research degree study.

Admission Requirements (Onshore):

Completion of a Bachelor Degree (AQF Level 7) or equivalent in the same discipline or cognate area with a Credit average (GPA 2); subject to availability of a suitable supervisor and approval by the School Dean.

Students interested in enrolling in Honours are advised to contact the Academic Chair before application to discuss supervision of their potential research project.

Course Structure - 24 credit points

Coursework - 3 credit points

VLS683 Advanced Research Methods for Scientists - 3 points
MURDOCH: S1S-internal, S1S-external, S2N3-internal, S2N3-external

Thesis - 21 credit points

VLS535 Honours Thesis in Biotechnology - 21 points
MURDOCH: S1-internal, S1-external, S2-internal, S2-external, Y-internal, Y-external

PREREQUISITES

Advanced Research Methods for Scientists (VLS683)

Enrolment in Honours or a graduate-level (AQF level 9) course or Bachelor Environmental Science.

Honours Thesis in Biotechnology (VLS535)

Enrolment in Honours in Biotechnology.

Honours Information

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1. OBJECTIVES

The distinctive feature of honours study is that it provides training in research and the development of higher-level skills. This includes the development of organisational, writing, oral, analytical and problem solving skills to an advanced level, and the ability to work independently. For this reason honours entails an individual program of study, unique to, and tailored to suit, each student's research project. The research training also forms a basis for determining the student's suitability for subsequent enrolment in a research degree, if that is the student's desired path.

This objective is met by a research thesis, which must have a value of at least 8 points. An Honours thesis may take many forms and can embody research, production or performance include a production or performance component, as well as a dissertation. Where such productions/performances involve collaboration with others, care should be taken to ensure the student's role/responsibility can be clearly specified for the purposes of examination.

2. STUDY PERIOD

Under Bachelor Degree Regulation 54, honours normally takes an academic year of full-time study* (24 points) after completion of the ordinary degree. The Honours Course shall be completed within two semesters on a full-time basis, no longer than four semesters on a part-time basis, or one semester enrolled full-time and two semesters enrolled part-time. It is not permissible to take two full-time and one part-time semester.

* The Bachelor of Theology with Honours (BTheol) may include 12 points of the ordinary degree in the 24 point Honours course, thus requiring only one additional full-time semester (12 points). Students should seek advice from the Honours Chair for Honours in Theology.

3. ENTRY REQUIREMENTS

To be admitted to honours, the student must have completed the requirements of the corresponding ordinary degree, at this or another university. A student is not permitted to commence honours while completing the last few points of the ordinary degree. The exception to the requirement of completion of the ordinary degree is those honours courses which do not require an additional period of study. (for example, LLB) or where honours is only an additional 12 points (for example, BD/BTheol).

Entry to all Honours courses is subject to quota and availability of supervision, and, from year to year, there may be competition for places. Graduates from other institutions seeking admission to Murdoch University Honours courses are expected to have equivalent backgrounds.

4. ADMISSION TO THE DEGREE

Applications for Honours for semester 1 close in mid January however late applications may be accepted. Students completing their Murdoch degree mid-year should apply by mid July to commence Honours in second semester.

Application forms for Honours are available from The Student Centre or online at

<http://www.murdoch.edu.au/Future-students/Entry-Requirements/Applying-online/>

Admission to honours is based on three criteria:

Academic merit. Each School is free to establish its own minimum requirements for admission to honours. Normally students who have obtained Distinctions or better in most Part II units taken in the area of the proposed honours course are admitted to honours.

Availability of supervision. There needs to be a staff member with competence to supervise the intended thesis topic, who will not be fully loaded with other research or honours students, and who (if the student is enrolling full-time) will not be on Outside Studies Leave during the period of the student's thesis. The applicant therefore should consult the proposed supervisor(s) before submitting an application.

Availability of places, within the target for that course and/or School which has been approved by Academic Council.

Prospective Honours students should consult with the Chair of the relevant Course and other members of the discipline staff concerning supervision, their choices of Honours units and possible projects during the semester before applying to undertake Honours. This allows more time for careful planning of the Honours course, and gives the Honours Subcommittee some indication of the student's intentions when considering their application for entry. An Honours course should be carefully planned at the outset, as **all** changes require approval of the Honours Subcommittee and the School Dean.

Applications for admission to honours must be submitted to The Student Centre. Decisions on admission are made by the School Dean on the advice of the Honours Sub-Committee Chair and subject to availability of places.

5. STRUCTURE

The Honours Course consists of 24 credit points. The course normally consists of a coursework component and a research component. Depending on the area of study the composition of the 24 points will vary but will normally consist of a thesis and coursework. The actual components vary according to the discipline area. One 4 point undergraduate (200-300 level unit) and up to 8 credit points of Master level units may be included in an Honours course subject to approval of the Honours Subcommittee (Bachelor Degree Regulation 55). More specific detail of the content of the individual Honours courses is listed in the online handbook.

6. HONOURS PROGRAM OF STUDY FORM

Enrolment is not finalised until the student's Honours Program of Study form has been approved by the School Dean. By the end of Week 1 in the first semester of enrolment an Honours Program of Study form must be completed in consultation with your supervisor, and then submitted to the Enrolments Office via The Student Centre for referral to the Honours Subcommittee Chair and School Dean. The Program of Study form lists the details of each component including Supervisor, points, mode of assessment, word count, topic, completion date, etc.

Any alterations to the signed Program of Study Form must be in consultation with the supervisor and submitted to the Enrolments Office via The Student Centre for approval by the School Dean. This includes changes to the thesis title, completion dates, or supervisor and requires the submission of a new Program of Study form. A *change of thesis title will not require a new Program of Study form if the student is in their last semester of Honours.*

Changes to Honours units (withdrawals, etc) are subject to the same dates and deadlines (eg HECS-HELP) as other units.

Students should also make themselves familiar with the Degree Regulations as they relate to Honours. These Regulations can be found in the University Handbook and online at

<http://handbook.murdoch.edu.au>

7. SUPERVISION

Students are asked to nominate a supervisor when they complete the application form. Supervisors are appointed from amongst the permanent Murdoch academic staff (normally of the status of lecturer or above) with research expertise and experience relevant to the area of the student's proposed thesis and discipline. On occasion the Honours Sub-Committee may select a supervisor other than the one nominated by the student.

The supervisor's role includes:

- advising the student of the aims, scope and presentation of the thesis;
- initiating and holding frequent and adequate discussions with the student concerning the thesis;
- assisting in the planning of an individual work program to allow sufficient time for completion of writing of thesis by submission date;
- reviewing drafts of major sections of the thesis, providing written comments within a mutually agreed period, and commenting critically to the student on the draft of the complete thesis before it is submitted for examination.

8. HONOURS THESIS

Each honours student shall submit three copies of the thesis to their School for examination in a format approved by the Academic Council on the Friday of the last teaching week in their final semester of enrolment. School of Psychology submission of their Honours thesis is Monday of the last teaching week.

In *exceptional circumstances* the **School Dean** may approve an extension to the submission date of a student's honours thesis, on the recommendation of the Honours Subcommittee Chair. **Such a request must be put in writing with supporting documentation, and submitted at The Student Centre for consideration by the Enrolments Office.**

The University Deferred Assessment Regulations apply here and details can be found at

<http://www.murdoch.edu.au/oss/exams/deferred.html>

The School will assist students with the costs associated with producing the Honours thesis to a maximum of \$50. Students themselves must meet all costs above this amount. Typing, photocopying and binding charges apply to all theses, while additional costs may be incurred for photographic work, etc. The total cost of producing a thesis can be considerable (eg \$150 for three copies of a typical 50 page manuscript), and the following notes are intended to assist in minimising these costs while still producing a document of acceptable standard for submission.

Note that the criteria detailed below represent the minimum standard of production that will meet all the requirements of the examiners. Full credit for the quality of thesis presentation will be given if all the criteria are met.

8.1 Layout of the Thesis

The layout of the thesis will inevitably depend on the type of research work, and the scope of the project. However, it is

conventional that a thesis include in the following order:

A title page: giving the title of the thesis in full, student's name and degrees

A statement of presentation in the form "This thesis is presented for the Honours degree of ... of Murdoch University" and the year of submission, together with a declaration that it is the student's own account of his/her research.

Copyright Acknowledgment Form

An abstract of approximately 300 words.

A table of contents.

General acknowledgements of any help given or work carried out by another person or organisation.

Main text.

Appendices, if any.

Bibliography.

A 'How to Cite References' guide is available on the Murdoch Library web site at:

<http://wwwlib.murdoch.edu.au/guides/cite.html>

8.2 Presentation of the Thesis

Honours theses must be typed in **minimum 1.5 spacing** on good quality **acid free** white bond paper, and submitted in hard copy. The paper should be of international standard A4 size (30 cm x 21 cm). A margin of 4.5 cm must be provided on the **bound** side of the sheet. Other margins should be not less than 2 cm.

The restriction on the size of paper is lifted on maps, drawings, musical scores or computer tabulations where it is impractical, inappropriate or undesirable for other reasons. Photographs or other illustrations or inserts on non-standard paper must be securely mounted so that they conform with the above page size and marginal requirements.

8.3 Binding the thesis

Theses must be bound prior to submission in a format and at a minimal cost determined by the University Librarian. The Librarian has approved use of thermo-binding, for which there is a minor charge paid by the student.

At the time of thesis submission, each honours student is given the Copyright Acknowledgment Form which should be signed and included, at the least, in the copy of the thesis to be lodged with the library.

Where a production or performance component is submitted for examination, the specific role and responsibility of the student under examination must be clearly specified. A copy of the production/performance component must also be lodged in the library.

After examination, the School shall deposit one bound copy and one digital copy with the University Librarian (unless honours are not awarded), provide one copy to the supervisor and return the third copy to the student.

9. ASSESSMENT

9.1 Thesis

Under degree Regulation 58 (2) "An honours sub-committee shall appoint at least two persons, to examine the thesis of each honours student and to provide a detailed written report to the honours sub-committee. If the thesis supervisor(s) is to be an examiner of the thesis then the honours sub-committee shall appoint at least two other persons to examine the thesis."

In recommending an overall class of honours, the Honours Sub-Committee takes into account the examiners' reports on the thesis and the grades obtained in any coursework included in the approved Honours program of study. However, the class of honours is not simply the sum of marks obtained for each piece of work; it also represents the Sub-Committee's overall judgement of the quality of the student's assessed work during honours. The Sub-Committee is responsible for maintaining equivalence of standards in assessment across students, and years for that discipline.

9.2 Coursework

Coursework components (including individualised components) must meet the requirements of the Code of Practice - Assessment Policy, including those concerning methods of assessment and written notification of assessment methods to students. In several courses, a seminar must be completed and may be assessed on a Pass/Fail basis.

9.3 Final Award

The Honours Subcommittee will recommend a class of Honours to the Board of Examiners after taking into account the results of all units and the thesis.

The various classes of Honours are awarded as follows:

Honours I (First Class):

Indicates an outstanding level of achievement in both coursework and thesis.

The candidate should clearly be worthy of a postgraduate scholarship.

Honours IIA (Second Class -Division A):

Indicates a high level of achievement overall and evidence of considerable research ability.

Candidate can be considered capable of postgraduate research and (possibly) a research scholarship.

Honours IIB (Second Class -Division B):

Indicates a good overall performance in coursework and research.

Candidate unlikely to make a good independent research worker and could not be considered for a postgraduate scholarship.

Honours III (Third Class):

Indicates satisfactory performance but serious inadequacies in research competence, understanding and/or presentation.

Fail:

Indicates unsatisfactory performance with serious inadequacies in all or most areas.

If it is the opinion of the examiners that revision of parts of the thesis is necessary then the maximum class awarded will be Honours IIB. Generally, Australian universities accept Honours I and Honours IIA for admission to postgraduate research courses.

(Criteria for examination may differ where production, performance and creative writing are part of the dissertation. Please contact the relevant Honours coordinator for further details.)

10. GRIEVANCES

Any difficulties which the student faces with honours should be discussed initially with the supervisor(s). If the student is dissatisfied with this response, he or she should discuss the matter with the

Chair of the Honours Sub-Committee or, if the Chair is the supervisor, with the Head of School. Difficulties with supervision (in particular, concerning clear formulation of the project in time for the student to realistically complete the work, or concerning adequate feedback on work or production components) should be taken immediately to the Chair of the Honours Sub-Committee, or in the case that the Chair is the supervisor, to the School Dean. It is far preferable for all concerned if any problems with supervision are identified early, so that improvements can be made or an alternative supervisor found. If necessary, an extension of time to complete the honours course may be granted in such cases.

11. APPEALS

In recognition of the uniqueness of Honours, the Student Appeals Committee has developed particular processes for appeals by Honours students.

An Honours student may appeal to the Student Appeals Committee against a grade awarded in a Unit undertaken as a component of their Honours if the grounds of appeal fall within guidelines set by Academic Council.

A student may appeal to the Student Appeals Committee against the grade awarded for their Honours thesis if it can be shown that: the procedures established by the University for the examination of Honours theses have not been followed; or there was prejudice or bias on the part of one or more of the examiners; or one or more of the examiners lacked the qualifications and experience necessary for the proper examination of the thesis which has unfairly disadvantaged the student in the grade recommended. Following consultation with the Chair of the Honours Sub-Committee, the Student Appeals Committee can reaffirm the Thesis grade, recommend a different Thesis grade, or appoint an additional examiner. If an additional examiner is appointed, the Honours Sub-Committee, after considering that examiner's report, shall recommend to the Board of Examiners a class of honours. It is not permissible to appeal against the final result of the examination of an Honours thesis on the basis of circumstances that adversely affected a student's performance in the preparation of the thesis. Mechanisms exist for the resolution of such problems before submission of the thesis and an extension of time for completion of the thesis would normally be allowed in such circumstances if appropriate.

A student who wishes to appeal against the overall class of honours can appeal to the Student Appeals Committee, if the grounds fall within guidelines set by Academic Council. Following consultation with the Chair of the Honours Sub-Committee, the Student Appeals Committee can reaffirm the class of honours or recommend a different class. The student cannot expect to have her or his judgement of the value of their total performance in their honours program of study over-ride that of the Honours Sub-Committee, so appeals are limited to where it can be shown that the procedures established by the University for the award of Honours have not been followed or there were computational errors in the calculation of marks.

12. ENROLMENT CHANGES

Any extension of an individual student's honours program of study (i.e. of the thesis submission date) can be granted *only in exceptional circumstances*; approval is by the School Dean on the recommendation of the Honours Sub-Committee Chair. The supervisor(s) does not have authority to grant an extension. Where an extension has been granted and the work is not submitted by the start of the following semester, the student will be enrolled for administrative purposes for the period of the extension. This does not attract additional credit towards the degree, and does not incur any extra HECS/tuition liability.

12.1 Withdrawal from a component

Students wishing to withdraw from a component of an honours course (or to postpone a component to another semester) should do so before the HECS census date (31 March for semester 1, 31 August for semester 2), as any changes after then will be recorded on their academic transcript, will increase their HECS liability and will not entitle them to extra time to complete their honours. Withdrawals and failures in honours components are taken into account when arriving at the final class of honours, but neither necessarily disqualifies the student from graduating with honours.

12.2 Intermission of Enrolment

If a student needs to suspend honours enrolment, an application should be submitted to the Faculty Student Administration. A suspension may be granted for a maximum period of two consecutive semesters. Students who suspend honours for one or two semesters, will need to change their study program. In some cases this may require changes to the components of the honours course, or of supervisor(s).

12.3 Withdrawal from Honours

Honours withdrawals appear on academic transcripts according to the same withdrawal dates and codes as other unit withdrawals.

A student may withdraw at any time from an honours course, however, a student who has withdrawn from an honours course is not permitted to enrol again in an honours course in the same disciplinary area, unless the withdrawal took place before the end of the first semester of the course (for a part-time enrolment, before the end of the second semester) as per Degree Regulation 60.

Where a student withdraws from the entire honours course before the commencement of the second semester of enrolment (or third semester, in the case of a part-time student), this is not treated as an attempt. Withdrawals after then are regarded as an attempt. A student is permitted only one attempt at an honours course within a disciplinary area or group of closely related disciplines. Students who withdraw from honours do not receive any academic credit for any coursework already completed; there is only a total 24 points credited when honours is awarded.

You should always select your units in consultation with your honours supervisor.

Honours courses shall consist of studies at 400 level, except that up to four points may be at 200-300 level and up to eight points may be at 500-600 level. 'Honours Topics' are individual study units with a supervisor.

Enrolment in the Thesis may be completed over more than one semester.

An Honours qualification of 2A is normally required for admission to higher research degree study.

HONOURS PRIZES

13. PRIZES

See subsequent section

14. RELEVANT DEGREE REGULATIONS AND HONOURS POLICY

Please refer to the following web pages for further information regarding Honours Regulations.

<http://handbook.murdoch.edu.au/study/honours.html>

<http://www.murdoch.edu.au/admin/legsln/regs/bachelor.html> (especially Reg 52-63)

The Honours Policy is included in this booklet (Appendix B).

15. CONTACTS

For the contact details of the School Deans or Program Chairs please refer to the following link:

<http://www.murdoch.edu.au/contacts/academic/>

16. GUIDE TO HONOURS COURSE STRUCTURES

Honours unit requirements for each course can be found in the online handbook: <http://handbook.murdoch.edu.au/courses/>