

Procedures for Submission and Examination of MD degree

in

University College Cork

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Section One: Introduction MD Degree

- 1.1 An MD degree is awarded to suitably qualified candidates who prepare a thesis describing original research which is their own work. Such work will include discovery of new facts or new interpretations of existing knowledge, and thus represent a real advance in the field of study.
- 1.2 The Examination Board consists of Examiners who are both internal and external to the University, with the External Examiner being an expert in the field of study of the thesis.
- 1.3 These guidelines are intended to help candidates and Examiners to understand their contributions to, and roles in, the examination and the general procedures operated by the University in regard to doctoral examinations.
- 1.4 A student must pursue a programme of supervised research and have completed their approved period of registration in order to submit a MD Thesis. It is a University requirement that all current MD students remain registered until their thesis is submitted for examination.
- 1.5. MD students will be allowed a maximum of 4 years to submit their thesis. Candidates who do not submit their thesis within the 4 years from the date of first registration for the programme for which they have been approved will require approval for extensions from the School of Medicine and must be registered at the time of thesis submission. A detailed review must be undertaken as outlined in the Progress Review Policy (http://www.ucc.ie/en/graduatestudies/policies/).

Section Two: Preparing the MD Thesis

- 2.1 Drafts of the thesis should be prepared under the guidance of the Supervisor(s). Feedback the candidate may have received during their research programme (e.g., through monitoring by a Graduate Studies Committee and/or Thesis Committee) may be useful in terms of the expectations of the likely content and format of the eventual thesis.
- 2.2 Candidates should familiarise themselves with the norms and regulations, where appropriate, applying for MD doctoral theses, especially with regard to length, style, literature citation and layout.
- 2.3 When a thesis is submitted, a signed declaration must be included, stating that the thesis submitted is the candidate's own work and has not been submitted for another degree, either at University College Cork or elsewhere. This declaration must explicitly make reference to the fact that the candidate is aware of the importance of plagiarism and that the text presented for examination does not include plagiarised material. The following wording should be used:

"This is to certify that the work I am submitting is my own and has not been submitted for another degree, either at University College Cork or elsewhere. All external references and sources are clearly acknowledged and identified within the contents. I have read and understood the regulations of University College Cork concerning plagiarism."

2.4 Supervisors should make students aware of all aspects of plagiarism in preparation of their thesis. Plagiarism in research degree theses constitutes a very significant breach of examination

regulations and the Procedure for Investigating Allegations of Plagiarism in Research Theses may be found at http://www.ucc.ie/en/graduatestudies/policies/.

- 2.5 The use of external professional individuals or organisations for proof-reading or copy-editing of theses on a paid basis is not permitted, and students found to have engaged such assistance in preparing their thesis will be deemed to be in breach of examination regulations.
- 2.6 UCC permits MD theses to be presented in the form of a Publication-based Thesis. The research described in a Publication-based Thesis will be presented in the form of a set of manuscripts or other scholarly outputs from the work undertaken during the MD student's period of registration, typically with each manuscript forming one chapter of the thesis. In the case of students accepted under the MD by Prior Published Work policy, scholarly output undertaken prior to their registration as an MD student may be included. The work should not consist of a series of publications reporting essentially the same data or findings to separate readerships. As the thesis is a draft document for examination, PDF versions of articles or other outputs as appear in press should not be included in the body of the thesis, but rather the corresponding document in text-based manuscript format; copies of published material could be included for information in an Appendix to the thesis.
- 2.7 A typical Publication-based Thesis will normally include at least one paper published in a peer-reviewed academic journal or equivalent, and others in press, submitted, or planned for submission. In all cases, a key consideration for the Examiners is whether the quantity and quality of work presented represents an appropriate level of scholarly output for a MD thesis.
- 2.8 All papers in a Publication-based Thesis should fit around the pre-approved coherent MD topic and should appear in text document format. There does not have to be an exact correspondence between the published articles and thesis versions as, for example, additional material may be included in versions of publications included in a thesis, or sections contributed by others which are not necessary for the thesis version may be removed.
- 2.9 Publication-based Theses must include, as well as the works themselves, a substantial and original introduction and discussion to tie together the work. The introduction will typically take the form of a review of the relevant literature and an explanation of the scope and objectives of the work described in the thesis; the discussion or conclusion should form a critical synthesis or analysis of the overall contribution of the work to the field concerned.
- 2.10 The student must normally be first author and key contributor to the papers presented in a Publication-based Thesis.
- 2.11 In all cases where papers presented in a Publication-based Thesis have multiple authors, the individual contributions of the student and the co-authors to the paper should be clearly specified for each article. In such cases, students are expected to inform co-authors of the inclusion of such work in their thesis, and quantify the extent of such additional input.

All elements submitted within the thesis, including material already published, are under examination by the Examiners, and amendments to the version of the work included in the thesis as a text-based document (i.e., not the PDF of the published article) may be required. Publication of work does not in any way predetermine the outcome of the examination

Section Three: Submission Procedure

- 3.1 In consultation with the Supervisor(s), the candidate submits an Intention to Submit Form to the Graduate Studies Office (GSO) at least three months before the likely date of submission. Failure to do this will delay the examination. (http://www.ucc.ie/en/graduatestudies/thesis/)
- 3.2 The GSO then notifies the Head of School/Department, who arranges for an Approval of Examiners Form to be completed and sent to the relevant Graduate School for oversight, before being forwarded to the Graduate Studies Office. A completed biographical form for the External Examiner(s) must accompany the form. (http://www.ucc.ie/en/graduatestudies/thesis/)
- 3.3 When the final draft of the thesis is ready, one copy per Examiner is submitted in soft-bound form to the Graduate Studies Office, and a Thesis Submission Form signed by the Supervisor(s) and Head of School/Department. (http://www.ucc.ie/en/graduatestudies/thesis/)
- 3.4 Any student who believes that such a signature(s) has been unreasonably withheld may still submit their thesis, but must be notified in writing by the Head of School/Department that this is against the advice of the School/Department. In such cases, the Supervisor(s) must submit an independent report to the Head of School/Department outlining the reasons for not supporting submission. The Head of School/Department (or Chair of the Graduate Studies Committee if the Head is a Supervisor of the student in question) should transmit this report to the Head of the Graduate Studies Office. This will then be considered alongside the report(s) arising from the Examination by the Academic Council Graduate Studies Committee before a final recommendation is made to Academic Board on the result of the examination of the thesis. In cases where the thesis is rejected or failed, the Graduate Studies Office will notify Examiners of the fact that the supervisor did not approve submission of the thesis after the Examination is complete.
- 3.5 No changes may be made to the thesis after submission to the Graduate Studies Office and the External and Internal Examiners may not communicate with the candidate about the thesis in the period between the submission of the thesis for examination and the completion of the examination process.
- 3.6 The GSO will send the thesis to all Examiners, along with this guide to Examinations and details of the dates of meetings of the Academic Council Graduate Studies Committee (ACGSC) to which reports should be returned.
- 3.7 The process of reading and examining the thesis, including the oral examination, should normally take a maximum of three months.

Section Four: Examination Board

- 4.1 The Examination Board normally consists of two Examiners for every thesis: an External Examiner and an Internal Examiner.
- 4.2 If the candidate is a member of staff of UCC academic staff, or a permanent member of staff of the University, or holds an employment contract of 3 or more years, either full-time or part-time, there will be an additional External Examiner. For the purposes of this regulation, a candidate will

not be classified as a part-time member of staff 1) where they only carry out work for the Dept/School pursuant to a student support scheme or 2) where they are paid on an hourly basis, and, in the opinion of the Head of Department/School is not such as to justify the application of the rule requiring an additional External Examiner.

- 4.3 In the case of MD theses in inter-disciplinary fields, where a reasoned academic case may be made that a broader diversity of academic expertise is required to examine the thesis, the Examination Board may be extended to include an additional Internal and/or External Examiner, to a maximum of four examiners in total.
- 4.4 The Examiners are nominated by the Head of Department following consultation with the local Department Graduate Studies Committee (GSC), the Supervisor(s) and other relevant expertise where appropriate. The nomination is countersigned by the Head of Graduate School. In the case of any conflict of interest by the Head of Department (e.g if the Head is also a supervisor), the nomination should be made by the Head of School of Medicine. In the case of a conflict of interest by the Head of School, the nomination should be made by the Head of College.
- 4.5 The External Examiner should have a strong track-record in the research field of the thesis and will normally have experience of examining Doctoral theses elsewhere. The Head of School/Department must satisfy themselves as to the expertise of proposed External Examiner(s) in the subject of the thesis and a biographical information form must be filled out for each proposed External Examiner so that an informed decision can be made.
- 4.6 The Internal Examiner is expected to have sufficient knowledge and understanding of the subject area of the research topic to enable them to judge the quality of the thesis, and he or she is expected to play a full part in determining the outcome of the examination.
- 4.7 There must be no conflict of interest, whether personal, professional or commercial, between the proposed Examiners of a thesis and the candidate, Supervisor, University or subject matter. Specific examples of circumstances which may lead to a conflict of interest include, but are not limited to, the following:
 - Formal association between the External Examiner and UCC (e.g., as staff member or student) within the past five years;
 - A personal or family relationship with the candidate or Supervisor;
 - Co-authorship of publications with the candidate;
 - Collaboration with the candidate in the work described in the thesis;
 - Acting as External Examiner for a thesis by the same supervisor in the past three years, unless a strong reasoned case for this being the best examiner for the thesis is presented;
 - Commercial interest in the work described in the thesis;
 - Acting in the past, or near future, as an employer of the candidate;

- Substantial contact with the candidate or Supervisor in any other circumstance which might jeopardise the independence of the examination.
- 4.8 Any requests for deviation from the regulations on the composition of the Examination Board must be approved by the Chair of ACGSC.

Section Five: Oral Examination

5.1 There is not normally a viva voce examination for an MD theses, but if all examiners request this, the Internal Examiner should contact the Chair of the ACGSC for guidance and approval, and procedures to be followed should be as described in the UCC Procedures for the Examination of Doctoral Degrees.

Section Six: Award of MD Thesis

- 6.1 When considering the thesis the Examiners may give particular attention to the following:
 - Has the thesis demonstrated a significant and original contribution to knowledge?
 - Is the work the candidate's own or, where the candidate worked as part of a research team, does the thesis clearly demonstrate a sufficient individual contribution of the candidate, as primary researcher or author, to the overall research project to merit the award of the MD?
 - Is the candidate familiar with other work in the field published up to the date of submission
 of the thesis, and can the candidate summarise and critically evaluate the relevant work of
 other authors?
 - Does the thesis form a coherent piece of work? In the case of Publication-based theses, does the candidate present an appropriate framework for the work described in the thesis and its contribution to the field in the introduction and discussion sections of the thesis?
 - Was appropriate methodology adopted and described in the thesis? Is the candidate aware
 of alternative methodologies? Does the candidate appreciate any inherent weaknesses in
 the methodology adopted? If a new methodology has been developed, has it been tested
 and calibrated appropriately?
 - If relevant, were all ethical requirements met?

Presentation of the thesis:

- Is the thesis presented in a style appropriate to the MD, and with a minimum of typographical and grammatical errors?
- Are results presented appropriately and in a clear and accessible way? Are all tables, figures
 and plates, where included, adequately annotated and correctly referenced in the text?
- Are results interpreted appropriately? Are reasonable conclusions reached based on the
 evidence presented in the thesis? Have appropriate statistical methods been employed?
 Does the candidate appreciate the significance of the results and do conclusions reached
 take into account relevant published findings by other authors?
- Is the bibliography complete, comprehensive and up-to-date? Is it referenced appropriately in the text with a recognised citation style?

- Does the thesis contain an acceptable abstract which accurately summarises the work described therein?
- 6.2 The Supervisor may be invited by the Examiners to clarify any issues identified during their consideration of the thesis and, if necessary, bring to the attention of the Examiners any additional information which may be relevant (e.g., the nature of decisions taken at intermediate stages in the research programme). The Examiners must ensure that they have all the information they need on which to base their judgement.
- 6.3 The Internal Examiner shall ensure that the Examiners consult with each other. Once the Examiners are satisfied that there are no other issues they should take into consideration The Examiners shall prepare a written report on the thesis. Where the Examiners are in agreement, the Internal Examiner shall submit a joint report to the GSO for consideration by the ACGSC. Where the Examiners are not in agreement, the Internal Examiner shall ensure that separate reports are made and submitted to the GSO for consideration by the ACGSC.
- 6.4 The Examination Board must recommend one of the following results:
- (1) Award, no amendments needed (the degree is awarded without any changes to the thesis)
- (2) Award, on condition minor amendments are carried out this includes minor recommendations that do not significantly affect the argument and/or conclusions of the thesis (such as typographical errors, minor changes in phraseology, inclusion of additional minor points of discussion, or correction or updating of the bibliography). These amendments should be verified to the GSO by the Internal Examiner in writing and should generally be completed within 3 months of the Examination. The Supervisor will play a supporting role in ensuring that this process is brought to completion. In the case of theses for which a grade is awarded, the grade will be recommended by the examiners on the basis of the original submitted thesis.
- (3) Award, on condition major amendments are carried out the thesis requires substantial modification including rewriting of parts of chapters or sections of the thesis, introduction of new material, further experiments or calculations, analysis or data. These amendments should be verified to the GSO by the Examiners in writing, when submitting a corrected hard-bound copy of the thesis, and approved by the ACGSC, and should generally be completed within 6 months of the Examination. On consideration of a resubmitted revised thesis, such a judgement may be changed to one of the 'Reject' judgements below where the all examiners determine that the amendments which were originally required have not been carried out to their satisfaction within a reasonable time-frame.
- (4) Reject, but permit the submission of a revised thesis, i.e., a major rewrite of all or a significant part of the thesis, leading to a new thesis being submitted to the GSO for examination. This may include substantial rewriting of parts of the thesis, including introduction of new research and appropriate correction of an inherently flawed and unsound argument or methodology. The modification(s) would normally be so great as to require re-examination. If the candidate is not capable, in the opinion of the Examiners, of carrying out such a significant revision of the thesis, then option (5) below is preferable. This process should normally be completed within 12 months of the Examination, and the revised thesis should be resubmitted to the GSO. In the case of theses for

which a grade is awarded, the grade which will be recorded for a thesis rejected and resubmitted, following acceptance of the changes by the Examiners, is Pass.

- (5) Reject, but allow the award of a lower degree a research Masters degree is awarded in lieu of a MD as the thesis stands, or such a degree is awarded subject to minor amendments as in (2) above, or may be awarded once substantial modifications are satisfactorily carried out as under (3) above. A recommendation will also need to be made on the grade of award of the lower degree (on the original thesis), where appropriate.
- (6) Reject. No degree is awarded as the thesis is very seriously and inherently deficient. In this case the Examiners must be of the opinion that that the deficiencies of the thesis are such that it is reasonable to suppose that the candidate will not be in a position to bring it up to the appropriate standard within a reasonable time. Examiners should be convinced that this is the only decision open to them.
- 6.4 Reports submitted to the GSO for consideration by the ACGSC should
 - give an indication of the content of the thesis, its contribution to knowledge and the quality of its presentation;
 - indicate, where appropriate, the nature and extent of any amendments that are required to the thesis;
 - clearly identify one of the available options in terms of results, e.g. no amendments, minor amendments, major amendments etc.;
 - be typed;
 - typically be around 500 words in length;
 - be sufficiently clear and informative to allow ACGSC to make a recommendation to Academic Board;
 - be written in English, or accompanied by an English translation
 - be signed by all the Examiners.
- 6.5 The ACGSC has delegated authority to approve Examiners' report and recommend the conferral of research degrees to Academic Board. The ACGSC may refer back to the Examiners if the information given is not sufficiently complete to enable the Committee to reach a decision on the recommendation of the Examiners, or if any of the required elements in the report (e.g. a formal indication of a result, an Examiner's signature) is missing. If the report does not justify the recommendation made, the ACGSC may recommend an alternative judgement to the Examiners.
- 6.6 The ACGSC makes a recommendation to the Academic Board of UCC as to the award of the degree or otherwise. The candidate will be notified in writing of the result after consideration by ACGSC, subject to final approval by AB.
- 6.7 The supervisor is responsible for overseeing the amendments or alterations required by the Examiners. The award of the degree will not be made until all amendments have been made to the satisfaction of the Internal Examiner and, if required (as in the case of major amendments), the Internal and External Examiners.

- 6.8 Once the amendments have been carried out, the student submits a final hardbound thesis to the GSO, accompanied by written confirmation by the Examiner(s) that the required changes have been made.
- 6.9 A CD/Memory Stick containing an abstract/summary of the thesis (which is used by the Library for cataloguing the thesis) should accompany the hardbound thesis. The thesis will then be lodged in the University library.
- 6.10 Once the corrected hardbound has been submitted to GSO the student is then eligible to graduate at the next conferring ceremony.
- 6.11 Appeals. Candidates may appeal a result by following the procedures of the University, as published in the Guide to Examinations. These procedures establish the grounds on which an appeal may be made and the process by which it is considered by the Appeals Committee. (http://www.ucc.ie/en/exams/procedures-regulations/)

For more information on the Procedures for Submission and Examination of the MD degree in UCC please contact the Graduate Studies Office:

http://www.ucc.ie/en/graduatestudies/contactus/