751AA Ph.D.- Science

Year and Campus:	2015 - Parkville
CRICOS Code:	056958E
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Research Higher Degree
Duration & Credit Points:	Students are expected to complete this research in 3.00 years full time, or equivalent part time. Credit Points: 300
Coordinator:	-
Contact:	**Melbourne Graduate School of Science** Faculty of Science The University of Melbourne Victoria 3010 Tel: + 61 3 8344 6128 Web: **http://graduate.science.unimelb.edu.au/ (http://graduate.science.unimelb.edu.au/)**
Course Overview:	The degree of Doctor of Philosophy signifies that the holder has undertaken a substantial piece of original research, which has been conducted and reported by the holder under proper academic supervision and in a research environment for a prescribed period. The PhD thesis demonstrates authority in the candidate's field and shows evidence of command of knowledge in relevant fields. It shows that the candidate has a thorough grasp of the appropriate methodological techniques and an awareness of their limitations. The thesis makes a distinct contribution to knowledge. Its contribution to knowledge rests on originality of approach and/or interpretation of the findings and, in some cases, the discovery of new facts. The thesis demonstrates an ability to communicate research findings effectively in the professional arena and in an international context. It is a careful, rigorous and sustained piece of work demonstrating that the PhD Graduand is admitted to the community of scholars in the discipline. In scope, the PhD thesis differs from a research Masters thesis chiefly by its deeper and more comprehensive treatment of the chosen subject. It is written succinctly, in English, unless approval has been given for the thesis to be written in a language other than English. The normal length of a PhD thesis is 80,000 words. The Faculty of Science offers PhD programs in the following departments: # Botany # Chemistry # Earth Sciences # Forest and Ecosystem Science # Genetics # Mathematics and Statistics # Optometry and Vision Sciences # Physics # Resource Management and Geography # Zoology For information in regards to the research groups within the Faculty of Science departments as listed above, please refer to: **http://science.unimelb.edu.au/research-themes (http://science.unimelb.edu.au/research-themes)**
Learning Outcomes:	See 'Graduate Attributes'
Course Structure & Available Subjects:	A candidate for the PhD degree must be an enrolled student in this University and is required to carry out research at the University for a specified period under the direct supervision of one or

	more members of the academic staff. All candidates for the PhD-Science will be examined on the basis of their thesis.
Entry Requirements:	The criteria for assessing applicants' eligibility for PhD-Science candidature are: **1. Minimum qualifications** Applicants are normally required to have completed at least a four - year honours degree at H2A (75–79%) grade from an Australian university, or a qualification or combination of qualifications considered by the RHD Committee to be equivalent. **2. Minimum level of academic achievement** Applicants should have achieved an overall H1 (80–100%) or H2A (75–79%) grade or equivalent, in the relevant Masters or honours degree. **3. Relevance of the degree** The completed degree must be in an area that is relevant to the intended PhD, including sufficient specialisation such that the applicant will have already developed an understanding and appreciation of a body of knowledge relevant to the intended PhD. **4. Evidence of research ability** Applicants are normally required to have completed a research project, component, subject or group of subjects that accounts for at least 25% of their work (i.e. Honours year), or 25% of one year accumulated over the length of a Masters degree, and which has, or have, been conducted, and assessed, individually. Research carried out in groups should at least have been graded individually. This project, component, or subject(s) may include: # any obviously research oriented project, subject or sustained piece of scholarly writing conducted for assessment, such as small theses, research essays, long essays, or studios; AND/OR # any less-obviously research subjects, including practice-based subjects such as performance or fieldwork, where there is also scholastic rigor as documented in a sustained piece of writing analogous to (a); AND/OR # any subjects directed at the formation of research skills, such as methodology and reasoning, such as scientific reasoning, or legal reasoning, where a sustained piece of writing has also been produced. **5. Currency of applicant's knowledge of the discipline** The applicant's degree(s) and/or professional experience must demonstrate that the applicant's knowledge of the discipline in which they plan to undertake their PhD is current. It is therefore expected that an applicant will have completed their tertiary studies and/or any relevant professional experience in the ten years immediately prior to their intended entry to the PhD. **6. Assessment of suitability** Based on interview or other verbal communication, an assessment should be made of the level of understanding, motivation and time commitment of the applicant for the proposed program of study. For example, a full-time candidate would be expected to devote at least 40 hours a week and a part-time candidate about half of this. Applicants must also meet the University's **English Language requirements (http://futurestudents.unimelb.edu.au/admissions/entry-requirements/language-requirements)** .
Core Participation Requirements:	All PhD candidates are required to complete the equivalent of at least 12 months full-time (24 months part-time) advanced study and research in the University unless studying at an outside institution approved by the Research Higher Degrees Committee (RHDC). The RHDC will not approve entirely distance supervision or entirely on-line supervision for graduate researchers.Throughout their candidature candidates are expected to attend the University in order to benefit from planning, conducting and writing up their research within a University community and environment.The residency requirement is deemed especially important during the period of probationary candidature. During probationary candidature the student is expected to interact on a regular basis with the supervisor, the department (including staff and other research students) and the University, so as: to build the skills and knowledge necessary to carry out the proposed research program to acquire an understanding of the standards and requirements for a PhD awarded by the University to make use of support programs and facilities provided by the Melbourne School of Graduate Research throughout candidature. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability will impact on meeting the requirements of this course are encouraged to discuss this matter with a Faculty Student Adviser and Disability Liaison.

Graduate Attributes:	Doctoral degrees at the University of Melbourne seek to develop graduates who demonstrate academic leadership, increasing independence, creativity and innovation in their research work. The University expects its doctoral graduates to have the following qualities and skills: an advanced ability to initiate research and to formulate viable research questions; a demonstrated capacity to design, conduct and report sustained and original research; the capacity to contextualise research within an international corpus of specialist knowledge; an advanced ability to evaluate and synthesize research-based and scholarly literature; an advanced understanding of key disciplinary and multi-disciplinary norms and perspectives relevant to the field; highly developed problem-solving abilities and flexibility of approach; the ability to analyse critically within and across a changing disciplinary environment; the capacity to disseminate the results of research and scholarship by oral and written communication to a variety of audiences; a capacity to cooperate with and respect the contributions of fellow researchers and scholars; a profound respect for truth and intellectual integrity, and for the ethics of research and scholarship; an advanced facility in the management of information, including the application of computer systems and software where appropriate to the student's field of study; an understanding of the relevance and value of their research to national and international communities of scholars and collaborators; an awareness where appropriate of issues related to intellectual property management and the commercialisation of innovation; and an ability to formulate applications to relevant agencies, such as funding bodies and ethics committees. The University provides a variety of opportunities in addition to the supervised research program, to facilitate a student's acquisition of these attributes.
Links to further information:	http://www.gradresearch.unimelb.edu.au/
Notes:	Application Procedure: Detailed course and scholarship application information is available at **http://graduate.science.unimelb.edu.au/ (http://graduate.science.unimelb.edu.au/)** Facilities and Supports: The Melbourne School of Graduate Research makes available a broad range of **Programs & Services (http://www.gradresearch.unimelb.edu.au/programs/)** available to graduate research students.