
MASTER OF BIOMEDICAL SCIENCE

MBiomedSc

Course Code : MC-BMEDSC

An information guide for applying to study, and studying a Master of Biomedical Science through Melbourne Medical School (MMS Departments and affiliated research institutes).



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1. WELCOME FROM PROFESSOR LEA DELBRIDGE

Master of Biomedical Science Course Coordinator

Welcome to the Master of Biomedical Science (MBiomedSc). This program has been created to offer graduates a new pathway into a research or science based career and/or PhD studies. The Master of Biomedical Science is an alternative to the Honours undergraduate year, in providing a pathway to the PhD. Students undertake a research project and discipline-specific coursework subjects. In addition, a range of professional business and communication subjects are offered to complement and enhance research and progress career opportunities. The Master of Biomedical Science provides an understanding of the research process, specialist knowledge and professional skills that are attractive to employers. Normally this is a two-year full-time course (200 points), although part-time enrolment may be possible. Mid-year course entry may be possible depending on supervisory arrangements.

Students must complete a research project under the supervision of a staff member located in the School of Medicine in the Faculty of Medicine, Dentistry and Health Sciences (MDHS). Depending on supervisor and project availability, research can be undertaken in a range of discipline areas based in academic Departments (at various sites as listed) and some affiliated institutes (as indicated) including:

- Anatomy
- Biochemistry and Molecular Biology (including the Bio21 Institute)
- Cell Biology and Cancer (including the Peter Mac Institute)
- Medicine (Royal Melbourne Hospital / Western Hospital / St Vincent's Hospital)
- Microbiology and Immunology
- Neurosciences (including the Florey Institute)
- Ophthalmology & Otolaryngology (including the Bionics Institute)
- Paediatrics (including Murdoch Children's Research Institute)
- Pharmacology
- Physiology
- Psychiatry
- Radiology
- Surgery (Austin Hospital / Royal Melbourne Hospital / Western Hospital / St Vincent's Hospital)

Master of Biomedical Science students are scattered across preclinical and clinical locations in the Faculty, and interact extensively with other research student groups in their host departments/academic units. MBiomedSc students frequently participate in coursework activities with Honours and Master of Science students. The assessment of Master of Biomedical Science research projects is managed by each host department/academic unit, with academic and administrative oversight provided by the Melbourne Medical School. The opportunity to interact with a range of students and academics in a variety of settings offers Master of Biomedical Science students a rich cohort and mentoring experience.

Our students are important and much valued members of our School and Faculty. I hope that your time with us is rewarding and enjoyable and wish you all the best with your studies.



Professor Lea M D Delbridge
Course Coordinator
Director, Graduate Research Programs
Melbourne Medical School
Department of Physiology

2. INTRODUCTION TO THE MASTER OF BIOMEDICAL SCIENCE PROGRAM

About the Faculty of Medicine, Dentistry and Health Sciences

The Master of Biomedical Science program is offered by the Melbourne Medical School of the Faculty of Medicine, Dentistry and Health Sciences (MDHS). As a Master of Biomedical Science student, you will undertake a research project under the supervision of researchers located within an MMS department or associated institute. The MMS is responsible for monitoring your program.

The Melbourne Medical School (MMS) is an extremely diverse faculty made up of different schools, departments and centres with a proud history and a promising future.

Major research strengths of the MMS are in the areas of cancer, immunology, neurosciences, cardiovascular diseases and metabolic disorders. One of the aims of the research domains is to increase the opportunities for researchers to conduct research on common themes.

This multidisciplinary approach brings together researchers from a range of disciplines who take different approaches to studying important questions.

Why undertake research in Biomedical Science?

The Times Higher Education Supplement consistently ranks the University of Melbourne as the leading Australian university for bioscience.

Located in one of the world's most highly concentrated precincts of biomedical research in Parkville, we have strong links to leading research institutes, major general and specialist hospitals and private sector industries in Victoria and around the world.

What is the Master of Biomedical Science?

The Master of Biomedical Science is a two year postgraduate coursework degree that offers you the opportunity to engage in a substantive research project in the biomedical field. The degree can be your pathway to a research doctorate (PhD) and also provides you with solid grounding for a career in biomedical professional fields.

The Master of Biomedical Science comprises 200 points in total- 125 points of Research Project and 75 points of coursework. Coursework selections are designed to complement the chosen research area and to develop general scientific professional skills.

How will the Master of Biomedical Science help me?

Investing in the additional two years at University required to complete the Master of Biomedical Science gives you the opportunity to draw together your early years of study and add significant value to your resume. The Master of Biomedical Science is very different from earlier undergraduate years, allowing and requiring a greater degree of independence and flexibility that will help you develop the maturity and skills for transition to employment in a range of occupations and industries or a research doctorate (PhD).

What benefits does a Master of Biomedical Science provide?

1. Enhance your employment prospects

The Master of Biomedical Science provides an understanding of the research process, specialist knowledge and professional skills that are attractive to employers. It also provides a pathway to research higher degrees. Graduates might consider employment options within the biomedical and health sector, such as:

- Research & development
- Health sector policy
- Services delivery
- Health sector management
- Services co-ordination

2. Develop skills that employers seek

Managing a research project over two years develops time and project-management skills, while the need to work with staff or other students develops negotiation and communication skills. Interaction with your supervisor, writing your project report and delivering your mid-way and end-of- project presentations will all hone your skills in communicating complex scientific or technological concepts. These activities will also increase your understanding of how scientific or technical arguments are constructed. Most importantly, the whole research project is about advanced problem-solving. This is a critical skill that can be used in any industry, government or scientific setting.

3. Work closely with a senior researcher and their research group

Many of Melbourne's academic staff members are internationally recognised leaders in their fields of research. You may have been taught by them in your earlier years. Now you will have an opportunity to learn from them directly and become part of the research group. You will gain insight into the research process through observing leading researchers and senior postgraduate students up close, and gain from their advice as you pursue your own novel research.

4. Learn advanced research techniques and processes

The advanced research project components of this program are designed to integrate and expand on the techniques and scientific processes learnt during your earlier undergraduate studies. You will develop the ability to work independently and start to develop an understanding of how to guide an extended program of research. In the process you will develop teamwork skills which are important in reaching larger, long-term research objectives.

5. Gain advanced knowledge in your particular discipline

The advanced coursework components of each program focus on taking you towards the edges of your discipline and broadening or deepening your knowledge base. You will be able to pursue your specific areas of interest as well as being exposed to cutting-edge developments in your field.

6. Prepare for Research Doctorate (PhD)

A Doctor of Philosophy (PhD) degree enables you to undertake a substantial piece of independent and sustained research on an original topic under academic supervision. Assessment for the degree is via a thesis which is examined externally. In scope, the PhD thesis differs from a Master of Philosophy (MPhil) thesis chiefly by its deeper and more comprehensive treatment of its subject. The length of the PhD thesis varies between 80,000 and 100,000 words whereas an MPhil thesis is typically 30,000 words. The research on which the thesis is based is expected to make a new and innovative contribution to knowledge in your discipline.

3. MASTER OF BIOMEDICAL SCIENCE PROGRAM OUTLINE

Students undertaking the Master of Biomedical Science program must complete **200 points** comprising:
a **Research Project (125 points)**;
a selection of **Discipline subjects (4 x 12.5 points)**; and
a selection of **Professional Skills subjects (2 x 12.5 points)**.

Course structure details are here: <https://handbook.unimelb.edu.au/view/2014/MC-BMEDSC>. All subject selections are entered by students via the Student Portal <https://portal.unimelb.edu.au> in the usual way.

3.1 The Research Project

What is a Research project?

The Research Project component of the Master of Biomedical Science program is spread over the two years of your degree and comprises 125 points. Students complete research under the guidance of an academic who specialises in that specific area of interest.

This component of the course provides students with the opportunity to apply their knowledge and technical skills in a supervised research project and develop skills in experimental design, project implementation and in the communication of the outcomes of a research project. The project develops students' technical and data acquisition skills, their problem-solving and critical thinking capacities in the context of research, their skills in communicating to a variety of audiences and the application of appropriate risk assessment and ethical approval processes.

A critical element of success in the Master of Biomedical Science program is choosing a research area that interests you. Department websites have information on the range of research areas they offer, as well as areas of interest of academic staff members who can supervise your project.

There are over 300 research projects for students to choose from across the Melbourne Medical School.

Research project report

Students entering the Master of Biomedical Science stream are expected to have organised and identified an academic supervisor in a Department or affiliated institute as part of their application. The theme and scope of the research project is negotiated between the Student and Supervisor at the time of application prior to enrolment. A Research Project Report is to be submitted for examination at the conclusion of the project (see details below) and other related assessment hurdle requirements are to be satisfied as the Project progresses.

Subject to supervisor approval, students will enroll in any combination of research project subjects as indicated below, to ensure they have completed the required total of research project points (normally 125 points) by the end of their course. The combination of research project subjects is chosen to accommodate the Discipline and Professional Skills subjects undertaken concurrently such that the total academic load in a semester (i.e. points) does not exceed 50 points. The available research project subjects differ by point value only and are otherwise identical:

BIOM90001 Project in Biomedical & Health Sciences – 12.5 points
BIOM90003 Project in Biomedical & Health Sciences – 25.0 points
BIOM90004 Project in Biomedical & Health Sciences – 37.5 points
BIOM90005 Project in Biomedical & Health Sciences – 50.0 points

It is acceptable to enroll in the same subject code more than once if this is required to achieve the appropriate point loading in different semesters. The assessment components of the research project report are:

- A report of up to 20,000 words, due towards the end of the final semester of the research project (100%) (see page 21 for more details regarding the submission timeline);
- A literature review of up to 6,000 words, due at the end of the second semester of the research project (hurdle); and
- Two 15-20 minute oral presentations, due towards the end of the second and final semesters of the research project (hurdle).

Satisfactory performance is required for the completion of 'hurdle' components. If necessary this may involve re-submission or re-presentation. For the literature review and the research report, Departments or academic units will provide guidance regarding format and convention according to research discipline specific requirements and local practice. Specific submission timelines should be determined by the Supervisor and the Coordinator with reference to semester dates here:

<http://www.unimelb.edu.au/unisec/PDates>

Assessment processes and criteria are detailed later in this Guide. The Handbook entry should be consulted for the definitive course outline, including assessment criteria.

3.2 Advanced coursework requirements

Discipline Subjects

For most Master of Biomedical Science students, the discipline subject **BIOM40001 Introduction to Biomedical Research** (12.5 points) is specified as a co-requisite subject, usually to be undertaken in the first semester of enrolment. The handbook entry is here:

<https://handbook.unimelb.edu.au/view/current/BIOM40001>.

This subject is held during an **intensive period in the last 2 weeks of February** and provides training in key areas of importance in biomedical and health sciences research (experimental design and analysis, hypothesis testing and data presentation, ethics and integrity).

The scheduling of **BIOM40001** early in the academic year provides flexibility to allow additional subject selections in Semester 1 and concentrates teaching activity to maximise time available for research project focus. The timetable also allows students time to attend additional induction sessions organised by their host Departments or academic units relating to environmental health and safety. In some circumstances, Supervisors and students may apply to have this co-requisite subject waived in favour of an alternative discipline specific subject (currently, this only applies to students undertaking a project within Biochemistry and Molecular Biology). Local Master of Biomedical Science academic coordinators within each department should be consulted where waivers are sought.

Students should select their remaining three discipline subjects in consultation with their Supervisors, taking into account relevance to research project, availability and personal interest.

Some Departments or academic units offer honours (40000 series) or masters (90000 series) level subjects specifically designed for Master of Biomedical Science students to take in parallel. Discipline subjects may also be selected from third year (30000 series) subjects in a relevant area of interest - a maximum of two discipline subjects may be taken at this level.

Professional Skills Subjects

Students will complete **2 x 12.5 point Professional Skills subjects** from those listed below:

Subject	Title	Availability in 2014
BUSA90471	Business Tools: The Market Environment	Semester 1
MAST90044	Thinking and Reasoning with Data	Semester 1
MAST90045	Systems Modelling and Simulation	Semester 1
MAST90007	Statistics for Research Workers	June
BUSA90403	Business Tools: Money People & Processes	Semester 2
SCIE90005	Ethics and Responsibility in Science	Semester 1
SCIE90012	Science Communication	Semester 2
SCIE90013	Communication for Research Scientists	Semester 1
MKTG90022	Commercialization of Science	Semester 2
SCIE90006	Scientists, Communication & the Workplace	Semester 2

The availability and range of Professional Skills subjects varies from year-to-year. The University Handbook can be consulted by searching by subject code: <https://handbook.unimelb.edu.au>. Individual subject timetables can be found throughout the year via <https://sis.unimelb.edu.au/cgi-bin/subjects.pl>

Course Planning: mixing and matching Subject components over 2 years

With their Supervisor, each student builds a customized plan for their Master of Biomedical Science, putting together the best sequence and balance of components to suit their goals. Depending on the character of their Project, the emphasis on allocation of Project points and the timing of other subjects may vary. For all students, the completion of the discipline subject 'Introduction to Biomedical Research' (BIOM40001) or an equivalent is required in the first Semester of study. Some examples of course structure are shown below (for a fulltime 2 year enrolment). It is not necessary to lock in a plan for the full course at the start - subject selections are made year by year and can be adjusted as the course proceeds if permitted. However, it is a good idea to look ahead and consider some possible options early in the course.

Some examples of possible course plans are shown below.

	Research Project Total = 125 points
	Discipline Subjects 4 x 12.5 = 50 points
	Professional Skills subjects 2 x 12.5 = 25 points

Example 1

FIRST YEAR		SECOND YEAR	
Semester 1	Semester 2	Semester 1	Semester 2
Project 25	Project 37.5	Project 25	Project 37.5
BIOM40001		DISC Selective	
DISC Selective	P Selective	DISC Selective	P Selective

Three components evenly balanced over two years

Example 2

Project 12.5	Project 25	Project 37.5	Project 50
BIOM40001			
DISC Selective	DISC Selective		
PS Selective	DISC Selective	PS Selective	

Early Discipline subject grounding. Project progressively building

Example 3

Project 37.5	Project 25	Project 25	Project 37.5
	DISC Selective	DISC Selective	
BIOM40001	DISC Selective	PS Selective	PS Selective

Initial Project focus. ongoing maintenance. delayed Professional Tools

Obtaining credit for prior study (advanced standing)

Students applying for the Master of Biomedical Science may apply for up to 75 points credit for subjects previously undertaken (or advanced standing) that might be considered to have equivalence in the Master of Biomedical Science. Details of this process can be found at:

<http://sc.mdhs.unimelb.edu.au/credit>

The application for advanced standing is in relation to specific (coursework) subjects within the Master of Biomedical Science is made at the time of application for admission to the Course. Prospective supervisors or the Melbourne Medical School are usually able to provide guidance about subjects which are likely to qualify. No advanced standing is allowed for the research project under any circumstances.

Advanced standing is requested for specific subjects of the Discipline or Professional Skills category and a case must be made for each subject for which credit is sought. Importantly, advanced standing is applied to individual subjects which the student would normally undertake and not to components of the course. Before an advanced standing application is considered, the Supervisor must approve the subject(s) for which credit is being sought as being relevant to the area of the research project.

In negotiating advanced standing, the Course requirements must be satisfied for Master of Biomedical Science - 4 discipline subjects (including BIOM40001) and 2 professional skills subjects.

Contact the MDHS Student Centre advisor for further information before finalising an application for advanced standing.

3.3 Subject selection and enrolment

Checklist for selecting subjects and completing enrolment

1. Read this Information Guide and review the Handbook entry for the course carefully:
<https://handbook.unimelb.edu.au/view/2014/MC-BMEDSC>
2. Decide which subjects you would like to do from those available – full details, prerequisite and timetable information for any subject can be located at: <https://handbook.unimelb.edu.au>
3. Make a time to meet with your Primary Supervisor to discuss your subject selection, being sure that you have completed steps 1 and 2 above first. Take a copy of the Study Planner in this Guide with you to help prepare your plan.
4. You and your Primary Supervisor need to agree on your study plan for the year ahead. Your selections can be reviewed and altered at the beginning of the next semester if you wish.
5. Your Primary Supervisor needs to email your proposed study plan to the Melbourne Medical School (mms-postgrad@unimelb.edu.au). The Study Planner page can be scanned and emailed or the subjects selected can simply be listed in an email.
6. Your selected subjects will be checked and placed in your study plan. You can confirm the study plan and enroll in the nominated subjects through the student portal which was set up for you when you accepted your offer (<https://portal.unimelb.edu.au>). Your Student Advisor will contact you should there be any problem with your plan.

7. Ensure enrolment in BIOM40001 is completed **at least 3 weeks prior** to Semester 1 start. You do not need to apply to undertake this subject (it will be automatically listed on your study plan). Ensure enrolment in other subjects is finalised prior to Semester start.

3.4 Proforma: Master of Biomedical Science Subject Planner

This Study Planner has been devised to simplify the course planning process. When selecting subjects, please consider the balance of research and coursework components needed throughout the course (as explained in the table below). The timing of coursework subject enrolments should be adjusted, depending on the nature of the Research Project demands.

Over the two years, 4 'Discipline' subjects and 2 'Professional Skills' subjects are to be completed. BIOM40001 is a required Discipline subject. Some Academic Units may specify other required discipline subjects.

A standard full-time load is 50 points per semester. As an general approximation, each 12.5 pt Research Project subject could be considered equivalent to a 10 hr time allocation to research work (50pts = 40hrs/week)

This table summarises the planning decisions to be made over the two years:

Research Project Subjects Total: 125 points	Discipline Subjects Total: 50 points	Professional Skills Subjects Total: 25 points
Any combination of: BIOM90001 12.5 pts BIOM90003 25.0 pts BIOM90004 37.5 pts BIOM90005 50.0 pts	BIOM40001 Intro to Biomedical Research	Professional Skills selective 12.5 pts
	Discipline selective 12.5 pts	Professional Skills selective 12.5 pts
	Discipline selective 12.5 pts	
	Discipline selective 12.5 pts	

Subject Selection List

Student Name: _____ Student ID: _____
 Primary Supervisor Name: _____ Department: _____

Subject Code	Subject Title	Semester / Year	Points
BIOM40001	Introduction to Biomedical Research	February 20 ____	12.5 pts
		Sem ___/ 20 ____	
		Sem ___/ 20 ____	
		Sem ___/ 20 ____	
		Sem ___/ 20 ____	
		Sem ___/ 20 ____	
		Sem ___/ 20 ____	

Supervisor's signature: _____ Date: _____

Notes:

Neither Semester 1 nor Semester 2 enrolments should exceed 50 credit points, without prior approval from MDHS. BIOM40001 (February) is included as part of the Semester 1 pts.

International students must be enrolled full-time (50 points per semester).

Please ensure that all prerequisites are met and that the course structure requirements are complied with:

<https://handbook.unimelb.edu.au/view/2014/MC-BMEDSC>

Supervisors/students, please email the signed, completed proposed study plan to mms-postgrad@unimelb.edu.au

AND georgie.bodman@unimelb.edu.au. Please include Student ID number in the email header.

4. APPLYING FOR THE MASTER OF BIOMEDICAL SCIENCE

Entry requirements

The minimum entry requirements for all students into the Master of Biomedical Science program are:

1. The Selection Committee will evaluate the applicant's ability to pursue the course successfully using the following criterion:

- an undergraduate degree with a major in a relevant discipline with a weighted average of at least 65% in the final year major subjects, or equivalent.

Quotas may be applied to the degree as a whole, or to individual disciplines, and preference may be given to applicants with evidence of appropriate preparation or potential to undertake research. Entry is subject to the capacity of a participating department to provide adequate supervision in a research project appropriate to the interests and preparation of the individual student and is subject to the agreement of an academic staff member to supervise the project.

2. The Selection Committee may conduct interviews and tests and may call for referee reports or employer references to elucidate any of the matters referred to above.

Note that entry into the program is competitive and depends on supervisor availability. You are not guaranteed a place even if you satisfy the basic requirements above.

Application deadlines and study load

The University accepts applications at any time, however there are formal cut-off dates for upcoming semester intakes. These can be found here: <http://medicine.unimelb.edu.au/study-here/postgraduate coursework programs/master of biomedical science>. The University may still accept your application past these dates depending on availability of places.

Regarding a mid-year intake, you may be able to commence in July (i.e. mid-year) depending on the nature of your project. You will need agreement from your supervisor/s if you wish to take up this option.

For local students, part-time study is possible with agreement of your supervisor/s. Please inform the Melbourne Medical School if you wish to apply for part-time study. For international students, part-time study is generally not permitted due to Australian Government visa requirements.

Further information can be found here:

<http://cms.unimelb.edu.au/studentservices/international/visas/studyload>.

Exploring the range of projects

You must identify a project and a supervisor willing to undertake supervision of your research as part of the Master of Biomedical Science application process. There are typically over 300 projects available for expressions of interest from prospective Master of Biomedical Science students.

Locating a supervisor

The University suggests a number of ways to locate a supervisor for your project:

- You can explore the websites of the departments and institutes in the biomedical disciplines which interest you. Most of these websites can be found here: <http://www.mdhs.unimelb.edu.au/schools-departments-and-centres>
- You can explore the Faculty of Medicine, Dentistry and Health Science research portal here: <http://research.mdhs.unimelb.edu.au/>
- Finally, you can use the University's 'Find an Expert' tool to locate a researcher with a suitable background: <http://www.findanexpert.unimelb.edu.au>

We are often asked when it's best to start your search for a supervisor. The answer depends on the student, the supervisor and the project, but in general you should start as early as possible. You may contact more than one potential supervisor. As you narrow your search, it is courteous to inform those involved how you are progressing and what commitment may be likely - including those potential supervisors with whom you will not be proceeding.

Finding a supervisor is the student's responsibility but if your initial efforts do not seem to be effective, please contact us at mms-postgrad@unimelb.edu.au and we will try to advise. Once you are enrolled in the program, if you then encounter difficulties with your supervisor or project, please contact us (details above) so we can assist.

You don't need to feel restricted by your undergraduate specialisation (major) in choosing a biomedical discipline in which to do your research project, however you will need to find a project and a supervisor that is suited to your background which will, in all likelihood, shape what you can feasibly expect to study.

Ultimately you will need to make a case to a prospective supervisor and the Master of Biomedical Science coordinator that you have the skills and background to undertake their specific project or a supervisor will need to develop a project with your expertise in mind. When your application is lodged online you will receive a request to identify your prospective supervisor, and will need to provide evidence that the prospective supervisor is 'willing to be nominated as Supervisor' in relation to you and the project identified. An attached/forwarded email is sufficient.

How to apply for the Master of Biomedical Science

For the purposes of admission into the University, there are essentially two types of student: Local and International. They are defined as follows:

The University will classify you as a **local student** if you are an Australian Citizen, Australian Permanent Resident or a New Zealand Citizen. If you do not fit into the local student category, you will automatically be deemed an **international student**.

The following site provides for detailed instructions on how to apply for the Master of Biomedical Science program: <http://futurestudents.unimelb.edu.au/admissions/applications/>.

As part of the online application process, you will be asked to identify your student status (local or international) and will be directed to proceed accordingly. If you need assistance or clarification relating to your application, please contact:

Local Students contact: MDHS Student Centre by filling out this form:

<http://sc.mdhs.unimelb.edu.au/askgradcw>

International Students contact: International Admissions on **+61 3 8344 4505** or

IntAdmissions-PG_SCIENCE@unimelb.edu.au

If you are transferring from a Masters course elsewhere, you apply as a new student and, at the same time, apply for credit for equivalent studies already undertaken. The process is relatively straightforward. If you satisfy the program entrance requirements, you can apply for a place in the program as a new student.

As part of the application process, you can apply for advanced standing (commonly known as credit transfer) for up to 75 points (or 3/4 of a year) whereby you can gain credit for subjects which you have already completed that are deemed equivalent to subjects you would be expected to complete as part of the Master of Biomedical Science program. Further information can be found on page 8 regarding the application process.

How you will know the outcome of your application

The University endeavours to inform you of the outcome of your application as soon as possible following submission of an application. Typically, this process can take 4-8 weeks.

Fees

Program fees fall into one of the following categories

Commonwealth Supported Place, formerly known as a HECS place, the Australian Government subsidizes around two thirds of your tuition cost. Depending on your citizenship and residency status, you may be eligible to *defer* your student contribution. If you choose to pay your student contribution *upfront*, you may receive a discount from the Australian Government. Commonwealth Supported Places are limited in number and allocated based on academic merit. You must be a local student to be eligible for this fee category.

Australian Fee Place, this is similar to the Commonwealth Supported Place except the Australian Government do not provide a subsidy, so you are required to pay the “full fee” for the program. Depending on your citizenship and residency status, you may be eligible to *defer* some or all of your fees using FEE-HELP. You must be a local student to be eligible for this fee category.

International Fee Place, which is similar to the Australian Fee Place except you are ineligible to defer your fees (you must pay *up-front*). You must be an international student to be eligible for this fee category.

Fees are levied by individual subject. Based on the liability category stated in your offer letter, you can determine what fees you must pay, what fees you can pay and what fees you can defer here:

<http://fee.acs.unimelb.edu.au>.

For local students, general information on Commonwealth Supported Places and Australian Fee Places can be found on the Australian Government's website here: <http://www.studyassist.gov.au>

Scholarships and Financial Assistance

You may be eligible to apply for a scholarship. There are a limited number of scholarships available, based on academic merit, equity or other qualifying grounds, which may cover a range of financial burdens such as tuition fees, subsistence and living costs depending on the scholarship:

<http://futurestudents.unimelb.edu.au/admissions/scholarships>

Some specific partial fee-remission scholarships have been reserved for Master of Biomedical Science students and are awarded on merit.

Beyond scholarships, the University does provide support services for students who need help finding housing or financial aid, amongst other things. These services can be found through the University of Melbourne services portal here: <http://services.unimelb.edu.au>.

For local students, you may like to also consider Australian Government payments such as Youth Allowance, Austudy or Abstudy (<http://services.unimelb.edu.au/finaid/income/centrelink>).

5. ACADEMIC ORGANISATION AND STUDENT SUPPORT

Master of Biomedical Science students are assisted in many ways at many levels to successfully complete their studies at the University of Melbourne.

The Primary Supervisor

Student host Departments or academic units have primary responsibility to provide support and guidance for students through their Research project and through selection and performance in coursework. The **Supervisor** is the **student's key academic contact**, and Departments or academic units are required to ensure appropriate supervisory standards and continuity. The Supervisor is responsible for nominating appropriate Examiners for their students' Research Project Reports and notifying the Stream Coordinator of these nominations prior to the commencement of examination of the Research Project Report. Information is included in this Guide to be used by the Supervisor to nominate Examiners (below).

The Master of Biomedical Science Department/Academic Unit Coordinator

Departments or academic units may take different coordination approaches in relation to supporting Master of Biomedical Science students: in some instances there may be a dedicated Master of Biomedical Science Coordinator, and in other settings this may be a role taken on by the Graduate Coordinator who has broad responsibility for all graduate students. In other situations, because Master of Biomedical Science students engage in various activities in parallel with Honours students, the Honours Coordinators may have joint Master of Biomedical Science responsibility. Whatever the arrangement, an **Master of Biomedical Science Coordinator** should be identified by the Department/academic unit and registered with the Melbourne Medical School. A list of administrative contacts is also maintained.

The Master of Biomedical Science Coordinator is a senior academic whose role includes providing assistance to supervisors in provide appropriate support to students, providing course advice to students and managing the Research Project Report examination and hurdle evaluation activities. The Master of Biomedical Science Department Coordinator is ultimately responsible for having appropriate Examiners in place for each student and acts as an intermediate in the examination process, albeit it is the Supervisor who nominates such Examiners.

The Master of Biomedical Science Course Coordinator

The **Master of Biomedical Science Course Coordinator** has responsibility for ensuring that the protocols approved by the Academic Programs Committee (in the context of Academic Board policy) and which apply to Master coursework and research programs are implemented. This includes appointing Examiners for the Report (based on nominations provided by Supervisors); resolving Examiner discrepancies; maintaining records of Research Project Report grades awarded; retaining a collection of exemplar theses for benchmarking purposes; providing operational guidelines for stream management and assessment implementation; and assisting Departments /academic units and Master of Biomedical Science Coordinators when difficulties arise and constituting an Examiner Committee.

Student Centre Support

The [Faculty of Medicine, Dentistry, and Health Sciences](#) (MDHS) provides support for the Master of Biomedical Science students managing the receipt and assessment of applications, facilitating the initial

enrolment of students and assisting with any ongoing enrolment matters. The MDHS also offers a schedule of orientation events for new students in February each year.

The **Medicine, Dentistry and Health Sciences (MDHS) Student Centre** provides ongoing assistance to students and to Coordinators with assessment results and other administrative matters.

For students, when queries arise that in the first instance cannot be dealt with by their Supervisor or their Departmental Master of Biomedical Science Coordinator, the first point of contact should be the MDHS Student Centre.

Medicine, Dentistry and Health Sciences Student Centre

Level 1, Brownless Biomedical Library
University of Melbourne
Phone: (03) 8344 5890
Email: mdhs-sc@unimelb.edu.au

Master of Biomedical Science Coordinator

Professor Lea M. Durham Delbridge

imd@unimelb.edu.au

6. WHAT IS EXPECTED OF A MASTERS STUDENT?

Ethics in research

The University of Melbourne is dedicated to creating an environment that promotes responsible academic conduct by embracing standards of excellence, trustworthiness, and lawfulness. Research integrity embodies a commitment to intellectual honesty and personal accountability and to a range of practices that characterise the responsible conduct of research.

For more information: <http://www.research.unimelb.edu.au/>

Intellectual property

Creating, managing and using Intellectual Property (both your own and others) is a core element of academic life. Intellectual Property (IP) represents the property of your mind or intellect - knowledge, discoveries and inventions in material form. It includes 'know-how,' trade secrets, patents, trademarks, industrial designs, reports, publications, and literary and artistic works. With the exception of copyright and circuit layout rights, which are automatic, you must take formal steps to register IP and obtain the legal rights of ownership.

Intellectual Property for Students and their Supervisors – Melbourne Research:

<http://mro.unimelb.edu.au/sites/default/files/public/brochures/pub69.pdf> For more information: <http://www.research.unimelb.edu.au/ip>

Data integrity and academic honesty

The most important attribute that the University of Melbourne would like to see in its graduates is a profound respect for truth, and for the ethics of scholarship ... we want our graduates to be capable of independent thought, to be able to do their own work, and to acknowledge the work of others.

Professor Peter McPhee (Provost 2007-2009)

In all written work submitted for assessment you must show the sources for your material. The principle is that whenever submitted material is not your own original work this must be acknowledged. To present material without acknowledgment is in effect to claim that it represents your own work and ideas.

Quoted passages should be placed in quotation marks and their source referenced within the text (giving author, date and page number). A list of references at the end of the paper lists all the works referred to. Presenting material from other sources without full acknowledgment (plagiarism) is penalised heavily. This holds for both copying and paraphrasing of others' work.

We expect that when a student turns in work for assessment that it is the independent work of that student, it is written by that student, and they have written it in their own words. In most cases, copied assignments will be given a zero grade for the piece of work for both parties: if A copies B's assignment, both A and B will get zero. Assignments copied in whole or large part from books or articles will receive a zero grade.

The same essay may not be submitted for assessment in two different subjects. For more information: <http://academichonesty.unimelb.edu.au>

Turnitin

Turnitin is online web-based text-matching software that works by comparing electronically submitted papers to billions of pages of content located on the Internet and proprietary databases as well as the work of other students whose papers have also been submitted into the system. This software is currently used by many universities in Australia and internationally. The University of Melbourne has been using this software since July 2004 and it is providing a valuable addition to existing methods for supporting the University's policy on academic honesty.

When student papers are submitted into Turnitin, sections of the papers that match other sources are highlighted and identified. The student paper with the highlighted matched text forms an Originality Report and is made available to the lecturer concerned.

Turnitin cannot make a judgement regarding whether plagiarism has occurred. It is the responsibility of the lecturer in charge of a subject to determine the quality of the Originality Report and to assess whether parts identified by Turnitin as non-original may be reasonably considered as plagiarism. Turnitin operation is administered by ITS under the auspices of the Office of the Provost.

For more information: <http://academichonesty.unimelb.edu.au/turnitin/>

Professional conduct

From the outset of candidature, Masters students should ensure that they confer with their supervisors at, mutually agreed and appropriate and regular intervals. Candidates should keep supervisors informed of their research activities, progress and problems and it is expected that an agreed level of contact hours will be arranged between the student and the supervisor.

6.1 What if things go wrong?

Students Experiencing Academic Disadvantage (SEAD)

The University of Melbourne recognises that academic disadvantage occurs when a person's circumstances or attributes substantially impact on their academic performance and participation.

For students whose circumstance is considered short term (e.g. illness, bereavement, change in accommodation), the University provides flexibility through standard extensions and Special Consideration (see following section for more on Special Consideration).

However for a significant number of students, their circumstances are likely to affect them over numerous semesters throughout their enrolment. For these students, the University has the Students Experiencing Academic Disadvantage (SEAD) policy which provides a consistent framework for the University to substantiate disadvantage and to identify and implement reasonable adjustments for all coursework programs.

The University through the Disability Discrimination Act, Disability Standards for Education, Equal Opportunity Act and now the University of Melbourne SEAD policy is obliged not to discriminate against these students, either directly or indirectly. The University therefore works through a process of identifying reasonable adjustments for students to ensure that the experience of disadvantage is not compounded and is, where possible, mitigated.

Students may experience academic disadvantage due to:

- Disability or chronic medical condition (including mental health conditions) Disadvantaged socio-economic circumstances
- Rural or isolated background
- Previous status as a refugee or current holder of a Humanitarian Visa. Recognition as an Indigenous Australian
- Personal difficulties, including intensive carer responsibilities

Attendance, time management, confidence, completion of assessment tasks and participation needs are examples of the issues students can have difficulty managing.

You are encouraged to discuss any issues that may impact on your progress with your supervisor as early as possible so that any adjustments that are possible can be enacted early in your candidature.

For more information: http://services.unimelb.edu.au/disability/students/our_services/what_we_do
Assessment Performance Policy: <https://policy.unimelb.edu.au/MPF1024>

Special Consideration

Special consideration is a formal and confidential procedure, administered by the student centre relevant to a student's degree, which aims to provide fair and consistent outcomes for students across the University. The purpose of special consideration is to provide an opportunity for students to alert the University to extraordinary or unusual circumstances that have adversely affected their performance in examinations and other forms of assessment. An accommodation will be considered where a student's capacity to attend, complete or submit assessment has been affected by significant factors beyond their control. Special consideration in relation to the Research Project can allow for extension of time to submit.

For more information:

http://services.unimelb.edu.au/disability/students/assessment/special_consideration

Other Resources

Finally, for students and supervisors seeking some more specific support at an academic or personal level, the University offers various services through the:

Academic Skills Unit (<http://services.unimelb.edu.au/academicskills>);
Disability Liaison Unit (<http://www.services.unimelb.edu.au/disability>), including the Students Experiencing Academic Disadvantage policy; and
Counselling Service (<http://services.unimelb.edu.au/counsel>).

Students and Supervisors should take every opportunity to benefit from the support available to ensure that both research project and coursework components of the Master of Biomedical Science progress well and that the Melbourne experience is enjoyable and rewarding.

6.2 Writing a Master's Research Report

Expectations and hints

The report is a detailed record of your research project, and is the major assessment component of the Master of Biomedical Science program. For most of you, it will be the first substantial piece of scientific writing that you will have attempted.

You will find that you will receive considerable guidance and support in writing your Masters report, generally much more than you might expect as an early undergraduate student. Contemporary scientific writing is a collaborative enterprise, and although the report is ultimately your responsibility, it will generally involve considerable input in the form of suggestions, editing and style from your supervisor and other laboratory colleagues. It is often wise to also seek advice from others from outside your laboratory and field (e.g. other Master of Biomedical Science students, even family and friends), as they can bring a perspective that is uncluttered by jargon and preconceived ideas.

As well as this specific input to the report, you will also receive general guidance, tips and advice on report writing as part of your Master of Biomedical Science coursework subjects and from your Department. Your Department will also provide clear details as to the expectations of the report (e.g. length, font, number of figures and references and so on). It is important that these requirements are clear to you.

In addition, the University's Academic Skills Unit runs a range of courses on report writing that you might find useful.

For more information on the Academic Skills Unit: <http://services.unimelb.edu.au/academicskills>

Research Project Report Presentation Style

There are no specific style and format prescriptions for the preparation of the Master of Biomedical Science Research Project Report. Students should consult Supervisors and local Academic Unit Coordinators to agree on an appropriate style specific to the relevant discipline. Local standards and examples may be consulted. A method of reference citation and bibliographic presentation which is considered an acceptable standard in the research field should be adopted. The format guidelines used for Honours thesis preparation are also specified for Masters Research Reports in many departments.

Making effective choices in relation to structure, formatting, figure and graph construction, statistical annotation, and layout all contribute to optimizing the quality of the Research Project Report and should be considered integral to satisfying the examination criteria.

Sufficient hardcopy versions of the Research Project Report should be prepared to allow for submission of one hardcopy to the Stream Coordinator for archive purposes.

7. RESEARCH PROJECT EXAMINATION & ASSESSMENT OVERVIEW

Evaluation and assessment *processes* for the various **Research Project** components are implemented internally by the Department/academic unit hosting the student research project, managed by local Masters Coordinators.

Appropriate records relating to the **Hurdle requirement assessment activities** (these being satisfactory completion of the literature review and oral presentations) are maintained locally and will be required by the Stream Coordinator. Standards of evaluation of hurdle requirements are at the discretion of the local Department/Academic Unit. These tasks need not receive any other grading, however feedback to the student to assist their skill development is both desirable and necessary. If performance is unsatisfactory on an initial attempt, a re-attempt may be allowed as required to achieve appropriate performance level. For assistance, evaluation proforma are provided in this Guide.

The protocols for the Examination of the **Research Project Report** (approved by Academic Programs Committee) apply, and these **Protocols** are available from the Melbourne Medical School. An examination proforma is provided below.

In summary, in relation to appointment of examiners and the conduct of examination, the following advice (adapted from the Protocols) applies:

1. At least two examiners must be appointed for all Research Project Reports (and constitute the Examiner panel).
2. All examiners may be internal to The University of Melbourne. External examiners may also be appointed.
3. Department or academic unit Coordinators will provide examiner nominations to the Course Coordinator.
4. The Stream Coordinator will usually serve as the Chair of Examiners, and will confirm the appointment of the Panel of Examiners.
5. The supervisor may or may not be one of the examiners but this should be consistently applied in the Department or academic unit. A supervisor who is an examiner must ensure that their input in relation to student preparation of the Research Project Report is limited to general guidance (see page 23 for further information on examiner nominations and appointments).
6. If the supervisor is not an examiner the supervisor has the right to raise concern about the marks with the Chair of Examiners Panel (who may then appoint an additional Examiner).
7. When examinations are complete, the Master of Biomedical Science Coordinator advises the Course Coordinator of the final mark and provides copies of the examiner marks and evaluations to the Course Coordinator and the Student.
8. When examinations are complete, the Department Coordinator provides the Course Coordinator with digital and hardcopy versions of the Research Project Report for archiving purposes.
9. The Course Coordinator arranges for the result for the Research Project to be entered into the student's academic record. *Departments/academic units do **not** enter results into ISIS.*

NB: Assessment and examination processes for the chosen **Discipline subjects and Professional Skills subjects** are managed entirely by the Academic Units (and Coordinators) responsible for each of those subjects. *The Master of Biomedical Science Coordinator does not have a role in any of these assessment processes.*

7.1 Research Project Report Assessment Process

Research Project Submission Timelines and Extensions

Examiner nomination & approval	At the end of the Semester teaching period, the Supervisor provides the Department Coordinator with the names (and brief statement of relevant expertise & experience) of at least two Examiners who are willing to serve. Details required are specified below. The Course Coordinator approves examiners (or requests alternatives).
Pre-submission 'Hurdle' assessment documentation	At the end of the Semester teaching period, the Department Coordinator provides Course Coordinator with confirmation that Research Project 'hurdle' evaluations have been satisfactorily completed (ie information relating to evaluation of Literature review and/or oral presentations). Assessment evidence is retained at Academic Unit level for possible later audit, and may be supplied to the Course Coordinator for recording purposes.
Earliest submission date	The Research Project Report can be submitted for examination immediately on the completion of 125 points of Research Project. This would usually be at the end of the final semester of the Master of Biomedical Science program, but may occur earlier depending on the timing of Project, Discipline and Skills subjects. Semester dates can be found at http://www.unimelb.edu.au/keydates .
Usual due date	The Research Project Report is due at the end of the examination period for the (project) completing Semester (i.e. usually late June or late November respectively). Semester dates can be found at http://www.unimelb.edu.au/keydates .
Short extension	As per University policy (UOM0374 Extensions), extensions can be granted for health or other reasons (i.e., equipment failure) for up to two weeks by the supervisor in consultation with the Coordinator. This policy can be found at https://policy.unimelb.edu.au/MPF1029
Longer extension/ Special Consideration	Students who require an extension of longer than two weeks should apply for Special Consideration through the Student Portal. If applicable, such as in the case of major project disruption, the student may request the Department Coordinator or supervisor write a letter to accompany their application for Special Consideration. This may be based upon the recommendation of the Department/Academic Unit Examination Committee or Department/Academic Unit Extensions Committee for the student.
Time allowed for Research Report examination	A 1-2 week period is recommended (and this should be negotiated in advance by host Department/academic unit with approved Examiners).
Timely Course completion (for Graduation)	In the absence of an extension, a timely completion can be achieved to ensure that the Research Project examination result is available by the Semester final result release date (found at http://www.unimelb.edu.au/keydates). Students may then apply for graduation at the first available opportunity.
Timely Course completion (for PhD Admission and Scholarship)	For students who are relying on a Report Examination outcome for course completion to be considered for further academic selection (ie for PhD admission & scholarships), a result should be entered by late November to receive a first round offer. PhD applications should be lodged 31 October. (with result pending).

7.2 Assessment advice for advanced coursework components

Alternate Exam Arrangements

For Discipline and Professional Skills subject components of the Masters program that are assessed by formal written examinations (typically components of the coursework subjects) a student may be eligible for Alternate Exam Arrangements (AEA). An AEA is an adjustment or alteration to the scheduled conditions or format of an examination. AEAs must be approved by the University and are only available to students who are able to demonstrate that their circumstances will adversely affect their performance and/or ability to undertake the scheduled assessment.

AEAs apply to all timed exams, including end of semester and end of year exams, supplementary and special exams, in-class and mid semester tests and practical exams. Adjustments for in-class tests may differ to those for formal exams as in-class assessments are generally of a shorter duration. AEAs can be approved on a one-off basis, and also for students with ongoing academic challenges who might need longer term adjustments made for each semester.

As AEAs are designed to promote equity and arrangements, they will vary according to individual circumstance.

It is the expectation of the University that students undertake exams as scheduled and are available for the entire exam period (including the supplementary exam period.)

However, the University may approve an AEA for students who by reason of academic disadvantage (including but not limited to disability and carer status), religious observance, defence reservist commitments, emergency service volunteer commitments or extra-curricular commitments at an elite level, are unable to participate effectively in the scheduled examinations.

The following circumstances are examples of activities that are not grounds for AEAs: social commitments such as weddings and birthdays, paid employment commitments and personal travel (including overseas travel).

It is the responsibility of students who think they may be eligible to contact the Student Equity Officer (SEO) in their Student Centre to confirm their eligibility and to find out if they may apply. In some cases, the SEO will refer students and/or seek advice from Disability Liaison.

SEO contact details: <http://msl.unimelb.edu.au/equity-engagement/student-equity>
Examinations Policy: <https://policy.unimelb.edu.au/MPF1028>

7.3 Nomination of examiners of the Master of Biomedical Science Research Project Report

Before the end of the last semester of research project enrolment, the Primary Supervisor is to nominate two or more examiners prior to the commencement of assessment of the candidate's Research Project Report. These nominations are provided to the Department Coordinators. Examiners can be external to the University (however this is not mandatory) and the candidate's supervisor can be an examiner. If a supervisor is one of the nominated examiners, a statement must be provided confirming that the supervisor has offered only limited general guidance to the student in relation to the preparation of the Research Project Report and has not been involved in any drafting process. The Department Coordinator notifies the Course Coordinator of examiners nominated, providing the following information:

- the Research Project title and a brief description of the research focus (<50 words)
- Name and title and Institution Affiliation / Department and email address of Nominee and each nominated examiner
- Description of why each is a suitable examiner for this Research Project Report noting academic experience (including examination experience at an appropriate level) and research relevant experience (1-2 sentences each).

All nominations are subject to approval by the Course Coordinator who is the Chair of Examiners.

In order to nominate the examiners, an email from the Department Coordinator to the Course Coordinator (Chair of Examiners) containing the above information will suffice. This email is then a 'declaration' from the Department Coordinator to the Chair of Examiners that they endorse the nominations. The Course Coordinator will advise should further information be sought in relation to the nominations.

7.4 Proforma for Examination of the Research Project Report

THIS PROFORMA MUST BE COMPLETED FOR RESEARCH PROJECT REPORT EXAMINATION

STUDENT: ID |_|_|_|_|_|_|_|_|

PROJECT:

SUPERVISORS

DEPARTMENT CO-ORDINATOR:

Instructions to the Examiner: Please assess this student's Research Project Report (up to 15,000 words) using the criteria below. Complete the table by placing ticks in the appropriate boxes, *making use of the entire range of available marks (0-100%)*. **Award an overall grade** for the Report based on the distribution of ticks and your judgement of the Report. Please provide an **attachment** to this examination proforma consisting of up to one page commentary which evaluates the Research Project Report with reference to and consistent with the criteria supplied with this scoresheet. This attachment will be provided to the student and should not contain any grading or marks..

	Criteria	H1 (>80)	H2 A	H2 B	H3 (65-	Pass (50-64)	Fail (<50)
1	Explanation of aims of study						
2	Logic and critical thought						
3	Clarity and conciseness						
4	Extent of body of work undertaken						
5	Interpretation of data						
6	Soundness of rationale and methodology						
7	Evaluation and use of literature						
8	Implications of findings						
9	Presentation						
10	Style, grammar and syntax						

Overall grade awarded : %

Course co-ordinator use only:
 Student ID |_|_|_|_|_|_|_|_|
 Other examiner marks ____|____|_

Examiner Name:.....

Email:.....

Signature.....

Dated:...../...../.....

Comment Proforma: Examination of the MBiomedSc Research Project Report

THIS PROFORMA MUST BE COMPLETED FOR RESEARCH PROJECT REPORT EXAMINATION

STUDENT:ID.....

PROJECT:

SUPERVISOR(S):

DEPARTMENT CO-ORDINATOR:

EXAMINERS NAME & SIGNATURE:

Instructions to the Examiner. Please provide this **attachment** proforma consisting of up to one page commentary which evaluates the Research Project Report with reference to and consistent with the criteria supplied with this scoresheet. ***This attachment will be provided to the student*** and should not contain any grading or marks.

Examiner Written Evaluation of Master of Biomedical Science Research Project Report

In scoring the Report on the proforma the following criteria should be considered. In preparing a short evaluation commentary (up to 1 page) the general tone of comments should be positive where possible and major points of strength and weakness addressed. Typographical and grammatical adequacy should be noted, but it is not necessary to provide correction details.

Class H1 (80-100%)

A Report graded as 'upper H1' (>85%) is strong in all areas of assessment. Overall the Report shows:

- outstanding command of expression and logical argument in a skilfully structured manuscript;
- superior evaluation and integration of existing literature;
- evidence of significant insight and original thought in dealing with the critical issues;
- sophisticated understanding of research methods, with evidence of careful attention to critical design issues in the execution of the project;
- outstanding presentation and reporting of a body of work;
- thoughtful and appropriate choice of analytical approach (where appropriate) and clear and coherent interpretation of the Report data;
- comprehensive understanding of the importance of the results in the context of the theoretical framework.

A 'lower H1' (80-85%) student displays many of the same strengths but is less well-balanced with weakness in some areas. Overall: An H1 Report (upper or lower) is written by a student obviously capable of undertaking a PhD.

Grading over the entire range of 80-100% is essential. The habit has been for examiners to grade between 80-85% for outstanding submissions, with 90% being a rare exception. A grade of 90% and above implies the Report is at the standard expected of an academic/researcher in the field and could be published in an appropriate journal.

Class H2A (75-79%)

A H2A Report shows a good understanding and exposition in most areas although with some notable weaknesses. The Report has most of the following characteristics:

- the manuscript is well written, logically argued and generally well structured;
- the evaluation and integration of the existing literature is very sound without being outstanding; reasonable insight and some evidence of original thought in dealing with the critical issues evidence of a solid understanding of research methods;
- adequate design of the research project, although possibly containing minor but retrievable errors;
- choice of data analysis that is appropriate for the design (although less well justified than might be expected of H1 standard), and clear presentation of results;
- generally sound but pedestrian interpretation of results and their relevance to the published literature.

Overall: An H2A Report is written by a student who is capable of undertaking a PhD or MPhil. The report should highlight areas where the work can be improved.

Class H2B (70-74%)

A H2B Report has most of the following characteristics:

- generally competently written, although some problems exist in the logical organisation of the text and expression;
- provides an adequate coverage of the literature, although it is more descriptive than interpretive, and arguments are often disjointed;
- occasional evidence of insight into the issues underlying the Report or essay, but little evidence of original thinking;
- basic but somewhat limited understanding of research methods;
- the design of the research project is generally adequate but is marred by some errors and oversights;
- reasonable choice of data analysis, although other approaches may have been more appropriate or powerful;
- presentation of results lacks clarity;
- interpretation of results or other studies is adequate but limited.

Overall: The Report shows an adequate understanding and exposition of relevant issues but there are notable weaknesses in several areas. An H2B Report is written by a student who may be capable of undertaking an MPhil under close supervision.

Class H3 (65-69%) and below

Theses that are graded at H3 and below have most of the following characteristics:

- the work is not well written and shows flaws in the structuring of logical arguments;
- coverage of the literature is weak, with insufficient information provided to support the arguments made, or conclusions drawn;
- little evidence of insight and ideas are highly derivative;
- knowledge of research methods is deficient;
- serious flaws exist in the design of the research project, making it difficult for the research to meet its aims;
- data analysis techniques are inappropriate;
- the results are poorly presented;
- interpretations are superficial, show a weak understanding of the results and their relevance to the theoretical framework.

Overall: The student shows a poor understanding of the relevant issues and there are major weaknesses throughout the Report. The student has not mastered the higher-order skills required at this level and would likely not be able to undertake further research.

7.5 Proforma: Evaluation of MBiomedSc Literature Review

**DUE AT END SEM 2
(FULL TIME EQUIV)**

STUDENT:

PROJECT:

SUPERVISOR(S):

DEPARTMENT CO-ORDINATOR:

Satisfactory evaluation (i.e. Pass) of the Literature Review is a 'hurdle' requirement for the Research Project component of the Master of Biomedical Science. The grade assessed provides indicative student feedback but *does not* form part of the final Research Project grade (which is based entirely on the Research Project Report). If the Review is considered **unsatisfactory** (i.e. Fail), re-submission and re-evaluation is necessary. If two unsatisfactory evaluations are determined then consultation involving the student, Supervisors, Master of Biomedical Science Coordinator and Coordinator should be initiated by the Master of Biomedical Science Coordinator.

Evaluate using the criteria listed on the following page. Complete the table below by placing ticks in the appropriate boxes. Provide an overall grade range for the Review based on the distribution of ticks and overall judgement. Provide annotation on the Review (hard or soft copy) for detailed student feedback – as this Review will likely constitute a major component of the Introduction for the student's Research Project Report, this feedback to the student is very important.

	Criteria	H1 (>80)	H2A (75-79)	H2B (70-74)	H3 (65-69)	Pass (50-64)	Fail (<50)	N/A
1	Understanding and exposition of relevant issues							
2	Structure and development of argument							
3	Standard of critical analysis							
4	Relevance and design of figures and tables (if used)							
5	Evidence of wide and relevant reading							
6	Evaluation and synthesis of material							
7	Citation of references							
8	Context for and articulation of Research Project goals							
9	Quality of written text							
10	Overall design & presentation							

Overall evaluation (H1 / H2A / H2B / H3 / P / Fail):

Date:

Name of Evaluator: _____ Signature: _____

Criteria for Evaluation of Master of Biomedical Science Literature Review

Class H1 (80-100%)

Student displays an excellent understanding and exposition of relevant issues in the field. The argument is clearly structured and logically developed and the review has only minor (low H1) or no (high H1) obvious weaknesses. Relevant data are clearly presented, figures and tables (if used) are relevant and are part of the overall argument and their sources are acknowledged. The evaluation and synthesis of a wide range of material is excellent and the standard of critical analysis throughout is high. References are correctly cited and conform to the style of a discipline-appropriate scientific journal. The text is clearly written in unambiguous, readable English. Overall design and presentation of the literature review is good. Rationale and segue to Research Project goals very clear.

Class H2A (75-79%)

Overall the student displays a good understanding and exposition of the relevant issues, but there are notable weaknesses in a few areas. For example, the review may not be well structured, the argument not fully developed or some of the relevant data has been omitted. Figures and tables (if used) are appropriate (but may not integrated into the argument) and there is evidence of further reading. The critical analysis is of an adequate standard. References are correctly cited and conform to the style of an appropriate scientific journal. The text is clearly written in unambiguous, readable English. Overall design and presentation are good. Annotate the document to indicate areas for development, correction and/or improvement.

H2B (70-74%)

Overall the student shows an adequate understanding and exposition of relevant issues but there notable weaknesses in several areas. For example, the argument is reasonably clear but isn't fully developed and there is a limited presentation and explanation of relevant research. Figures and tables are not well presented or are not part of the argument (i.e., they serve a decorative purpose only). Limited amount of relevant reading mostly of secondary sources (reviews, etc.) and the material has been insufficiently evaluated. References are mostly correct and appear in both the text and reference list. Writing is not consistently clear and there is a need for some sentences to be reworded. Overall presentation is adequate.

Class H3 (65-69%) and Pass

Overall the student shows a poor understanding of the relevant issues and there are major weaknesses throughout the review. The arguments are unclear and the relevant data often lacking. There is poor use of figures and tables and little evidence of relevant reading. The evaluation of material is superficial and the synthesis is poor. There are frequent errors and omissions in the text and the writing style is poor, with many sentences in need of correction. Overall presentation of the review is substandard.

Fail

The work is of unacceptable standard and indicates that the student has insufficient grasp of the research field, minimal capacity to synthesize material, inadequate expression skills and inability to contextualize the Research Project. The evaluation indicates that the student would not be expected to be able to produce a Research Project Report of adequate standard.

7.6 Proforma: Evaluation of MBiomedSc Oral Presentation

STUDENT: ID |_|_| |_|_|_|_|_|_|

PROJECT:

SUPERVISOR(S):

DEPARTMENT CO-ORDINATOR:

ORAL PRESENTATION Date:/...../.....

Presentation #: **1 (mid-way)** **or** **2 (final)**

Satisfactory evaluation (ie Pass) of two **Oral Presentations** (by end Sem 2, end Sem 4) is a 'hurdle' requirement for the Project component of the Master of Biomedical Science. The performance assessed provides indicative student feedback *but does not form part of the final Research Project grade* (which is based entirely on the Research Project Report). If an Oral Presentation is considered **unsatisfactory**, re-presentation is necessary. If two unsatisfactory evaluations are determined then consultation involving the Student, Supervisors, Master of Biomedical Science Coordinator and Department Coordinator should be initiated by the Course Coordinator.

Evaluate using the criteria below. Complete the table by placing ticks in the appropriate boxes. Provide an overall grade range for the Presentation based on the distribution of ticks and overall judgement. Provide additional notes on an attached sheet to assist the Student in developing their presentation skills if possible.

Presentation component & weighting for evaluation	Excellent	Good	Fair	Poor	Unsatisfactory
Structure of talk (10%)					
Delivered in logical sequence					
Appropriate timing for each segment					
Delivery of talk (15%)					
Voice: clear, suitable volume & pace, well modulated					
Presence: physical habits; rapport with audience					
Visual aids: visible, legible, understandable, used well					
Content (65%)					
Appropriate selection of material					
Clear & concise explanation of terms/definitions					
Science rigorous and well-implemented					
Limitations acknowledged and implications discussed					
Answers to questions (10%)					
Appropriate answers given					
Demonstrated familiarity with topic & broader issues					

Overall evaluation (Excellent / Good / Fair / Poor / Unsat) _____ **Date** _____

Name of Evaluator: _____ **Signature:** _____