



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

School of
Microbiology
Scoil na
Micribhitheolaíochta



Graduate Studies Handbook



For further information see:

Microbiology Programme Website : <https://www.ucc.ie/en/microbiology/study/micropg/>

Graduate Studies Office Website: <https://www.ucc.ie/en/graduatestudies/>

College Calendar: <https://www.ucc.ie/admin/registrar/calendar/postgraduate/>

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Introduction

The School of Microbiology Graduate Studies Committee (SGSC) has been set up to ensure a better understanding of the responsibilities of Student and University in ensuring the best practice in conducting research for the degree of Postgraduate Degrees (MSc and PhD).

There are four principal players in the postgraduate process; the Student, the Supervisor, the School and the University. The School of Microbiology is represented by the School Graduate Studies Committee (SGSC), while the University in this case is represented by the Academic Council Graduate Studies Committee (ACGSC).

This handbook sets out the operational details of the interplay between student, supervisor, SGSC and the ACGSC, and also defines the responsibilities of each partner.

School Policies are also laid down in the handbook. All postgraduates are expected to familiarise themselves with this handbook before beginning their studies and to keep abreast of any changes during the course of their studies.

Quick Checklist of Postgraduate Programme start to finish

At the beginning

- On arrival every student should register with the School of Microbiology office and receive the appropriate access card (deposit=€10). Registration will also involve attendance at the appropriate induction session.
- Your Learning Plan (produced and agreed with your supervisor) should be submitted to the School of Microbiology office within 3 months of starting (see Appendix 1).

At the end of the first year you will need to:

- Prepare an annual report for your thesis committee and update your Learning Plan
- Arrange additional meetings as required
- Register on-line for the second year

During the second year you will need to:

- Present your research and your research plan to your thesis committee (18 month milestone)

For MSc students only:

- File notice of intention to submit a thesis (3 months notice required)
- Complete and submit your MSc thesis

At the end of the second year (PhD students only)

- Prepare an annual report for your thesis committee and update your Learning Plan
- Arrange additional meetings as required
- Register on-line for the third year

At the end of the third year (PhD students only)

- Prepare an annual report for your thesis committee and update your Learning Plan
- Arrange additional meetings as required
- Register on-line for the fourth year

During the fourth year

- Deliver a seminar to the School of Microbiology
- File notice of intention to submit a thesis (3 months notice required)
- Complete and submit your PhD thesis

Students are also expected to present a poster every year at the School of Microbiology Research Day that is held at the end of Semester 1 (late November-early December). Participation at this event is a requirement for all postgraduate students and details will be circulated closer to the date. Participation at this event has to be noted on the Annual Review form (see Appendix 4).

Completion of the Annual Review form is a compulsory pre-requisite for progression through the PhD process.

Procedures for Admission to the Microbiology Postgraduate Programme

Applying for a postgraduate position

- Any person wishing to pursue an MSc or PhD degree must first make contact with an individual academic member of staff and following meetings and interviews as required an offer of a postgraduate position may be made by that member of staff.
- Following acceptance of the offer of a position, the prospective postgraduate student then needs to formally apply to the University using either the on-line application system or the International Education Office (see below). This should only be done following consultation with the member of academic staff.

Admission Criteria and Procedures (from the College calendar)

- To be eligible for consideration to undertake a programme of study for a Master's Degree by Research, a candidate must have obtained a standard of at least Second Class Honours in an approved primary degree or possess such other qualifications as the Graduate Studies Committee may recommend to Academic Board.
- To be eligible for consideration to enter on a programme of study and research for the Degree of PhD, a candidate must have obtained a standard of at least Second Class Honours, Grade I, in an approved primary degree, or presented such other evidence as will satisfy the College/Faculty of his/her fitness.
- All EU applications should be made online at www.pac.ie. All Non-EU applications should be made to the [International Education Office](#).

Key Aspects of the Microbiology Programme

- The School of Microbiology has a Graduate Studies Committee (SGSC) that oversees operation of the postgraduate Programme.
- **All postgraduates in Microbiology must have a thesis committee** and this must be formed within three months of commencing the programme.
- The thesis committee must include the supervisor and at least one other member of academic staff (either a co-supervisor(s) or an advisor). The thesis committee will normally be formed during the application process so please check with your supervisor.
- The different roles of the student, the supervisor, the co-supervisor and the advisor are set out in the 'Code of Practice for Supervision of Research Students' and the 'Models of Supervision at UCC' documents available at the Graduate Studies Office web page link [here](#)
- The Student **must** make an annual report to the thesis committee and receive approval to continue in the MSc or PhD programme (see Appendix 3 and 4). **Failure to comply with the Annual Review policy will result in a students registration being suspended.**

Role of the School in the Postgraduate Process

- Responsibility for overseeing the PhD programme within the School rests with the School Graduate Studies Committee. The SGSC has responsibility for all aspects of the PhD programme, from Admissions to Final Examination.
- In line with the Bologna process, the University has defined a PhD in terms of ECTS credits. *“PhD candidates undertake an equivalent of 90 ECTS credits for each calendar year of full-time research, or proportional equivalent for part-time students. Students will complete a minimum of 270 credits (3 years, full-time) and a maximum of 360 credits, for consideration for the award of PhD”* (from the Calendar).
- All students undertaking a PhD in UCC are required to complete a minimum of 15 credits of relevant courses. The University allows students gain up to a maximum of 90 credits for taking relevant courses during a 4-year PhD (and 30 credits for a 3-Year PhD). This is recognised in the final transcript but **does not form part of the decision to award a PhD**. *“A number of generic and disciplinary training modules are available to PhD candidates to provide them with research and transferable skills. Students may take modules up to a maximum of 90 credits as part of their PhD studies as advised by their Supervisor(s)”*. (from the Calendar).
- The School of Microbiology endorses this approach and facilitates students to take some modules.
 - All students undertaking a PhD in UCC are required to complete a minimum of 15 credits of relevant courses.
 - These courses should be selected with your supervisor and should be part of your Learning Plan.
 - A range of modules are available throughout the University. Please see the UCC [Book of Modules](https://www.ucc.ie/admin/registrar/modules/descriptions/PG.html) for module descriptions at <https://www.ucc.ie/admin/registrar/modules/descriptions/PG.html>
 - **All postgraduates** in Microbiology (with some notable exceptions) are required to take module PG6026: Teaching and Demonstrating Skills for College of Science, Engineering and Food Science (SEFS) Postgraduate Students. **Please see Appendix 2 for more details.**
 - It is also recommended that postgraduates in Microbiology take:
 - PG6001 STEPS - Scientific Training for Enhanced Postgraduate Studies [5 ECTS credits]
 - PG6005 Biotechniques [5 ECTS credits]
 - Postgraduates may be required to take additional generic training modules that are organised in the future.
 - Postgraduates may be required to take discipline-specific modules as part of a tailored training programme.
 - Postgraduates may, with the agreement of their supervisor(s), take additional modules to enhance their own knowledge and skill set.

Responsibilities of the Student

It is the responsibility of the student to maintain a professional relationship at all times with the supervising academic members and other university staff.

Every postgraduate student must take responsibility for the progress and completion of their own postgraduate studies (i.e. PhD or MSc).

After registering as a postgraduate student it is the responsibility of the student to:

- Be familiar with the University's regulations and School guidelines and written information pertaining to postgraduate studies, including this handbook
- Be aware of the University administrative requirements pertaining to all steps in the postgraduate process (e.g. dates and deadlines for thesis submission, etc)
- Be familiar with the School of Microbiology postgraduate programme and its requirements
- Agree to a schedule of meetings that will ensure regular contact
- Develop competence in written and communication skills
- Take the initiative in identifying problems and seeking solutions to these
- Document the progress of work as agreed with the supervisor and present written or other material in sufficient time as requested
- Present written or other reports in sufficient time as may be required by the SGSC
- Satisfy the SGSC and Supervisor(s) in the annual evaluations that satisfactory progress is being made. The purpose of this evaluation is to examine the student's progress, ensure the student has sufficient knowledge of the fundamentals of the chosen discipline, ensure the student has developed a clear plan of research, and has identified a viable topic. The student is expected to present a report of progress to date and successfully defend that report
- Prepare and submit a thesis of original research, in consultation with the supervisor(s) and the SGSC
- Establish to the satisfaction of the examiners at the *viva voce* that the student's contribution to the work reported in the thesis is clearly indicated
- Students are expected to commit a reasonable effort in terms of time in pursuit of their degree
- Students are expected to give Seminars during the course of their studies
- All postgraduate students in Microbiology are expected to contribute to the undergraduate degree programmes. This involves modest amounts of demonstrating and supervision of undergraduate projects. This forms an important part of postgraduate training
- Postgraduate students are expected to contribute modest amounts of time to the promotion of the discipline and the School if required. This might include attendance at open days, visits to schools, or other outreach activities.

Responsibilities of the Supervisor

It is the responsibility of the supervisor to maintain a professional relationship at all times with the student and to:

- Give guidance about the nature of research and the standard expected, about the planning of the research programme and presentation of a research proposal, about literature research and appropriate courses to attend
- To agree a project outline with the student and to make this outline available to the Thesis Committee and the Chair of the SGSC
- Agree the nomination of an extern with the SGSC for approval by College of SEFS
- Give advice on the necessary completion dates of successive stages of work so that the thesis may be completed within the scheduled time and to familiarise the student with the periodic reviews
- Encourage the student to show initiative and self-motivation in order to pursue independent research with confidence
- Establish and maintain regular contact with the student. Such contact to be available at the request of either the supervisor or the student. In certain circumstances, e.g. external research locations, less frequent contact may be considered appropriate
- If a supervisor is to be on leave for a period greater than one month, to ensure that alternative supervisory arrangements are made
- Request regular written work, interim reports or research results as appropriate. Draft chapters of thesis should be returned with comments within one month during the academic year
- Facilitate the student meeting other researchers in the field and attending meetings or conferences as appropriate
- Ensure that the student is made aware of inadequate progress by specifying the problems and suggesting ways of addressing them. If the supervisor feels obliged to recommend a candidature be terminated because of unsatisfactory progress, he/she must make this recommendation to the SGSC who will inform the student accordingly
- Advise the SGSC of the progress of the student after each review
- Ensure that the work is conducted to a high ethical standard
- Encourage where appropriate the publication of the results of the research, provided that any published work is coherently incorporated into the thesis
- Ensure agreement is reached with the student on authorship of publications and acknowledgements of contributions
- Ensure that the student is aware of the standard of work that is generally acceptable
- Seek to ensure that research projects sponsored by industry grants or contracts should not impose unreasonable restrictions on dissemination and publication of work done as part of a doctoral thesis or compromise the independence of the research. Where a confidentiality agreement exists between a School and a sponsor, the implications should be made explicit to the student. Submission of the thesis should not be unduly delayed by the School/Sponsor's interest in the confidentiality of the student's own work
- To ensure that if the research leading to the Ph.D. is done in laboratories in which several candidates, technicians and post-doctoral fellows contribute to the project, clear delineation of the contribution made by the candidate is essential in a thesis and work done by others should be explicitly defined and acknowledged appropriately
- To ensure that in the event of a student not carrying out their work to the satisfaction of the supervisor(s), a written warning is given to the student by the chairman of the SGSC.

Responsibilities and Role of the Thesis Committee

- It is a University regulation that all PhD students have a thesis committee. It is the policy of the Microbiology School that this requirement is extended to all postgraduate research students (i.e. PhD and MSc)
- The committee is comprised of the supervisor, any co-supervisors in the case of joint supervision, or a thesis advisor(s) where relevant
- The thesis advisor(s) have a role that is distinct from the supervisor(s) and the advisor should not be considered a “co-supervisor”
- The advisor is independent of the supervisor, the student and the project and so can provide objective inputs to the process
- Typically, the advisor is another staff member of the Microbiology School. Academic staff of other Departments may also serve as advisors, and some funding agencies require this
- The advisor is in place to aid the student and to ensure that satisfactory progress towards the postgraduate degree is being made
- The thesis committee will receive an annual report from the student and will ordinarily meet with the student to discuss progress.
- The format of the meeting is discretionary and may involve a presentation or a less formal discussion
- The thesis committee will make recommendations to the student regarding progress towards the thesis and may request additional meetings with the student
- The thesis committee will deliver an annual report on progress and additional reports of any formal meetings to the SGSC
- The thesis committee will ensure that the student is made aware of inadequate progress by specifying the problems and suggesting ways of addressing them
- In the event that the thesis committee is dissatisfied with student performance, this must be discussed with the student and a review meeting arranged
- All reports from the thesis committee are to be co-signed by all members of the committee and the student
- The thesis committee is required to approve student continuation in the postgraduate programme
- The thesis committee is required to approve transfer of student registration from MSc to PhD following University regulations.

Preparation, Submission and Examination of Theses

- Students are required to inform the University at least three months in advance of their intention to submit a (MSc or PhD) thesis
- Relevant forms can be downloaded from the [Graduate Studies Office](#) website
- Students need to agree a schedule with supervisors regarding reading of chapters and the whole of the thesis and have due regard for the range of other commitments that supervisors have
- Supervisors should read the thesis within reasonable a time-frame and return with comments
- It is the responsibility of the student to achieve a satisfactory standard of writing and presentation in the thesis and should not expect the supervisor to correct language and proofread
- Supervisors will not approve submission until the thesis is of a satisfactory standard
- A thesis submission form needs to be included with the submitted thesis. This needs to be signed by the student, the supervisor and the Head of School
- Students should consult regulations regarding the style (e.g. hard/soft-bound) and number of copies of theses that are required (see the [Graduate Studies Office](#) web page for more details). **Please note that the thesis submission processes will be digital from 6 January 2020 onwards, see link [here](#)**
- All theses are examined by an examinations board appointed by the University. That board sends a recommendation on whether or not to award the degree to the Academic Council Research Committee
- All exam boards include an external examiner and an internal examiner
- Under new regulations, the supervisor is present at the *viva voce* but is not one of the examiners. The student may request in writing to the Graduate Studies Office that the supervisor does not attend the *viva voce*.
- PhD theses are always examined at a *viva voce* (oral defence of work)
- Students should be aware that it is possible to appeal the result of any examination. For this purposes, the University has an examinations appeals officer and an appeals board. Students considering this process should consult the Registrar's Office to be advised on procedures
- Students should consult the College Calendar for up-to-date details on examination procedures
- **Students should note the requirement to be registered in all years until the PhD is submitted. In some cases (e.g. medical reasons) it is possible to suspend registration through a Leave of Absence. Any application for a Leave of Absence must be with the agreement of your supervisor(s).**
- **Following discussion with your supervisor(s) any Registration Change Requests need to be forwarded to the School of Microbiology office email: microbiology@ucc.ie and using this [form](#)**

Procedures and Protocols for resolving difficulties

- It is accepted that from time to time, situations may arise where there are difficulties in the relationship between a student and his/her supervisor(s).
- In such cases, all parties are encouraged to take a reasonable and professional approach to resolving the issues that may have arisen.
- Most issues can be resolved locally and amicably
- A general sequence of events as follows is recommended:
 - Students with academic difficulties are encouraged to discuss the situation with their supervisor in the first instance.
 - In a case, where there is an issue between the supervisor and student regarding progress of the postgraduate work, the matter should be brought to the attention of the thesis committee who will arrange a meeting and attempt to resolve the issue.
 - if the issue is still unresolved, the problem should be brought to the attention of the SGSC Chair who will mediate on the issue.
 - finally, unresolved issues can be addressed by the Head of School.
- It is also recognised that all students are entitled to discuss their issues with the Head of School at any time by appointment. It is School policy to try to resolve all differences in an amicable way within the School. In extreme cases, however, if a satisfactory resolution is not reached, the matter may be referred to the UCC Student Ombudsman.
- Following performance assessments, a supervisor may form the view that a student is not making sufficient progress to continue the postgraduate research degree. In this case, there are defined procedures and steps that should be followed to protect a student's interests:
 - The supervisor needs to meet the student and explain why adequate progress is not being made. The supervisor should outline to the student what needs to be achieved and the requirements of the project.
 - If satisfactory progress is not made, a meeting of the thesis committee to review progress must be convened. If the committee is of the view that progress is not being made, then this view must be communicated in a report that is presented to the student and to the SGSC.
 - A remedial plan must also be designed to set goals that could be achieved in a reasonable time-frame (e.g. 6-12 weeks) to give the student an opportunity to recover the situation. This plan must be prepared in writing and given to the student and forms part of the report that also goes to the SGSC.
 - The thesis committee should be reconvened at the appropriate time to assess whether the student has fulfilled the requirements that were set.
 - If the thesis committee decides that it is not in the interest of the student to continue, this decision must be communicated to the student in writing and copied to the chair of the SGSC and the Head of School.
 - The student may request a meeting with the chair of the SGSC or the Head of School to discuss the outcome if they wish.
- If you are finding it difficult during your PhD please talk to your supervisor(s) and/or advisor(s). Help for students in distress is also available through the [UCC Student Counselling and Development Office](#)

General Topics

- **Correspondence and communication is important.** The School and SGSC will only use UCC student e-mail addresses for bulk correspondence and will not use hotmail, gmail or other outside e-mail accounts. This is to facilitate mailing lists and to ensure that current e-mail accounts are used. All students, regardless of what other e-mail accounts they may use, are required to regularly check their UCC student account for correspondence, especially towards the end of the academic year when details of reports, UCC registration documentation, and other important documents are distributed via this system. Postgraduates should also use their UCC e-mail address for professional correspondence, for example when requesting strains or corresponding regarding manuscripts.
- Funding of postgraduate students is a matter between the student and supervisor. The School does endeavour, however, to ensure that postgraduate stipends are fair and there is a general policy to aim to pay postgraduates at nationally-set rates (e.g. IRC). Almost all postgraduates are funded on external grants secured by the supervisor and the rates payable may be dictated by the funding agency. These rates also change over time, often after a grant was initially funded at a particular level. Postgraduate research is an intensive activity and it is generally not appropriate that students would have outside jobs that take up any significant amount of time. This would also create tax compliance issues as postgraduates are typically funded on a tax-free stipend.
- Regardless of the particular location of a student, the research programme or centre to which the student is affiliated, or the source of funding, every student supervised (or co-supervised) by a member of the Microbiology School Academic Staff is part of the Microbiology Postgraduate programme. This provides the Academic framework by which an MSc or PhD degree can be awarded. Accordingly, it is appropriate that the School of Microbiology is duly acknowledged in all talks, reports and publications. For talks and presentations, this entails including the Microbiology Logo (available from microbiology@ucc.ie) in the acknowledgements section, and for publications, the School of Microbiology must be included in the address line. It is proper of course to also acknowledge other contributors and agencies where relevant.
- There is a Postgraduate Society in the School of Microbiology. This society is responsible for organising various functions and events and is also an interface between the School and the postgraduate students. Students are encouraged to participate in the society. Please ask at the Microbiology Office if you want to make contact with this Society.
- All students are encouraged to join the Microbiology Society (<https://microbiologysociety.org/>). Key benefits of membership include:
 - free subscription to Microbiology Today
 - free attendance (costs paid) at 1 meeting per year (typically in the UK or Ireland)
 - opportunity to apply for grants to attend other meetings
 - opportunities to apply for grants to visit other laboratories for up to three months
 - Membership of FEMS (<http://www.fems-microbiology.org/>) and associated benefits
- Students should also consider other Disciplinary Societies such as the Society for Applied Microbiology (www.sfam.org.uk/), the British Society for Medical Mycology (<http://www.bsmm.org/main.htm>), the American Society for Microbiology (<http://www.asm.org/>), FEBS (<http://www.febs.org/>) and others. Most of these societies provide grants for courses, meetings and exchanges. By combining grants it is possible to fund attendance at almost any conference.

General School Policies for postgraduate students:

1. Facilities and resources available to postgraduate students within the School and within the University:
Students shall have access to the research laboratories of their supervisor, and the general areas of the School. Students should seek permission before working in any other laboratory or before using equipment in another research laboratory. It is the responsibility of the student to ensure that they do not operate equipment without prior instruction on the safe use of that equipment. Students will have access to the library using their student cards. The School expects students to conduct themselves appropriately in the library and to adhere to the rules set down by library staff. Students should only use computers within the School after consultation with their supervisor.
2. Timing and mode of presentation of reports, reviews, seminars and examinations by which the student is assessed.
Timing and mode of presentation of reports, reviews, seminars will be at the discretion of the supervisor. Examinations will be set by the supervisor or module coordinator where relevant.
3. Coursework and other requirements for the Ph.D. degree.
Students will be required to take those courses prescribed by their Thesis Committee. Students are expected to be able to demonstrate a general knowledge of the discipline and a detailed knowledge of their area of research.
4. School policy on student costs for attendance at conferences.
Where possible, the supervisor will cover the costs incurred in attending conferences from research grant funds. Students are also expected to be proactive in seeking to secure funds for attending conferences and undertaking research visits.
5. School calendar (seminar dates etc).
Students are advised to consult the School notice boards for information relating to seminars, vacation dates, cleaning protocols, etc. Postgraduate students are expected to attend School Seminars.
6. School guidelines regarding thesis content and standards expected.
Theses will consist of a detailed review of the research literature, an account of the materials and methodologies used during the course of the study period, a concise account of the results obtained and a clear interpretation of research results. The student is required to have the approval of their supervisor as to the quality and suitability of the thesis before submission.
7. School specifications for the publishing of papers in international journals or international conference presentations as part of the requirements for the Ph.D.
Research must reach a standard such that it is likely to be accepted in international peer-reviewed journals. Publication of research outputs in peer-reviewed journals is not a requirement for the PhD; however students are strongly encouraged to publish their results, and ideally part of the thesis will be published prior to submission.
8. Requirements for student training in health and safety issues
Students are required to take part in the regular health and safety training programmes offered by the School/University at the earliest possible time. Students are required to be aware of, and to follow, safe work practices. This includes wearing a lab-coat when in a lab, and all other aspects of good microbiology practice.
9. Medical issues.
Students are expected, at the earliest possible opportunity, to inform their supervisor of any health issues (including pre-existing conditions) that could affect their ability to carry out the proposed project. This requirement is for health and safety reasons as certain conditions may preclude exposure to chemicals/reagents/infectious agents. Equally, supervisors are expected to inform students as to any risks associated with a particular project or laboratory (for example, work involving particular infectious agents).

Appendix 1

School of Microbiology Research Student Learning Plan

This Research Student Learning Plan is based on UCC's Code of Practice for Supervision of Research Students¹ and the School of Microbiology Graduate Studies Committee Handbook. It reflects and records the intention of the supervisor and the research student. It is not a legally binding agreement² but rather can be used as a basis for discussion and consensus at the initial meeting between the supervisor(s) and the research student, to clarify roles and expectations of both parties for the period of research.

The responsibility for the research project and completing the thesis is ultimately the student's, and the student must fully engage in the research and completion of the thesis. This Plan is intended to help by clarifying the roles and expectations of the student in this regard, and the supervisor in supporting the student in the process, as well as any additional elements required as part of the structured PhD.

The Research Student Learning Plan should be completed and signed by the supervisor(s) and research student (and Advisor where appropriate) within the first three months of the commencement of the research degree programme. The original document will be retained by the supervisor and a copy will be given to the student. If there is more than one supervisor, the document will be filled in by all parties at an initial meeting where all are present and should be completed within three months of registration. The Research Student Learning Plan is intended to serve as an indicative plan of action, which can be revisited and updated throughout the course of the student's programme of study, as necessary.

Name of Student:

[Click here to enter text.](#)

Academic Unit:

[Click here to enter text.](#)

Supervisor 1:

[Click here to enter text.](#)

Supervisor 2:

[Click here to enter text.](#)

Advisor³:

[Click here to enter text.](#)

Approved Start Date:

[Click here to enter text.](#)

Date(s) of initial meeting(s):

[Click here to enter text.](#)

Student Contact Details:

[Click here to enter text.](#)

Student email address:

[Click here to enter text.](#)

Supervisor(s) Contact Details:

[Click here to enter text.](#)

Supervisor(s) email address:

[Click here to enter text.](#)

¹ Some sections have been adapted in part from Barbara Grant and Adele Graham, 'Postgraduate Research Supervision: Getting Started on Supervision', University of Auckland, School of Graduate Studies (2006).

² Nothing in this plan should be construed as an intention to create legal relations.

³ If a research student does not have co-supervisor(s), they must have an Advisor.

Part 1: Meetings
1. How frequently will formal meetings take place (bearing in mind that this may change at different stages of the programme)? Will an agreed schedule of meetings be identified in advance and, if so, what will this be? In the case of there being more than one supervisor, how will meetings and communication between all involved be organised?
Click here to enter text.
2. How should the student and supervisor(s) maintain contact outside scheduled meeting times?
Click here to enter text.
3. How will supervisor(s) and the student record agreed actions and changes to these?
Click here to enter text.
Production of Written Material and Feedback
4. How often will written work be given to the supervisor(s) and how will feedback be given (e.g. have you agreed a schedule for submission of drafts and a timescale for feedback? What is the plan for drafting and redrafting of work? If there is more than one supervisor, how will this be managed?)
Click here to enter text.
Formal Progress Reviews
5. All students carrying out their research in School of Microbiology are required to carry out progress reviews at 12 months, 18 months, 24 months, 36 months (as detailed in the Graduate Studies handbook). When approximately will the student's first formal review take place and what are the School of Microbiology requirements for the review?
Click here to enter text.
Leave
6. How will any absence longer than one month on the part of either supervisor or research student be managed?
Click here to enter text.
Duties and Expectations
7. Please specify any other expectations requiring clarification with regard to teaching hours, demonstrating etc. Refer to the School of Microbiology Graduate Studies Handbook.
Click here to enter text.
8. Please consider and record any other issues relating to supervisor/research student interactions that require discussion or comment
Click here to enter text.

Part 2a: Training Needs Analysis* The following table should be filled out to identify existing skills gaps as outlined in the [Irish Universities PhD Skills Statement](#). While undertaking a major research project will in itself help to develop some of the skills listed below, [modules](#) and [workshops](#) are also available. In addition, credits may be obtained for modules and courses taken outside UCC.

Skills	Skills Gap Identified tick for yes	Plan for acquiring skills (e.g. through completion of PG modules)
Research Skills and Awareness	<input type="checkbox"/>	Click here to enter text.
Ethics and social understanding	<input type="checkbox"/>	Click here to enter text.
Communication skills	<input type="checkbox"/>	Click here to enter text.
Personal effectiveness and development	<input type="checkbox"/>	Click here to enter text.
Career management	<input type="checkbox"/>	Click here to enter text.
Team-work and leadership	<input type="checkbox"/>	Click here to enter text.
Entrepreneurship and innovation	<input type="checkbox"/>	Click here to enter text.
Other	<input type="checkbox"/>	Click here to enter text.
* This section is not required for students on thematic programmes or other postgraduate network programmes e.g. MSCA ITNs. Such students should refer to module requirements for their programme/network.		

Part 2b: Modules and Training

4. Please summarise the agreed modules to be taken (at least 15 credits worth of modules to be taken over 3-4 years).

Click here to enter text.

5. What is the timetable for completion of these modules? It is important for the student and the supervisors to map out the most appropriate times to take particular modules and other training.

Click here to enter text.

6. Have the student and supervisor(s) discussed the specific requirements of this programme? Specify mandatory modules and potential chosen elective modules.

Click here to enter text.

7. How frequently will supervisor(s) and the research student review training needs? At minimum this should be considered as part of the Annual Review process.

Click here to enter text.

Checklist for Supervisor(s):

The supervisor(s) has/have read the UCC Code of Practice for Supervision of Research Students and has set the expectation for the research student to engage actively with his/her research.	<input type="checkbox"/>
The supervisor(s) has/have made the student aware of all relevant regulations and policies, including health and safety policies and procedures and obligations arising from them.	<input type="checkbox"/>
The supervisor(s) has/have read and is/are familiar with the University's regulations, policies and the administrative requirements relevant to the research degree.	<input type="checkbox"/>
The student and supervisor have familiarised themselves with the School of Microbiology Research Student Progress Review Procedure.	<input type="checkbox"/>

Checklist for Research Student:

The research student has read and understood the UCC Code of Practice for Supervision of Research Students and is aware of the need to engage actively with his/her research.	<input type="checkbox"/>
The student is familiar with the University's procedures for informal and formal resolution of problems.	<input type="checkbox"/>
The student has received and read the School of Microbiology Graduate Studies Committee Handbook.	<input type="checkbox"/>
The student has read and is familiar with the University's regulations and the administrative requirements relevant to the research degree, and relevant policies, including that concerning plagiarism.	<input type="checkbox"/>

Signed

Research Student

Date

Supervisor 1

Date

Supervisor 2

Date

Advisor (where appropriate)

Date

Appendix 2

PG6026: Teaching and Demonstrating Skills for College of Science, Engineering and Food Science (SEFS) Postgraduate Students [5 ECTS credits]

Postgraduate students are the lifeblood of the School and it is essential that the School can provide their postgraduate community with different opportunities for learning, training and professional development. The School considers the teaching of undergraduate students, through demonstrating in organised practical classes, as an important component of this training and, to this end, demonstrating will be worth 5 ECTS credits (see below). Remember that as part of the UCC Structured PhD programme all PhD students are required to complete at least 15 credits worth of training/professional development, in addition to their research. The School of Microbiology delivers a sizable undergraduate practical portfolio and postgraduate students as demonstrators, teachers and role models, are highly valued and appreciated by the School. Detailed below, is the School policy on postgraduate student demonstrating requirements.

Who is expected to demonstrate?

ALL postgraduates (PhD or MSc) registered in the School of Microbiology are expected to contribute to undergraduate laboratory practical demonstrating with the following exceptions:

- PhD/MSc students that are based at sites that are off-campus (e.g. Teagasc).
- International PhD/MSc students (during the first 6-12 months of their studies).
- PhD students that are in the final year of their thesis.
- PhD students employed on Marie Curie ITNs or other structured programmes with significant predetermined training requirements.
- Other exemptions are at the discretion of the Head of School.

Any student that is normally exempt may choose to demonstrate, under the same terms and conditions as other students, in order to get the training and experience.

How much demonstrating am I expected to do?

- All eligible postgraduates are required to commit to a minimum of 40 hours per year to demonstrating (equivalent to at least 2 modules). This commitment includes lab report marking and other correcting responsibilities but does not include the pre-practical briefing.
- The demonstrating commitment (i.e. accumulated hours) of each student will be recorded by each student and signed-off by the School for inclusion in the Annual Review.
- In Year 3, students who have accumulated >80 hours of demonstrating in previous years (e.g. 40 hours in Year 1 and 40 hours in Year 2) will be paid an hourly rate at point 1 of the salary scale (currently approx. €17.47 per hour). If a student has not accumulated the necessary hours in Year 1 and 2 then payment will commence once the threshold of 80 hours has been reached. In Year 3 students will not be allowed to demonstrate for significantly more time than in their previous years.
- PhD students in the final year of their studies may be asked to demonstrate. If final year students wish to demonstrate, they will be paid accordingly at the relevant hourly rate (assuming that the student has >80 hours demonstrating in previous years).
- Demonstrating duties are generally assigned to postgraduate students by Carmel Shortiss (C.Shortiss@ucc.ie). All efforts will be made to provide each student with their demonstrating allocation as early as possible in each Semester.
- All postgraduates must correctly summarise/update their demonstrating commitment on their Annual Review forms.
- Student's without funding from their supervisor, a funding agency, or other source whose purpose is to cover registration fees and stipend, will not have to accumulate 60 hours demonstrating before getting paid on the hourly rate as defined above.

Will I get training and/or credits for demonstrating?

- Demonstrating is part of module PG6026 'Teaching and Demonstrating Skills for College of Science, Engineering and Food Science (SEFS) Postgraduate Students' and students will receive 5 ECTS credits towards their Structured PhD by completing this module.

- PG6026 is run by the SEFS Graduate School and every student will start this module in Year 1 of their studies. A detailed description of PG6026 can be found in the Book of Modules. Briefly, this module has 3 important objectives:
 1. Training (Year 1)
 2. Teaching through demonstrating (Year 1-Year 3)
 3. Reflection on teaching practice (Year 3)
- The module must be completed in advance of finishing the PhD. Completion of this module requires the student to have accumulated at least 60 hours of practical demonstrating.
- Much of the teaching experience associated with demonstrating is gathered through practice. Nonetheless PG6026 will, through lectures and workshops in Year 1, offer some training in teaching and assessment. This training will be supplemented with a workshop to be run in the School of Microbiology. This training will be provided as early as possible in the academic year but there is no guarantee that it will be completed before demonstrating begins.
- All demonstrators assigned to a particular practical class have to attend a pre-practical briefing where any specific learning objectives and technical components of that practical will be explained. This briefing is compulsory and is not included in your demonstrating contribution.

Appendix 3 Annual Reviews

Annual reviews are a formal strand of UCC's structured PhD programme. Therefore **all** registered PhD research students in UCC are required to undergo a formal review, at least annually, either by the relevant local Graduate Studies Committee (GSC), or by a Progress Review Panel (PRP) to which the GSC has delegated this function e.g. your thesis committee. Students undertaking a MSc degree are also required to undergo a formal progress review if they are registered for more than 1 calendar year.

All reviews should include the following elements:

- At a minimum, a review should take the form of a written report by the student and/or a presentation by the candidate to allow progress to be discussed and any issues clarified. Additional evidence *should* include a student written self-assessment and a report by the supervisor(s).
- A report on the modules undertaken by the student since their last review and plans for the coming year.
- Any obstacles affecting progress e.g. technical issues, availability of datasets/patient cohorts etc
- All students should be notified in writing of the result of the review along with any recommendations from the panel.

Timeline for annual review process

Month	Action
1	Registration and Induction at School level (rules, regulations etc)
3	Research Student Learning Plan (to include agreed research and training objectives for Year 1 (including 15 credits worth of modules to be taken by student); signed by supervisory team and student)
12	Annual Review (2 page report; progress assessed against research and training objectives (describing deviations from objectives where necessary); list conferences, papers, posters; confirmation of any modules completed; objectives set and agreed for next 12 months; thesis committee report and student report; signed by supervisory team and student)
18	Progress Presentation (highlighting research progress and future research plans for PhD; to be attended by thesis advisory team and Chair Microbiology GSC)
24	Annual Review (2 page pro-forma report; progress assessed against research and training objectives (describing deviations from objectives where necessary); list conferences, papers, posters; confirmation of any modules completed; confirmation of presentation; objectives set and agreed for next 12 months; thesis committee report and student report; signed by supervisory team and student)
36	Annual Review (2 page pro-forma report; progress assessed against research and training objectives (describing deviations from objectives where necessary), list conferences, papers, posters; verification of any modules completed; objectives set and agreed for next 12 months; thesis committee report and student report; signed by supervisory team and student)
37-48	School presentation

Appendix 4

<p>School of Microbiology Postgraduate Annual Review Form</p>
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Student Name		Student number	
Commencement Date		MSc/PhD	

What period does this report cover?	Yr 1	Yr 2	Yr 3	Other (explain)
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Thesis Committee	
Supervisor	
Co-supervisor(s)	
Advisor	

Date of Meeting with thesis committee	
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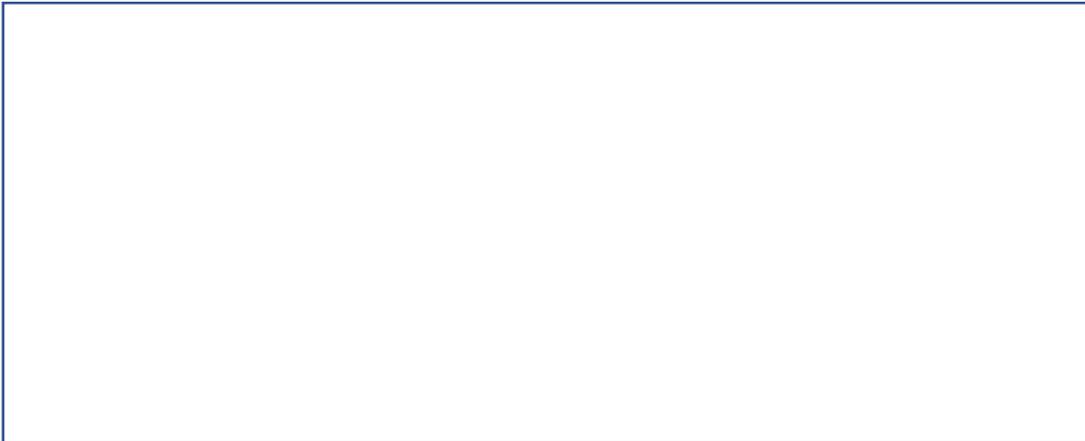
Programme Requirements (Please tick; supervisor to initial to confirm)	
Meeting with thesis committee	
Learning Plan submitted (with updated research and training objectives)	
Satisfactory attendance/completion of training modules (please indicate modules/credits completed in box below)	
Total no. of demonstrating hours completed (cumulative)	
Confirmation of 18-month presentation (where applicable)	
Presentation of poster at School of Microbiology Research Day	

Comments

Dissemination activities over last 12 months (including papers, pre-prints, posters, conferences)

A large, empty rectangular box with a thin blue border, intended for the user to describe dissemination activities over the last 12 months.

Education and Outreach activities over last 12 months (including Open Days, school visits etc)

A large, empty rectangular box with a thin blue border, intended for the user to describe education and outreach activities over the last 12 months.

Additional learning, training and personal development opportunities over last 12 months

A large, empty rectangular box with a thin blue border, intended for the user to describe additional learning, training, and personal development opportunities over the last 12 months.

Student report

Thesis committee report



Recommendation of the thesis committee (tick one box)

Proceed with PhD

Meet with committee again to review progress
(indicate time-frame)

Signatures

Student

Date

Supervisor

Date

Co-Supervisor(s)

Advisor

Contact details

Issues related to postgraduate research and Specific enquiries about the programme

Dr Jerry Reen

Chair, School Graduate Studies Committee

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Paperwork, forms, funding and fees queries

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microbiology@ucc.ie

Individual staff contact details are available at

The School of Microbiology website:

<https://www.ucc.ie/en/microbiology/>