University of Glasgow

POSTGRADUATE RESEARCH STUDENT HANDBOOK
2023-24

CONTENTS

Admission to Postgraduate Research

Candidates intending to apply for an MSc(R), MPhil, PhD, MD or DDS should possess a First/Upper Second Class Honours degree from an approved university.

Additionally, candidates for the degrees of MD and DDS must be a graduate in medicine or surgery, or dental surgery (BDS), and have been engaged for at least three years in either scientific work bearing directly on their profession or in the practice of medicine, surgery or dentistry.

Candidates for the degree of MVM should be a graduate in veterinary medicine and surgery.

The degrees of PhD, MD and DDS are awarded on the successful presentation and examination of a thesis which should include original research and scholarship, usually hypothesis-driven with conclusions which are evidence-based.

The thesis may be a complete piece of work or a substantial contribution to the understanding of the field providing a coherent basis for future work.

It is not expected that there should be any difference in the standard of presentation and quality of original research presented in these degrees though the MD and DDS degrees would be more likely to be of direct clinical relevance.

An MSc(R)/MVM/MPhil thesis may be either a record of original research or a critical review of existing knowledge.

1.1 Starting your Degree

Welcome to the Graduate School of the College of Medical, Veterinary & Life Sciences.

The Graduate School is responsible for coordinating the recruitment, training, supervision and monitoring of all postgraduates within the college.

Its aim is to provide a high quality learning environment for those undertaking study and ensure a balance between in-depth individual experimental research and more general training in a wide range of areas, preparing graduates for careers in many fields including biomedical, veterinary and clinical research.

This handbook includes advice and guidance for postgraduate research students.

We hope that you find your study with the college both enjoyable and rewarding and wish you well in your studies at the University of Glasgow.

Due to the coronavirus situation, the commencement and continuation of graduate research is constantly being updated and monitored.

For the latest information please see the university's coronavirus website Coronavirus: information and travel advice for students and staff[9]

It is your responsibility to read it now and familiarise yourself with the information it contains.

1.2 Registration

All new students are required to register online before starting at the university using the university's student information system, MyCampus.

The registration process allows you to register and confirm your personal, academic and financial information and confirm that you agree to observe the University Oath, regulations and requirements.

Once complete you will become a fully registered student at the University of Glasgow.

New entrants and continuing students will be sent full details of how to log in to the system and register – including completing financial registration.

If you are a new research student, you should complete the pre-registration process before arriving on campus.

It is mandatory to be both financially and academically registered to be considered fully registered.

Student support and advice is available at:

• **MyGlasgow Student Portal**[1]
• **Student Services Enquiry Team**[2]
• **Registration**[3]

If you require any further assistance you can complete the online help form through MyGlasgow at **Help and Support**[4]

Log in to MyCampus through the **MyGlasgow Student Portal**[1] or through MyGlasgow Students on the university homepage.

Log in using your university email and password. This will be the same log-in ID and password that you use for logging into the university network.

If you are a continuing student you are required to register online each year in order to continue your studies.

If you are funded by a public body, for example, the Student Awards Agency for Scotland (SAAS), a local education authority, you will be asked to confirm the reference number provided by this organisation and which Registry hold on file

If your employer or another organisation is paying your fees you should have a letter from them confirming how much they will pay towards your tuition fees. You will be asked to provide an electronic copy of this as part of your financial registration. The university may require to verify this letter before you can complete your financial registration.

Following registration and completion of your annual progress review (progress reviews are required for continuing students only), the Graduate School will mark your record 'progress' allowing completion of the annual registration process. It is important that you complete the registration process within the time period stated.

1.3 University Fees

Fees are charged each year and are quoted on your letter of admission.

International/EU fees charged at the overseas clinical and non-clinical fee rates remain static for the degree duration, whilst fees for Home postgraduate students are subject to progress review and increase.

The increase is normally nominal. Fees for students supported by studentships from the UK research councils or charities (e.g. Wellcome) will be paid directly to the university.

1.4 Induction Event for New PGR Students

The Graduate School provides annual induction events in early October and January/February for new postgraduate research students. Attending one of these is **mandatory** for research students.

The aim of the event is to welcome and introduce you to the Graduate School to discuss the formal requirements that must be adhered to, and issues surrounding good communication and research practices.

A key feature of the event are flash presentations from current postgraduate research students summarising their research.

The event is partially online plus some live sessions which will either be held on Campus or over Zoom. The elements are organised over a week, providing an exciting blend of activities, some of which are shared with students from across the university.

It is mandatory that all new students read and agree to abide by the PGR Code of Practice, available on the Graduate School's **Policies and Procedures PGR Students**[5] web page. Students must do so as part of the annual induction programme.

1.5 Safety Regulations

Your safety while working in research whether the laboratory or in the field is of paramount importance. The university has to provide clear guidance on all potential hazardous procedures under the Health and Safety at Work Act (1974).

These issues should be discussed with your supervisor who has a responsibility to advise you on safe working practices. If in doubt about the safety of a procedure or substances used, you must seek the advice of your supervisor or local safety officer.

It is most important that you familiarise yourself with the safety regulations which relate to your own school and adhere to them at all times.

All students working with chemicals must complete and sign risk assessment (COSHH) forms that outline the procedure to be used, the potential hazards that may be encountered and the steps that will be taken to minimise those hazards.

When using toxic or potentially harmful chemicals, it is a legal requirement to complete a risk assessment form.

The university produces a safety booklet which you are expected to read and abide by. Research students should aim to do the majority of their laboratory work during normal working hours.

You must not undertake laboratory work that may be considered hazardous outside normal working hours unless a colleague is also present in the laboratory.

Such work may be undertaken only after discussion with your supervisor and would be allowed only in exceptional circumstances. Please ensure that you always 'sign in' when in the building outside normal working hours.

Local regulations regarding radiation protection and laser protection will differ depending on whether you are based in a university building or in a hospital. It is therefore extremely important that you follow the advice given by your own school or hospital.

The university safety booklet and other relevant documentation can be found on the university's **Safety and Environmental Protection Service**[6] web page.

1.6 Data Protection

The protection of your data is a key concern for the university and we have welcomed the new data protection regulations that came into force in 2018.

These strengthen individual's rights and bring new requirements on organisations to demonstrate accountability, matched by new penalties for non-compliance.

There is further information on how this affects the university and you as a student on the university's **GDPR**[7] web page. You should familiarise yourself with the Student Privacy Notice which outlines how the university will process your personal data.

1.7 Student Contract

You are required to sign up to a Student Contract each year as part of your registration. This is an agreement between you and the University of Glasgow.

The contract sets out your rights and obligations as well as the university's rights and obligations.

The Student Contract is legally binding and is made up of the following:

- your offer from the university
- our Student Terms and Conditions
- our regulations as set out in the University Regulations
- the Student Contract

Read the Student Contract and its associated documents prior to accepting an offer of a place at the university and/or before registration.

The **Student Contract**[8] is available on the university's Senate Office web page.

1.8 Studying for a Research Degree

Studying for a higher degree is a challenge. It will involve a lot of hard work, application and self-discipline if you are to succeed.

It should also be an enjoyable time since it will provide you with a unique opportunity to develop your interests in a specific field.

Being a research student is very different from being an undergraduate student. You will be expected to develop the ability to work independently and to organise all aspects of your studies. These skills will take time to develop.

Initially, most students rely heavily on their supervisors for guidance but, as you gain confidence, you will gradually assume greater responsibility for planning and carrying out your research.

Gaining a higher degree by research is more than simply carrying out a piece of research and writing it up: it is the process of becoming a professional in your given area.

Your thesis demonstrates that you have wide, critical knowledge of your field; that you are able to ask appropriate questions and set your research in its proper context; that you have mastered the appropriate research techniques and you can communicate your ideas and your results effectively to others. It is an original contribution to your field within a framework of research training.

'Original contribution' does not mean work worthy of a Nobel Prize. It does, however, mean finding a gap in knowledge and answering a question or questions posed by an important and interesting gap.

As a training process, once you have gained your higher degree you should be able to help others attain similar achievements.

These notes do not tell you how to do research, or how to write a thesis. They are a guide to the formal and informal procedures involved in producing a successful thesis. The Graduate School runs a series of workshops and you are expected to attend a number of these. Your school may also run special seminars and you should make every effort to attend.

Carrying out research can be, at times, a lonely (and sometimes boring) process. Interaction with other postgraduate students, both within and out-with your school, can be motivating, supportive and widen your perspectives and interests.

Most students are full-time PhD students, funded for three (or possibly 3.5 or 4) years and have recently completed their first degree (or a Masters degree) and this will be taken as 'the norm'.

Other students study part-time, some of whom will be research assistants or doctors/dentists/vets preparing a thesis for a PhD/MD/DDS/MVM. Some study for an MSc by Research – MSc(R).

No matter what your mode of study, managing your time will be a major challenge. There is never enough time to do everything you want, and you will quickly discover that realistic planning is essential, most things take very much longer to complete than you anticipate.

Since you may be funded for a limited period, you will undoubtedly want to finish your research before your grant money runs out. Be aware that it is your responsibility to plan timetables and stick to them as closely as you can, always accepting that there will be some problems along the way. Discuss your plans with your supervisors - students are often unduly optimistic about how much can be done in a given time, but your supervisors will recognise that adequate time has to be given to all parts of the process, whether planning, experimental design, data collection, analysis and writing up.

Studying for a higher degree is a combination of intellectual ability, hard work and understanding the process. Good research is not enough if it is inadequately (or never) written up. Hard work is not enough if you do not understand what is required in a thesis.

Underestimating the work required can mean anything from not devoting enough time to asking the right questions, while overestimating what is required is demoralising.

As well as discussing the nature of the thesis with your supervisor(s) at an early stage, you should take time to look at relevant theses in the library, and read some in detail. This should give you some idea of standards and variations in style, format, detail and so on. Your supervisor(s) might suggest some theses to read.

COVID-19 AND YOUR STUDIES

2.1 Return to Campus

While all Covid rules and restrictions have been lifted, Covid has not gone away. Some people do still wear masks.

Current details can be found on the website **www.gla.ac.uk/myglasgow/coronavirus**/[9] This is constantly being updated.

Use 'Covid sense' to help protect yourself and others if you feel unwell or test positive. Tests can be bought at any local pharmacy.

The Scottish Government has provided a list of guiding principles for colleges and universities to follow which can be found at the link above.

ATTENDANCE

3.1 Submission and Completion

The minimum period of full-time study for a PhD is 3 years. A research student may alternatively pursue this on a part-time basis of not less than five years; or part-time study of not less than four years, comprising three years of part-time study and one year of full-time study.

The Senate shall have power, in exceptional cases, to reduce the period by one academic year – applications should be made in writing to the Graduate School who shall submit appropriate cases to the Higher Degrees Committee for consideration. Such applications will only be considered when the thesis is in its final stages of completion.

The University of Glasgow, in line with all other institutions, now places a four year limit for full-time submission (eight years for part-time students) from the start date to the submission of a PhD thesis, although this does not include any period of approved temporary suspension.

Whilst it is important for the college to be able to demonstrate good completion rates, no matter what your research degree, it is in your interests to submit your thesis on time.

Many employers are now reluctant to employ 'postdoctoral' scientists who are in the process of writing up. Therefore, failure to complete on time can delay or compromise subsequent employment opportunities.

Similarly, it is essential that those graduates taking time out from their clinical work and/or other commitments have sufficient time to complete and write the thesis rather than simply finish the data gathering.

3.2 Prescribed Period of Study

The information on this page shows the expected prescribed period of study and the maximum period for submission of the thesis for each degree.

Degree - Integrated PhD (iPhD) Full-time only
Year 1 - MSc taught component
Years 2 to 4 - Research degree
Year 5 - Thesis Write Up

Degree - PhD
FULL TIME: 3 years + 1 year thesis write up, 3.5 years + 6 months thesis write up or 4 years with no thesis write up year.
PART TIME: 5 years part-time + up to 3 years thesis write up.
Maximum period for submission:
Within 4 years of the start of the degree
(8 years for part-time)

Degree - MD
FULL TIME: 2 years + 2 years thesis write up
PART TIME:4 years + 2 years thesis write up
Maximum period for submission:
Within 4 years (6 years for part-time) of the start of the degree

Degree - DDS
FULL TIME: 2 years + 2 years thesis write up
PART TIME: 4 years + 2 years thesis write up
Maximum period for submission:
Within 4 years (6 years for part-time) of the start of the degree

Degree - MSc(R)
FULL TIME: 1 year + 1 year thesis write up
PART TIME: 2 years + 1 year thesis write up
Maximum period for submission:
Within 12 months from the date on which the candidate ceases to be a registered student

Degree - MVM + Residency
FULL TIME: 1 year + up to 3 years write up
PART TIME: 2 years + up to 2 years write up
Maximum period for submission:
Within 4 years of the start of the degree. Full time students can submit their thesis any time after the first year.

It is essential that you plan and prioritise your work to ensure the timely submission of your thesis.

If a student has to undergo a prolonged period of absence (e.g. paternity leave, prolonged ill health, etc.), the Graduate School has the option of 'suspension of studies' (see Section 4.2) and of granting a revision to the expected final submission date.

The Higher Degrees Committee will not grant permission for late submission of a thesis unless the circumstances are truly exceptional and compelling and are suitably documented and supported.

3.3 Carrying out Research 'Furth of Glasgow'

Any student who wishes to carry out part of their research at another institute or organisation 'Furth of Glasgow' must seek permission from the Higher Degrees Committee.

Applications should be made, in writing, to their local Postgraduate Convener in the first instance, providing details of the work to be carried out. It is important that appropriate consideration is given to matters such as student supervision and safety whilst working away from the university.

The full list of **Postgraduate Research Conveners**[11] and their contact details can be found on the MVLS Graduate School Contact Us web page.

4.1 Annual Leave and Sickness

A student's funding body may specify rules for annual leave or for reporting illness. Failing this, our requirements are:

A maximum of eight weeks' annual leave, including public holidays, is permitted (in line with UK research council rules).

Research students attempting an MSc(R)/MVM/MPhil in one year should expect to take no more than half this. Annual leave may be taken in accordance with your funder's regulations.

You should seek the permission of your supervisor for any extended periods of leave.

Absence because of illness (or other causes arising suddenly, such as family commitments) should be reported by telephone or email to your supervisor and recorded on MyCampus as soon as possible and certainly on the first day of absence.

In the case of illness, a medical certificate should be obtained from a doctor if the absence is, or is expected to be, at least seven days.

You should consult a doctor as soon as you need to and you should be registered with a GP (General Medical Practitioner) locally in Glasgow.

Your medical certificates should be uploaded to your student account on MyCampus.

Medical certificates should also be supplied in the event of short absences.

We reserve the right to terminate registration and, if appropriate, stipend payments, in the event of unexplained absence or unsatisfactory attendance.

Research students are subject to annual progress review and renewal of studentships at the beginning of each academic year, and hence any stipend payment is conditional on satisfactory progress.

External funders normally require the Graduate School to report unsatisfactory progress or unsatisfactory attendance.

UK research councils stop stipend payments and suspend studentships after 13 weeks illness. Unless other sponsors specify differently, this will be taken as the standard criterion. Special arrangements are made in the case of maternity leave or long term illness.

Non-UK nationals: Requirements under the UK Visa Regulations. Under the revised visa regulations the university is obliged to record attendance and report unauthorised absences to the UK Visas and Immigration (UKVI).

However, we expect students to be in attendance regardless of the new visa regulations.

Visas are granted on the understanding that the student will indeed be a full time student in attendance at the institution acting as the student's sponsor.

This is why it is essential that sickness absence be reported and supported by medical certificates; holidays approved by your supervisor; and any 'research furth of Glasgow' pre-arranged and properly approved.

In addition to routine course attendance, your status at the University of Glasgow will also be monitored at two re-registration check-ins during the academic year.

For more information on Tier 4 visa attendance go to:
www.gla.ac.uk/services/registry/tier4

Further information the university's policies on on attendance and absence, including the Student Maternity, Maternity Support and Adoption Policy and the Student Parents Policy can be obtained from the Senate Office's **Policy, Strategy and Regulations**[13] web page.

4.4 Special Considerations for Part-time Degrees

Studying on a part-time basis often involves additional factors. Prospective part-time students and supervisors are encouraged to discuss the question of time commitment thoroughly before embarking on a research degree.

The overall timescale for part-time study is correspondingly longer than for full-time students and you should take this into account.

Part-time students in medicine and veterinary medicine face particular problems if they are continuing to carry out routine clinical work unrelated to the research.

It is important that they remain in close contact with their supervisors, even after they return to their clinical duties full-time and are writing up the thesis.

4.2 Suspension of Study

The option of 'suspension of study' may be approved where good cause is demonstrated, e.g. maternity leave, prolonged illness, etc. Applications should be made in writing to the Graduate School using the appropriate form and should have the support of your supervisor and PGR Convener. This will be passed to the Higher Degrees Committee for review.

4.3 Extension of Study

Following the completion of the student's research period, an extension refers to any amendment to the deadline for the student's thesis submission. This must be approved by the Higher Degrees Committee and may refer either to a period of approved suspended study during the thesis pending period or to an additional approved period of time allowed before submission.

For further information regarding guidelines pertaining to attendance and other policies and procedures, please go to the University of Glasgow PGR Code of Practice.

As a postgraduate research student in MVLS you will be required to confirm that you have read the PGR Code of Practice. Please go to the Graduate School's **Policies and Procedures**[5] web page for more information.

4.5 Special Arrangements and Fee Discount for Members of Staff

A candidate holding an appointment as a member of the teaching or research staff of the University of Glasgow, paid through the Finance Office or directly by a grant awarding body approved by the University Court, may register part-time whilst being subject to the same provisions regarding minimum periods of full-time study if they devote the major part of the day, typically 75-80% of their time, to research studies.

Those members of staff who benefit from paying part-time fees are expected to achieve the same submission and completion rate as full-time students (see 3.2).

You may be working full-time on research that will form your thesis, but you must remember that you have been employed to do a job.

You are not a postgraduate student on a studentship. Your supervisor is normally also the grant holder. The timetable has already been set in the grant application and you will be expected to adhere to this. As the research questions and methodology are already set you may have a comparatively short time to orient yourself to the project.

You are unlikely to have the same amount of time to immerse yourself in the literature as a conventional research student. In addition, you might well be involved in a bigger project, collecting more data than will be part of your thesis.

From the outset, you must be clear as to what you can or cannot use as part of your thesis. In some cases the work for your thesis will be additional to the major study.

Whatever the case, the emphasis will be on producing reports for the grant-giving body and writing papers. Producing (at least first drafts of) these may be part of your job.

Generally, grant-holders are happy for research assistants to register for PhDs.

You may be given some time to work on your thesis during your working day, but it is not unreasonable for a grant holder to expect you to write most of your thesis in your own time.

The amount of time required has not been allowed for in the original timetable and you are not being paid to do this.

Remember, your salary is considerably more than a postgraduate studentship. You may find the time available to take on other activities (e.g. teaching) limited.

As a member of the university staff you will be included in the staff appraisal scheme. This will give you the opportunity to discuss any problems with someone other than your supervisor(s), and also wider career development issues.

You are also able to take advantage of courses run by the Staff Development Service. A programme of courses offered in each academic year is available on the **Human Resources** [12] web page.

YOUR SUPERVISION

5.1 Supervisory Arrangements

The university's PGR Code of Practice for postgraduate research degrees is available on the Graduate School's **Policies and Procedures**[5] web page.

It states that each student should be provided with a supervisory team consisting of at least two staff, comprising a primary supervisor and one or more secondary supervisors.

Coupled with the above, the Graduate School has agreed that staff in all schools may supervise research students based on the criteria in Section 5.2 of the Code of Practice.

5.2 The Role of Your Supervisors

The role of your supervisors is to introduce you to a specific research field, to help you with the formulation of your research problem and to supervise all aspects of your research training including the production of publications and the final thesis (see Code of Practice).

The relationship with your supervisors can be one of the most important factors affecting the success of your research training and the enjoyment you will get from your time spent as a research student.

It is important that you develop a good rapport with your supervisors.

At the start of your studies, you should discuss and agree with your supervisors how frequently you should meet.

You are encouraged to have frequent brief meetings, but also regular, more formal meetings at weekly or fortnightly intervals as appropriate.

It's important to keep a written record of your formal meetings with your supervisors. This is usually an agreement of what decisions have been made about progress and so forth.

5.3 The Supervisory Team

Alongside a primary supervisor and a secondary supervisor, your supervisory team may consist of further secondary supervisors.

They will be appointed where necessary to provide sufficient expertise for your project - e.g. the topic covers multiple disciplines or one supervisor is appointed for a specific purpose only, such as a technique, or one supervisor is a clinician or scientist.

It is worth sending any supervisors who are not present at a supervision meeting a brief summary of the session to keep them up-to-date with decisions.

5.4 The Role of Your Postgraduate Convener

The Postgraduate Convener has overall responsibility for research students in your school.

They do not normally take an active role unless actually supervising the research, or there are problems with supervision that require arbitration.

5.5 The Role of Your Reviewer/Assessor

An assessor will be appointed for you during the period of your research study. The assessor, where possible, will be generally familiar with the area of research. Your assessor will be responsible for encouraging both you and your supervisors to adopt the best practice and will assist you with regard to solving problems arising during the period of research, including problems that may arise between you and your supervisors (see Appendix 1).

5.6 Dealing with Problems

Most students experience problems at some time during their studies.

Most will be concerned with the work itself but you may experience personal problems too. Remember that it is important that you talk to someone at an early stage when the problem is often easily overcome.

You should discuss project matters with your supervisor. But what happens if the problem is your relationship with your supervisor?

In such cases you should try to sort this out with your supervisor, at least in the first instance. Give them the opportunity to consider practices. They may be totally unaware of the problem.

If this is not possible, speak to your reviewer or perhaps to the Postgraduate Convener in your school.

If you are unhappy with the help you receive or if you would prefer to talk to someone outside your school, please contact the Dean of Graduate Studies. You may contact the Dean at any time to discuss issues that concern you.

For information on the university complaints process please see the university's **Complaints**[13] web page.

5.7 Useful University Contacts

Information about the services provided by all of the offices listed below is available on the **MyGlasgow Students**[4] web page.

You should, in all matters of difficulty, contact your supervisor, the Graduate School office or the Head of School in the first instance.

Accommodation Services[14]
Student Services Enquiry Team,
Fraser Building
accom@glasgow.ac.uk
+44 (0)141 330 4743/4544

Careers Service[15]
Fraser Building
careers@glasgow.ac.uk
+44 (0)141 330 5647

Counselling & Psychological Services[16]
67 Southpark Avenue
studentcounselling@glasgow.ac.uk
+44 (0)141 330 4528

Disability Service[17]
65 Southpark Avenue
disability@glasgow.ac.uk
+ 44 (0)141 330 5497/5121/7237/2260

Equality and Diversity Unit[18]
equality@gla.ac.uk
+44 (0)141 330 1887

International Student Support & Visas[19]
Fraser Building
internationalstudentsupport@glasgow. ac.uk

Occupational Health Unit[20]
ohu@admin.gla.ac.uk
63 Oakfield Avenue
+44 (0)141 330 7171
(N.B. this is for occupational health enquiries only, not general medical consultation. All students should register with a General Medical Practice in Glasgow, within the post code area where they are living).

Registry[21]
Student Services Enquiry Team,
Fraser Building
+44 (0)141 330 7000

Report bullying, discrimination or harassment[22]
Support for bullying, discrimination, harassment or sexual harassment.

Research and Innovation Services[23]
11 The Square
RIS@glasgow.ac.uk
+44 (0)141 330 2730
Research Integrity Champions and Advisers[26]
Research Integrity[27]

Safety, Health & Wellbeing[26]
Find supportive services and resources to help you live well.

Sport[27]
Stevenson Building
77 Oakfield Avenue
+44 (0) 141 330 4540

Garscube Sports Complex West of Scotland Science Park +44 (0) 141 330 5363

sport@glasgow.ac.uk

Student Learning Development[28]
Dr Jennifer Boyle, Effective Writing Adviser - Postgraduate Research Students
Jennifer.Boyle@glasgow.ac.uk
+44 (0)141 330 6700

Students' Representative Council (SRC)[29]
 A student-led organisation representing the students of the university.
McIntyre Building
enquiries@src.gla.ac.uk
+44 (0)141 330 5360

University Nursery[30]
28 Hillhead Street
ecs-nursery@glasgow.ac.uk (for general enquiries)
+44 (0)141 334 4650 (for Nursery Manager only)

5.8 English Language Courses

All students who do not have English as a first language are advised to attend support classes in the English for Academic Study (EAS) for the first semester, irrespective of whether they have attained the level stated as a condition of entry.

The EAS also provides cultural and social support in addition to an introduction to the local dialect. More information on the EAS can be found on the university's **English for Academic Study**[31] web page.

5.9 Accessibility

Please let us know if you have any accessibility requirements. We aim to ensure everyone has equal access.

If you need alternative formats or other reasonable adjustments, please contact **mvls-gradschool@glasgow.ac.uk** with your request so that arrangements, where possible, can be made.

Due to our hilltop campus, limitations may be encountered and that may limit some of the arrangements we would wish to make.

The wide ranging measures the university is making to improve our accessibility are detailed on the university's **Accessibility**[34] web page.

5.10 Maintaining Contact

Please ensure that you keep in touch with your supervisors and they have up-to-date information on your address (both in Glasgow and your main home address if different) and phone number, where possible.

Students do tend to move location and it is important that you update your records and keep us informed if you do.

The easiest way to update your contact details is through MyCampus, which can be accessed through the **MyGlasgow Student Portal**[1].

The Graduate School would remind you that your university student email address* is the address which will be used for **all** communications from university services (e.g. Library, Registry, Finance Office) and the Graduate School, as well as staff in your own school.

An email from these official sources has the same weight as a written document; it is your responsibility to check your own account. Y

our student email address can be accessed via IT Services: **Student Email**[33] using your GUID credentials. Here you will also find instructions for configuring your email on an email client or mobile device.

For further information on university communication channels please visit the **University Communication Channels**[34] web page.

*As a PGR student you <u>may</u> have two email addresses**:**

GUID@student.gla.ac.uk and **initial.surname.x@research.gla.ac.uk**

Both addresses deliver to the same account, and there is no need to check them separately.

TRAINING AND ACTIVITIES

6.1 Research Training Programme

Researcher development is increasingly seen as a core part of any postgraduate research degree.

The College of Medical, Veterinary & Life Sciences provides a comprehensive professional and career development programme to help PGRs develop transferable skills that will be useful to them during their degree and in a wide variety of future careers.

This includes an extensive range of short workshops or online courses on topics which includes writing and presentation skills, information retrieval techniques, statistics, research design and ethical issues.

Attendance at these workshops or online courses may be distributed over the duration of the study period, but you should be aware that the large majority of these are most relevant to you in your first year of study.

Some of these courses are regarded as being 'mandatory' topics that should be attended by all students in order to achieve the requirements for progression into the next year of study (e.g. research integrity).

Discuss your training needs with your supervisors, by making use of the Researcher Development Framework (see Appendix 2).

Maintain a log book and personal development plan and discuss this with your supervisors.

The University of Glasgow has an online booking and e-portfolio system called Inkpath, which you will use to record, review and reflect upon your personal development planning. You can access **Inkpath**[35] via the web page.

You are advised to refer to the Research Training Programme Handbook for further information on the activities available and how to book them.

This can be obtained from the Graduate School's **Skills Training**[36] web page.

A record of the courses you have attended will be in your portfolio on Inkpath, which you are free to download.

Please note that you are responsible for maintaining your portfolio and attending appropriate mandatory activities as outlined in the RTP handbook and on the Graduate School website.

6.2 Extracurricular Activities and Societies

6.2.1 PGR Blog

The **Postgraduate Researcher Development Blog**[37] is a postgraduate community blog, written by postgraduate researchers with the aim of helping research students to navigate postgraduate life.

The blog aims to help current and prospective researchers to navigate PGR life at the University of Glasgow throughout the academic year. It includes guidance, tips and advice on life and researching in Glasgow from other postgraduates, university staff, and experts from around the world, as well as competitions and more. Follow the PGR Blog on Twitter **@UofG_PGRBlog**

The blog post '**Our Approach to Researcher Development This Coming Year (and How You Can Help**'[38] highlights some of the changes and alternatives available as a result of the Covid-19 pandemic.

6.2.2 Societies and Clubs

There are over 200 Students' Representative Council affiliated clubs and societies and over 50 Glasgow University Sports Association affiliated sports clubs which you can join.

You may choose to join several clubs or societies from this wide variety. Joining a club or society is an excellent way to meet people who share a similar interest and to participate in extracurricular events and excursions, giving you necessary breaks from your research.

You can choose how much time you devote and how involved you become in a club or society.

More information on SRC affiliated clubs and societies can be found on the **SRC**[39] website.

Further information on sport clubs and Fitness and Wellbeing Resources can be found on the university's **Sport**[27] web page.

6.3 Research Development Activities

6.3.1 Demonstrating

You may be asked to act as a demonstrator to undergraduate students and you may find this a valuable experience, giving you a taste of what teaching is like and for you to see if you have an aptitude for teaching.

It also provides the opportunity to refresh your basic knowledge of the subject.

It is your responsibility to ensure that the time devoted is within the time limit allowed by your studentship.

You should only take on demonstrating if you are genuinely interested in teaching: it is important that you actively engage with students and provide a positive experience for them.

Quality assurance procedures mean that you will be evaluated.

6.3.2 Scientific Societies and Professional Opportunities

You are encouraged to join your relevant professional scientific society (in some cases still on preferred student fees) and you should take advantage of training opportunities and travel fellowships offered by them.

We recognise that many societies and social opportunities are currently unavailable to students. There is information for **Distance PGR Support**[40], which includes available webinars, writing support, the university's Yammer Group, ways of keeping in touch with other PGR students, and IT Training.

Information on other opportunities, such as the Three Minute Thesis competition and Impact in 60 Seconds competition is available on the university's **Our Research Environment**[41] web page.

6.3.3 Scientific Meetings

You should discuss opportunities to participate and present your work at online events with your supervisors and aim to attend scientific meetings when possible.

Postgraduate research students may apply for funding if they are making the first presentation of their research (oral or poster) at a conference of international or national importance.

Priority will be given to presentations at major conferences with an international audience.

Supporting documentation confirming that your presentation will be included in the conference programme must be included with your application. Up to £400 is available for attendance within the EU and up to £750 for international events.

Skills Training Activities funding of up to £2,000 may be available on application from postgraduate research students or early career researchers.

Activities and events should fit with development of skills and attributes outlined in the Researcher Development Framework found at **www.vitae.ac.uk**

Please contact the Graduate School Office for an application form for both Conference Funding and Skills Training Funding at **mvls-gradschool@glasgow.ac.uk** or find them available on the Graduate School's **Current PGR Student Information**[42] web page.

Discuss all relevant opportunities to attend and present your work at online events with your supervisor.

Attending will earn you credits towards your PGR training record. See the RTP handbook for more information.

6.3.4 Job/Fellowship Applications

Students who aim to take up a postdoctoral fellowship after graduating should start to make enquiries and applications up to one year in advance of the projected start date, i.e. normally during the summer of their second year.
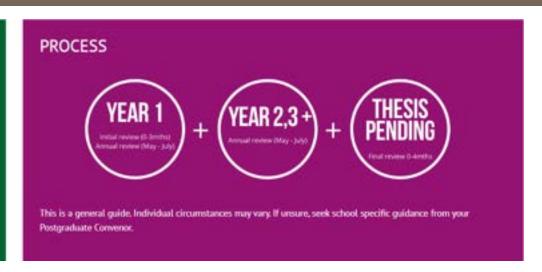
Many of the competitive fellowships have a closing date during the period October – December in the year preceding the year of tenure.

Early investigation is therefore essential. Students should keep their supervisors informed of their plans.

ANNUAL PROGRESS REVIEW

PURPOSE

The main purpose of the APR is to assess your progress in relation to your stage of study.

- It's an **essential requirement** for every research student.
- Provides an opportunity to discuss all aspects of training needs, milestones, work, achievements and any other issues.
- Allows you to get feedback on your research, personal development and performance.

PROCESS

YEAR 1 (Initial review (0-3mths) Annual review (May - July)) + YEAR 2,3+ (Annual review (May - July)) + THESIS PENDING (Final review 0-4mths)

This is a general guide. Individual circumstances may vary. If unsure, seek school specific guidance from your Postgraduate Convenor.

To meet Senate requirements, our progress reporting process involves the following elements:

- students evaluate their training needs
- students agree on a training plan with their supervisor
- students write a 3000 word literature review and also complete a progress report;
- supervisors complete formal progress report including a recommendation on whether the student be readmitted for the next academic session;
- a progress interview with two panel reviewers academic colleagues (academic colleagues that are not the supervisor)
- PGR Convenor reviews and assigns a final recommendation

Details of this procedure are available on the Graduate School's **PGR Progress Review**[43] web page.

All first year students should have an initial review in the first 3 months. Followed by an annual review normally in May.

It is your responsibility to make appointments with your supervisor and assessors.

If you start your degree between **March-June** your Initial and Annual Reviews will be rolled together so that these reviews phase in with the academic year cycle. And must be completed by August 31st.

If you start in **July-Sept** your initial review should be completed in the following January as per the normal process.

Contact the MVLS Graduate School if you are unsure what to do.

You are required to write a 3000 word literature review in the first few months of study. This is the first real test of your ability in scientific writing.

In some PhD schemes you may undertake placements for some months before choosing a definitive PhD topic and won't do an initial review.

Please contact the MVLS Graduate School before starting the annual review process if you are on a DTP, Precision Medicine or Wellcome Trust project.

In such cases the student may be involved in writing the project proposal.

Research students are also expected to deliver research seminars at an appropriate level, at least annually and in addition to any lab journal club or less formal groups.

If you are encountering any issues with your research or as a new student, it's important you have a chat with your supervisor. Good communication goes a long way!

MVM, MSc (R) and part time students have to complete initial and annual reviews. If you are unsure, contact the MVLS Graduate School.

All information you need is on the MVLS Graduate School website[42]. It's a great resource.

Annual progress reviews in second and subsequent years will involve more discussion of actual results.

In the final year of study, you are expected to incorporate a thesis plan in the scientific report.

The aim is to ensure that students fully understand the need to keep to a workable schedule for eventually writing a thesis.

When you go into Thesis Pending, one final review has to be done.

7.1 APRs – COVID-19

Your APR is an important part of your studies and an opportunity for you to discuss your progress and forthcoming plans with both your supervisor and an internal reviewer.

While the COVID-19 pandemic is subsiding, it may still have a possible impact on your studies.

Use your APR to consider the ways in which you think that you and your research may, and have been, affected by Covid-19 issues.

Take the opportunity to discuss the nature of the disruption on your research as part of your APR.

You will not necessarily be able to predict the full impact at the time, but we ask that you describe how your studies might be affected in your self-assessment.

7.2 Assessing Academic Disruption

Supervisors will help you to identify ways in which you can complete your thesis in a timely manner while, importantly, preserving the quality of your thesis.

7.3 Continuing Students

Discuss the details of any mitigation with your supervisors as part of your annual APR.

Mitigating actions are the principal route for addressing the impact of the pandemic on your research studies, and thus in supporting you to succeed in your research.

Following your APR, it is expected that you will start to implement any mitigation actions agreed at your APR.

Your academic supervisor will also work with you to assess the impact on your research studies project once the mitigating actions have been taken into account.
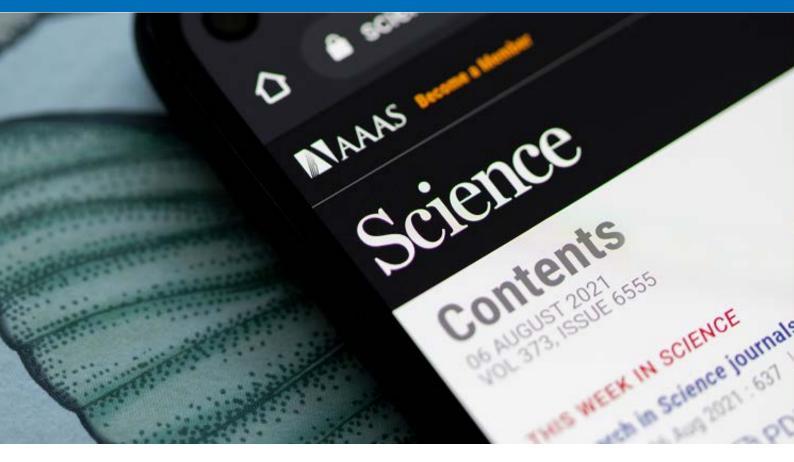
7.4 New Students

It is expected that you will start to implement any mitigation actions agreed with your supervisors.

Mitigating actions are the principal route for addressing the impact of the pandemic on your studies.

PUBLICATIONS

Publications have their own section in this document to remind you of their importance.

For those of you interested in an academic career they are probably the single most important element of your C.V.

By the time you are going for job interviews it will be assumed that you have a higher degree and this will be taken for granted.

'What have they published?' is the question future employers will certainly consider. This will be followed by 'where?'

You should be aiming to publish in journals of recognised standing.

Since the advent of the Research Excellence Framework, quality counts rather than mere quantity.

When you are struggling to complete your research and to write your thesis, it is easy to put off preparing articles until 'later'.

Unfortunately 'later' sometimes never comes: you get bored with the topic; you move away and losing daily contact with your research loosens the imperative to write it up; you have even less time in your new job.

To motivate yourself, keep in mind that publishing demonstrates the quality of your work and makes you more employable.

The style and pattern of your research may make having papers published by the time your thesis is submitted unlikely, but at the very least you should have submitted these.

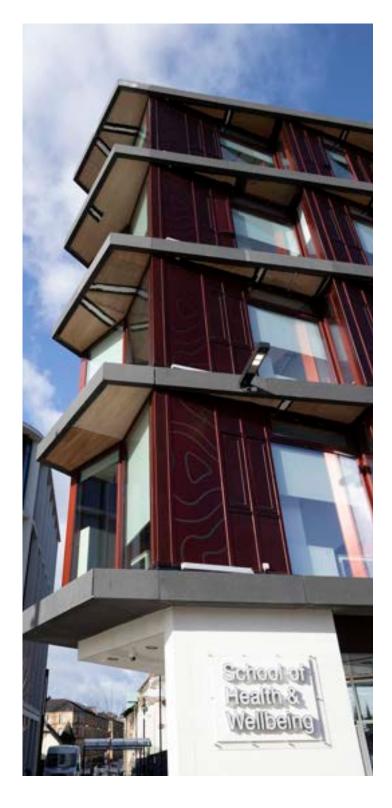The euphoria (coupled with the anxiety) of submitting your thesis makes it unlikely that you will immediately return to your desk and produce papers.

It is difficult to give an average for the number of publications you should aim to get from your research, as this depends on the type of study, the 'success' (or otherwise) of your results and so on, but you should discuss this with your supervisors.

8.1 Timescale for Submitting to Journals

If you are not familiar with submitting articles to journals this brief breakdown gives you an indication of how long a process it can be:

- submission;

- with some journals, the editorial board make a decision on whether the manuscript is appropriate for sending for review or whether it should be sent back immediately without further review. The decision not to review normally reflects the fact that the manuscript is not appropriate for journal to which it has been submitted;

- when the manuscript is deemed appropriate for reviewing, it is sent out for peer review. The referees are almost always anonymous. This will normally take 4-6 weeks but may be considerably longer;

- the article will be returned to you with reviewers'/editor's comments. It is uncommon for a paper to be accepted without needing to be rewritten in part. These criticisms, from (anonymous) experts in the field should also improve the writing of your thesis;

- resubmit. It may or may not go back to referees, or a decision may be made by the editor - anything up to another couple of months;

- final decision;

- publication - many journals are now publishing manuscripts in electronic form immediately upon acceptance. However, it usually takes between 2-4 months after acceptance for the paper version of the manuscript to be published.

You can now see why, if you want to impress examiners and employers with your publications, you need to start early.

8.2 Authorship of Papers

It is normal practice for the first author on a scientific paper to be the person who was responsible for carrying out the majority of experimental work and generally, the last author on a scientific paper to be the senior (and corresponding) author.

The senior author is the person responsible for initiating the project (i.e. having the idea) and organising the work on it.

Whilst in the majority of cases, the supervisor of most PhD, MD or DDS research will be the senior author, this may be changed in cases where the student took a major part in determining the actual formulation of the project.

In such cases the student may be both first and senior/corresponding author, particularly in cases where the student is also the research assistant on a grant-assisted project.

Importantly, with all publications, it is essential that your position on the authorship list should be negotiated in good faith with your individual supervisors.

This should be done as early as possible in the formulation of papers as these issues can lead to real difficulties and bad feelings when students feel that they have been unfairly positioned on the authorship list.

If your name is going to come first, however, your supervisors will expect you to have been the person responsible for generating the majority of the data presented in the paper.

It is also not unreasonable for the supervisor to expect you to be responsible for writing the first draft, making changes after discussion, being responsible for seeing it meets journal requirements, dealing with rewrites - all without constant reminder by the supervisor(s).

If you do not respond to prompts by your supervisor(s) to produce a paper in reasonable time and they take on the burden of drafting the paper(s) then your position in the authorship list may be reviewed.

Please note that papers published on work carried out for your PhD, MD or DDS (or other work at Glasgow) should bear the name of the school and college where the work was carried out, and many funders will also insist on being referred to as well as supporting the research.

This is the correct acknowledgement and not the name/place of new employment.

8.3 Ownership of Data/ Intellectual Property Rights

You, the student, own the Intellectual Property Rights (IPR) of data generated during your course of study unless you have explicitly assigned this elsewhere.

The university has developed a general agreement which will allow a student to assign their IPR to the university and receive the same benefits as an academic in exploiting the Intellectual Property.

For more information please go to the university's **Our Policies**[44] web page.

Many research councils and external sponsors may require you to assign your IPR to the university as a condition of funding.

You should determine whether any IPR arrangements you sign up to are fair and enforceable.

You are strongly encouraged to discuss the IP situation with your supervisor(s) at a very early stage and, of course, any agreement should be documented in case it becomes a matter of dispute later on.

8.4 Data Management

Publicly funded research is a public good. When data are created as part of academic research, they should be carefully stored, managed and, wherever possible, shared.

Data management plans are required by many funding bodies at the point of your first year Annual Progress Review and should be maintained throughout your degree: please make sure you understand and follow any requirements of your particular funding body and the university.

Good data management should be a core component of good academic practice.

The university expects researchers to ensure that data of longterm value (for example, data that underpin a publication or thesis, or that will form the basis of a future funding application) will be securely held for a period of ten years after the completion of a research project, or for longer if specified by the research funder or sponsor.

For this reason, PGRs are required to submit a data management plan as part of their annual progress review. <u>Attendance on the Research Data Management course is mandatory for all postgraduate researchers.</u>

For more information on data management plans, please see the university's **Data Planning**[45] web page.

The **Digital Curation Coalition**[46] also have extensive resources (and more examples of data management plans) available on their website.

For the regulations governing PGR data management plans, please see the Code of Good Practice in Research and the Postgraduate Research Code of Practice available on the university's **Our Policies**[44] web page.

For more information on the Research Data Management course, including instructions on how to enrol, please see 'Mandatory Courses for new PGRs' and 'How to book and cancel courses' on the university's **Our Research Environment**[41] web page.

IN YOUR FINAL YEAR

9.1 Thesis Submission and Examination Arrangements

The time taken to write a thesis, like that required for everything else, is often longer than at first supposed.

Please see Appendices 3, 4 & 5 – Outlining a Plan of Work, Guidance for Thesis Preparation and Recommendations for the Presentation of Theses.

A sensible timetable needs to be agreed with your supervisor(s) at an early stage in the final year and should include sufficient time for corrections of draft chapters by them and for second (and third) rounds of redrafting.

The guidance notes for the writing of theses make it clear that preliminary experience with writing should have been gained during the prescribed period of study in the form of writing reports for supervisors, writing (and presenting) papers within your school or at conferences and in documenting literature.

The following notes deal with the contents of a thesis and some training in writing is assumed.

If no such experience has been gained by the beginning of second year, especially with candidates for whom English is not the first language, the matter should be raised by the student with the supervisor(s).

9.2 Submission

Approximately six months before the expected submission of your thesis, you should complete the **'Notice of Intention to Submit a Thesis for a Higher Degree by Research'**. This is done online at **www.mvls. gla.ac.uk/TAP**.

This form permits the institute or school to make a prompt appointment of a Special Committee of Examiners comprising a convener, internal examiner and external examiner.

The identification of an exam convener and examiners is the responsibility of your Postgraduate Convener in consultation with your supervisor(s). It is not appropriate for you either to be involved in the identification of the examiners or to be informed of the names of those under consideration.

The nominations are approved by the Postgraduate Convenor. Following approval, the Graduate School staff will send a formal invitation to the examiners inviting them to examine the thesis.

The appointed exam convener of the Special Committee of Examiners has responsibility for arranging any oral examination, normally within three months of receipt of the thesis.

They are also responsible for ensuring that the viva is conducted in a fair manner, and in view of this, it is expected that they will be present for the duration of the examination. The exam convener is also responsible for assisting the examiners in reaching a consensus.

Normal procedure is to submit one copy of your
thesis and a word count form electronically to:

mvls-gradschool@ glasgow.ac.uk

Occasionally external examiners <u>may</u> request a soft-bound copy of your thesis to be sent to them. Your local school admin will arrange this with you.

You should also have your own copy for the viva. You will be asked to confirm the word count when submitting.

Note: In signing a submission form, the supervisor is confirming only that the work was undertaken by the candidate.

The principal supervisor will be asked to confirm if they have had sight of your thesis.

The supervisor's signature does not endorse that the work has been completed nor does it indicate that the thesis has achieved the required standard for the award of the degree.

A candidate may submit a thesis against the advice of the supervisor but in such cases the supervisor may state the position in a report submitted to the convener of the Committee of Examiners.

9.3 Criteria for a Satisfactory Thesis

In order to be judged satisfactory a thesis must fulfil the following criteria:

- Is an original work making a significant contribution to knowledge or understanding in the field of study.
- Shows adequate knowledge of the field of study and relevant literature.
- Shows the exercise of critical judgement with regard to both the candidate's work and that of other scholars in the same general field.
- Contains material which presents a unified body of work such as could reasonably be achieved on the basis of three years (if a PhD) of postgraduate study and research.
- Is satisfactory in its literary presentation, gives full and adequate references and has a coherent structure understandable to a scholar in the same field with regard to intentions, background methods and conclusion.
- Contains material which may form the basis for a publication.

An MSc(R), MPhil or MVM thesis may be either a record of original research or a critical review of existing knowledge.

9.4 The *Viva Voce* (Oral) Examination

The copies of your thesis will be scrutinised by the examiners.

It is mandatory for PhD, MD and DDS degrees that a subsequent oral examination takes place.

For the degree of MSc(R), MPhil and MVM by research, an oral examination is at the discretion of the examiners.

The supervisor will not normally be present at the oral examination but shall be available to the examiners for consultation.

If the candidate makes a request in writing to the exam convener for the supervisor to be present at the oral examination, this should normally be permitted.

The request should be made no later than one week before the viva.

It is customary within the viva for most of the time to be spent on the work of the thesis, but the examiners are at liberty to ask general questions relevant to the field of study e.g. "Given more time, what would you do next?"

The examiners may also discuss the generic training provided by the Graduate School.

Nevertheless, you can reasonably be expected to have a majority of questions on:

- the rationale of the project;
- the suitability, advantages, limitations, etc, of the experimental theoretical methods used and any alternatives which may have been tried;
- adequacy of interpretation of the results; loopholes, flaws etc.;
- the contemporary literature on the subject.

The best preparation for the viva is for you to develop a habit of discussing your work with other people, so as to have had exposure to a wide range of criticisms, and points of view.

Currently vivas have been conducted **mainly** by video conferencing via Zoom, with a few vivas taking place in person or a hybrid model.

After your viva the Graduate School will receive the reports from the exam committee and you will be sent a formal **Outcome of Viva** letter with instructions on how long you have for your corrections and handing in your final corrected thesis.

If you need more information on vivas please contact the Graduate School.

9.5 Concluding the Examination Process

If undertaking a PhD, following the oral examination, the exam convener and examiners will be asked to sign the joint report form of the Special Committee of Examiners. The outcome of the examination will be one of the following recommendations.

- The degree be awarded unconditionally.

- The degree be awarded subject to certain minor corrections of detail or of presentation specified by the examiners. These shall not involve changes of substance to the thesis. The corrections shall be carried out within one/three months of receipt of the specifications to the satisfaction of the internal examiner.

- The degree be awarded subject to certain changes of substance in a specific element or elements of the thesis specified by the examiners. These shall not involve a revision of the whole thesis or of a major proportion of it. They may include a requirement to carry out a further period of research in order to strengthen the thesis. The revisions shall be carried out within a timescale determined by the examiners and shall be confirmed by both the Internal and the External examiners.

- The thesis as a whole is unacceptable. The candidate is invited to resubmit the thesis taking account of the comments of the examiners. The resubmitted thesis will be examined on one occasion only. It will be resubmitted within a timescale to be determined by the examiners but normally no later than 12 months after the date of the joint report notifying the candidate of the requirements for revision. A resubmission fee will be charged to cover the examining costs.

- The thesis as a whole is unacceptable for the award of a doctoral degree. The candidate is invited to revise and resubmit the thesis for a Masters degree.

- **No degree will be awarded.**

Outcomes are broadly similar for other degrees. Where correction, revision or resubmission is required, the examiners will provide a report of corrections specifying the requirements and stating the timescale.

After addressing all required corrections and/or revisions to the satisfaction of the examiner(s), you should submit **an electronic copy of your final approved thesis to the Graduate School.**
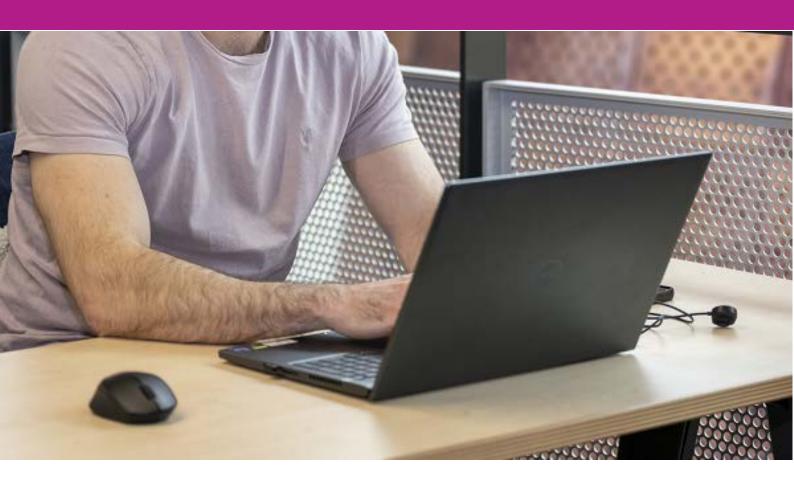
You are also required to deposit an electronic version to the University Library. You need only submit one copy electronically to the Library who will advise the Graduate School this has been submitted. This may be embargoed if you wish; further details are available from the Graduate School. The electronic version will be stored in 'Enlighten', the university's repository of published material that is maintained by the University Library. It is good practice to produce extra copies of your thesis for your supervisor(s) and yourself.

Following approval of your examiners' recommendations by the Exam Convenor, the Graduate School will issue an **Outcome of Viva** letter with instructions on how long you have for your corrections and handing in your final corrected thesis. Once receive your final corrected thesis you will be sent a formal letter of award confirming that you are eligible to graduate.

Enrolment is required for graduation and can be completed on the university's **Graduations**[47] web page. Graduation ceremonies are held twice a year, normally in July and in December.

POLICY GUIDELINES - Abridged

10.1 Use and Abuse of Internet and Email Facilities within the University

You are reminded that computer, email and internet facilities are intended only to support the research, teaching and administration of the university.

You should be aware that all electronic traffic can be monitored by IT staff. Whilst privacy is properly respected, this facility is essential to combat invasion by computer viruses and worms as well as legitimate data gathering on traffic levels.

Electronic 'traces' of internet sites you visit are recorded on your machine and centrally by IT Services.

Such traces can remain detectable during servicing and repair of your desktop machine and the central records are archived.

The university's policy towards those who access pornographic, or other generally objectionable internet sites from university machines, is clear (details below) – such misuse is unacceptable.

The university's policy requires that the college reports any such incidents to Senate; this will result in formal disciplinary action.

We are well aware that unsolicited email ('spam') continues to breach the various automatic safeguards and reaches all of us.

Provided such email is not responded to (even to ask to be removed from mailing lists), this does not cause any problem for the recipient in the context of this warning.

If you have any concerns on this topic, in the first instance please make those concerns known to your supervisor(s) or your local Postgraduate Convener.

The text below is selected from the regulations on the IT website. Each student has signed to acknowledge and accept these regulations upon registration. If you have any doubts about what constitutes 'acceptable use', please consult the university's **IT Services**[48] web page.

As a user you will also have access to vast quantities of information on the internet. These facilities are provided to enable access to information relevant to your work within the university and for career development.

Personal use is permitted so long as it is demonstrably reasonable and judicious. Specifically, this should not involve access to material of a nature which might bring discredit to you or the university.

Any staff, students, visitors or others granted access to information technology facilities who breach these regulations may be dealt with by the appropriate disciplinary procedures in force within the University of Glasgow. A breach of these regulations may constitute a criminal offence.

10.2 Additional University Policies and Guidelines

There are numerous guidelines given by the university in the 'Fees and General Information' section of the University Regulations, which also contains information on Hardship Funds, Code of Procedure for Appeals and the Complaints Procedure. This information can be accessed on the university's **University Regulations**[49] web page.

Additionally, the Code of Practice for postgraduate research degrees, available on the Graduate School's **Policies and Procedures**[5] web page, sets out the policy of the University of Glasgow with regard to good practice in all matters relating to postgraduate research students.

Its aims are to ensure that consistent, high standards are set and achieved across the university and to define clearly the responsibility of all parties, including students and their supervisors.

10.3 Sexual or Racial Harassment

"The University of Glasgow is committed to fostering a working, learning and research environment where mutual respect and dignity is experienced by and between employees and students.

The university aims to promote a culture where we embrace diversity and difference; harassment and bullying are known to be unacceptable; allegations are dealt with in fair and timely fashion, without fear of victimisation." *Dignity at Work and Study Policy and Procedure, University of Glasgow*

In the first instance, difficulties should be raised informally with the supervisor(s), assessor or local Postgraduate Convener as appropriate, with the SRC Advice Centre or via the university's anonymous online reporting tool, available on the university's **Report Bullying, Discrimination or Harassment**[22] web page.

10.4 Plagiarism

Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own without acknowledgement of the sources.

Plagiarism is considered to be an act of fraud and an offence against university discipline.

You should read carefully the university's policy statement of plagiarism (Appendix 6). If you are unsure of any aspects of the statement you should discuss them with your supervisor.

There is also guidance in the PGR Code of Practice, available on the Graduate School's **Policies and Procedures**[5] web page, and on the university's **Support and Development for Postgraduate Researchers**[50] web page. Here you will find information on self-plagiarism and guidance on proofreading.

10.5 Falsification and Fabrication

The **UK Research Integrity Office's Code of Practice for Research**[51] provides general principles and standards for good practice in research, applicable to both individual researchers and to organisations that carry out, fund, host or are otherwise involved in research.

This document has been designed to encourage good conduct in research and help prevent misconduct, in order to assist organisations and researchers to conduct research of the highest quality.

Section 3.16 Misconduct in research[52] discusses falsification and fabrication.

The University has a network of **Research Integrity Champions and Advisers**[24] that you can go to for informal advice or if you suspect an incidence of research misconduct.

RECOMMENDED READING

There are a number of books and other publications that provide useful information for research students. You are encouraged to look at the following:

ALLEN, K.A. (2005)
STUDY SKILL: A STUDENT SURVIVAL GUIDE
1st ed., John Wiley & Sons Ltd.
(ISBN 9780470094853)
Contains useful information on a range of topics.

DAY, R.A. & GASTEL, B. (2012)
HOW TO WRITE AND PUBLISH A SCIENTIFIC PAPER
7th ed., Cambridge University Press.
(ISBN 9781107670747).
A witty and informative book.

DYTHAM, C. (2010)
CHOOSING AND USING STATISTICS: A BIOLOGIST'S GUIDE
3rd ed., Wiley-Blackwell.
(ISBN 9781405198394)
This is a must for all students who use a computer package to apply statistics in practical and project work.

EVANS, D., GRUBA, P. & ZOBEL, J. (2014)
HOW TO WRITE A BETTER THESIS
3rd ed., Springer.
(ISBN 9783319042862).
This concise guide emphasises clear and logical structure as the key to a well-written thesis.

MARSHALL, S. & GREEN, N. (2010)
YOUR PHD COMPANION
3rd ed., How To Books Ltd.
(ISBN 9781845283926)
Reading this book is like having a friend with a PhD tell you what it is really like to study on a doctorate programme - warts and all!

MURRAY, R. (2015)
HOW TO SURVIVE YOUR VIVA: DEFENDING A THESIS IN AN ORAL EXAMINATION
3rd ed., Open University Press.
(ISBN 9780335263882)
A very helpful guide that will prepare you for the 'big day'.

MURRAY, R. (2011)
HOW TO WRITE A THESIS
3rd ed., Open University Press.
(ISBN 9780335244287)
Contains plenty of useful suggestions. Well worth consulting.

OLIVER, P. (2010)
THE STUDENT'S GUIDE TO RESEARCH ETHICS
2nd ed., Open University Press.
(ISBN 9780335237975)
Useful coverage of a range of ethical issues.

PECK, J. & COYLE, M. (2005)
THE STUDENT'S GUIDE TO WRITING: GRAMMAR, PUNCTUATION AND SPELLING
2nd ed., Palgrave Macmillan.
(ISBN 9781403997388)
There's always room for improvement!

PUGH, D.S. (2010)
HOW TO GET A PhD: A HANDBOOK FOR STUDENTS AND THEIR SUPERVISORS
5th ed., Open University Press.
(ISBN 9780335242023)
One of the best on the topic - strongly recommended reading.

RUGG, G. & PETRE, M. (2010)
THE UNWRITTEN RULES OF PhD RESEARCH
2nd ed., Open University Press.
(ISBN 9780335237029)
Covers topics from planning your research to writing the thesis and coping with the oral examination.

SMITH, P. (2014)
THE PHD VIVA HOW TO PREPARE FOR YOUR ORAL EXAMINATION
1st ed., Palgrave MacMillan.
(ISBN 9781137395764)
Useful and practical book to prepare students for UK based viva.

WHIMSTER W.F. (1996)
BIOMEDICAL RESEARCH: HOW TO PLAN, SPEAK AND WRITE ABOUT IT
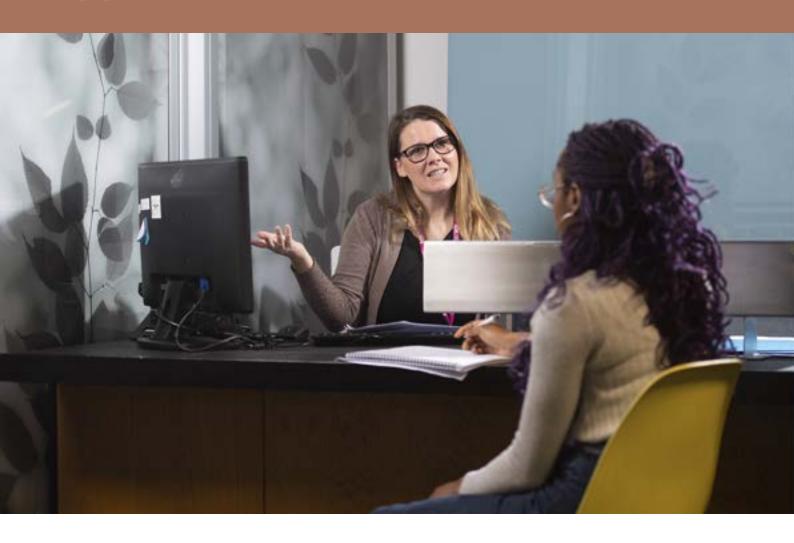2nd ed., Springer.
(ISBN 9783540198765)
Full of sound, practical advice for aspiring research workers.

11.1   Glasgow University Library

The **University Library**[53] web pages also provide a lot of useful information on a variety of 'Research Skills' relating to many aspects of postgraduate study.

Appendix 1

Guidelines on the Duties of a Reviewer/ Assessor to a Research Student

The Postgraduate Convener, in consultation with the supervisor(s), will be responsible for the appointment of an reviewer/assessor for each research student during the period of the research study.

The reviewer/assessor, where possible, will be generally familiar with the area of research and is responsible for encouraging both you and your supervisor to adopt the best practice.

They will also assist you with regard to solving problems arising during the period of research, including problems which may arise between the student and the supervisor.

Their role is largely pastoral.

The duties include the following:

- to maintain regular, informal contact with the student during the course of the research. The expectation is that there will be an informal discussion regarding progress at least once per semester;

- to maintain regular contact with the supervisor(s) during the course of the research project with the aim, in particular, of awareness of difficulties that might arise;

- to encourage the student to raise problems with the Graduate School or Postgraduate Convener which are affecting their progress;

- to provide an alternative conduit for information between the student and supervisor with the objective to solve problems at an early stage;

- to discuss the content of the student's annual progress report;

- in addition, to add a brief paragraph to the annual report on the quality and progress of the research and the research training.

Researcher Development Framework

The Research Training Programme is based on the requirements set out in the **Researcher Development Framework (RDF)** which is an evolution of the Research Councils' Joint Skills Statement and replaces this as the key reference for the development of researchers' skills and attributes.

The RDF is a national document which sets out the knowledge, behaviours and attributes of effective and highly skilled researchers as they progress through their career.

It is structured into four domains, which encompass what researchers need to know to do research, how to be effective in their approach, when working with others, and in contributing to the wider environment.

Within each of the domains are three sub-domains and associated descriptors, which describe different aspects of being a researcher.

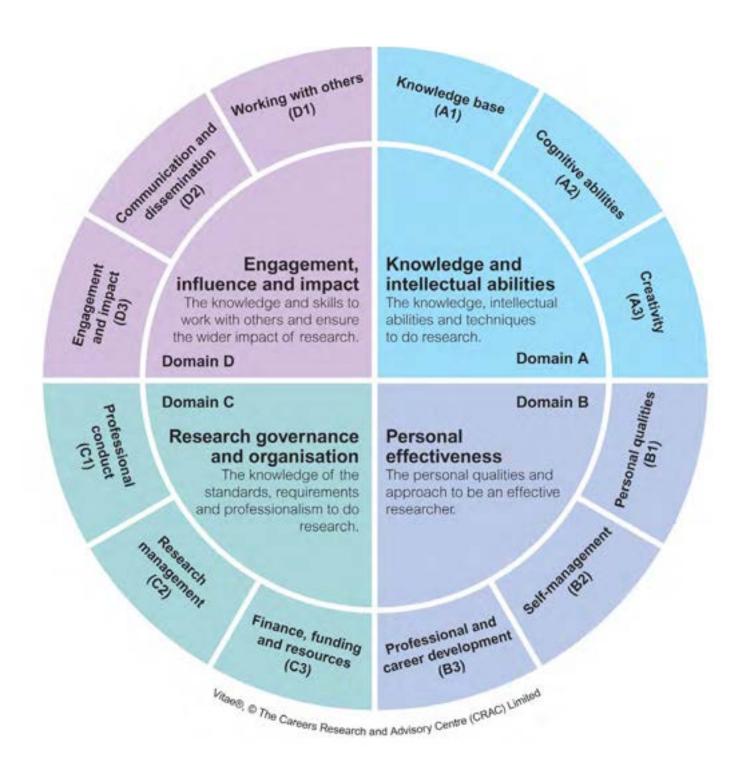Courses available in the Research Training Programme are mapped against the RDF with a descriptor number next to each course.

You are encouraged to use the RDF to plan your professional development and to update your Researcher Development Log.

It is recommended by the research councils that postgraduate students take part in the equivalent of 10 days of transferable skills training each year.

However, this does not mean that you have to attend 10 days' worth of formal courses. A wide range of activities can count towards your skills training and examples of such opportunities are listed within the Research Training Programme brochure.

You must discuss with your supervisor which RDF skills domain these fit into.

The complete version of the RDF, with a full description of what each domain covers, can be found on the **Vitae**[54] website.

Outlining a Plan of Work

Details depend on the type of research in which you are involved, e.g. a series of lab based experiments, clinical trials, one major piece of field work - but the basics are the same.

The process means moving from defining your field of study, through problem formulation, detailed thesis proposal/ protocol including methodology, data collection, data analysis to the final stage of writing up.

You are generally discouraged from leaving all the writing up until the very end, although in the tedium of data collection it is easy to put it off.

Clearly, the more you are able to do at an earlier stage, the less pressured you will be at the end - and the later you will be able to collect data.

This might be important for it will typically take you 8-9 months, full-time, to write your thesis.

The following year-by-year guide is a basic structure to be tailored to your particular circumstances.

It also gives you some indication of whether you are on course or how far adrift you are.

In most cases many activities progress simultaneously and writing should begin earlier than the third year.

Year 1

Under normal circumstances, within the first three months you should have completed an initial review online, carried out a Training Needs Analysis, a Literature Review and keep a Researcher Development Log.

At the start of May you should start the annual review process. It's your responsibility to make contact with your supervisor and assessors.

By the end of the first year you should have extensively reviewed the literature, developed a formulation of a problem which can be stated as one or more questions and developed a viable methodology.

The latter will include learning particular techniques, such as lab based skills, library skills, statistics, computing and word processing, interviewing and whatever else your research requires.

Some students are presented with fairly clearly devised research questions and appropriate methodology by their supervisor(s).

Research assistants who also intend to work for a PhD will usually find that they are expected to launch into data collection quite quickly.

Other research necessitates data collection separated by a fairly lengthy time interval, thus an early start on data collection is advisable.

This can make you feel that your work is really underway, and you have gained a head start. This may be true but you must still attend to the basics.

Your supervisor(s) may have devised the questions and methodology, but you have to write it up in your thesis.

There is no short cut to your literature review and you have to start now.

The literature review tells you not only what has been done, but what has not been done. Remember the 'original contribution' aspect of the thesis.

You will need to become conversant with ways of searching the literature. The library runs an annual course specifically for new students.

You will also need experience of a bibliographic database (such as 'Reference Manager') even if you choose to keep paper-based records (e.g. on record cards).

A good filing system for your photocopies is also worth setting up at this stage.

It cannot be emphasised often enough that you must keep full details of all references (that includes people's initials, page numbers - particularly of quotes from books).

A great deal of time can be wasted trying to find such details when you're writing up.

Your reading will initially have a wide scope which will frequently become even wider as you survey many different approaches to aspects of your topic, then narrow as you become more focused on your specific area of interest.

A number of possible research questions will present themselves - not vague, general ideas, but serious, potential topics which need working up and discussing with your supervisor(s).

Some may not be feasible in the time, require unavailable resources, or be more than one person can handle.

This will develop your thesis proposal which will be worked up into a protocol, which includes details of your methodology and how you intend to analyse your data.

Throughout the period of your study talk to as many people as possible about your work - if you can explain clearly and intelligibly what you are doing to a friend who knows nothing about it you will be able to explain it clearly in your thesis (albeit in a different style.

You also need to talk to experts in the field, if possible.

You may be able to get a Skills Training Award from the Graduate School to do courses to learn relevant techniques and enhance your skills.

Most people are happy to help with a couple of provisos:

1) you have done your homework first and

2) you have something specific to ask/learn/ discuss (if possible let the person have an outline of what you are doing and what you hope to get out of the meeting ahead of time).

Money is usually also available to travel to conferences/scientific meetings. Many grant funding bodies allow funds to travel to one overseas meeting[55].

A pilot study may be appropriate, but by the end of 12 months you should be 100% ready to collect data (i.e. data of publishable quality).

Problems in the methodology have been sorted out; you are competent in your data collection techniques, your samples/populations are organised and you have ethical permission if necessary.

This latter requirement can take several months so should be applied for as soon as you are sure of what you are going to do. However, since ethical committees often want to see questionnaires and so forth, premature application should be avoided.

Supervisors differ in the amount/type of written work they require, but for your own sake you should be practising writing, e.g. your literature review.

It will need revising later, but a good structure and outline now should be possible.

People working in lab based disciplines are used to keeping lab notebooks/workbooks in which everything is noted.

No matter what your research setting this is essential.

Note down all ideas (good, bad, indifferent, realistic, far-fetched - you never know what might be useful) and reasons for changes/decision made (it might be obvious now, but in two years you will have forgotten).

Always remember if you have concerns to bring these to the attention of your supervisor.

Year 2

The second year is usually dedicated to data collection and analysis. Specific activities are determined by discipline and topic. Where series of experiments are being carried out they should be analysed and discussed as you work through them. One-off field work does not usually lend itself to analysis until all the data are collected.

Doing a higher degree is not three years of unmitigated joy and you may hit a low spot during data collection - particularly if it is all 'more-of-the same' work.

Ward off boredom by sometimes changing your task. Write instead. Continue to work on your literature review, write your methodology (since it is now fixed), write papers for academic journals.

This may be more appropriate for research which is a progressive series of experiments rather than a one-off study. It helps to uncover any problems in methodology you and your supervisor(s) have not spotted by exposing the work to peer review.

Publishing at this stage also establishes you as a worker in a particular field, and the first investigator to publish observation X. As far as your thesis goes, it establishes to the examiners that the work has been found worthy of publication by peer review.

Reprints of published articles can be bound in the back of the thesis. Even if you do not have preliminary data to publish it may be possible to publish review or position papers establishing the 'gap' and what can be done to answer it.

When planning your work timetable it is worth considering whether data can be collected in such a way as to make publication possible.

Another way of overcoming boredom and providing an excellent incentive to those of you procrastinating over writing is to present a paper.

You will almost certainly have to do this at some stage in your school, but a short paper (or poster at a conference again exposes you to peer review and the opportunity to be questioned by (and later, hopefully, to question and discuss with others in your specific area.

Once again, research councils can be approached for support funding[55].

If you do not do this towards the end of your second year, you should certainly be considering it in your third.

Year 3

Writing your thesis will be the major project of your third year. You will have gained experience already in preparing written work for papers and articles and will have some idea of the standard required by your supervisor(s).

In fact, most of the methods and some results may already have been written or be at an advanced state of preparation during your experimental work.

Data collection should not continue beyond 6-8 months of this year. It is important to complete the writing up of the thesis before leaving the university; some jobs are contingent on the successful completion of the thesis.

There comes a time, therefore, when in discussion with your supervisor(s) it is agreed that your experimental work has reached a stage at which a contribution to your chosen field has been made and that the main parts of the thesis should be written.

Two points should be stressed 1) it all takes longer than you think and 2) no-one gets it right first time. Expect to have to rewrite several times. You also have to give your supervisor(s) time to read it, as you write it.

You may be prepared to work all night to finish, but others are unlikely to be so accommodating. You are expected to prepare your thesis yourself, but make sure enough time is left for obsessive proofreading, catching up, checking references and so forth.

It helps to draw up a clear outline of your thesis, so that both you and your supervisor(s) can see where you are going and what belongs where.

This is important for supervisors who are reading parts of a thesis as you produce them; it stops constant criticism if 'you haven't mentioned x or y' if they know that is in another part of the thesis.

It is to your considerable benefit to plan a sensible timetable for the production of a thesis with your supervisor(s).

Bear in mind that you may be rewriting sections before it goes to your supervisor(s).

The more you have written and discussed (content and style) with your supervisor(s) in the early years, the more straightforward will be the production of the first draft.

An important consideration when planning your timetable is to include holidays and other major commitments - yours and your supervisor(s).

There is no point in producing a draft when they are about to go on holiday/has hundreds of undergraduate exam papers to mark. Always discuss the best timing to submit work with your supervisor.

Toward the end of your writing up and after submission you should have a practice viva with your supervisor(s) and others.

You should also attend the workshop on 'Preparing for the Viva' run by the Graduate School.

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Appendix 4

Guidance for Thesis Preparation

Format
Guidance on the format for a thesis is given in Appendix 5.

Content
The thesis should contain in the following order (Note: all these pages may not be required depending on the structure of your thesis):

(i) 1. Title page
(ii) 2. Abstract
(iii) 3. Table of contents
(iv) 4. List of tables
(v) 5. List of figures
(vi) 6. List of accompanying material
(vii) 7. Preface
(viii) 8. Acknowledgement
(ix) 9. Author's declaration
(x) 10. Definitions/abbreviations
(xi) 11. Text – in chapters
(xii) 12. Appendices
(xiii) 13. Glossary
(xiv) 14. List of references
(xv) 15. Bibliography

It is common, although not mandatory, for the major sections, i.e. Introduction, Methods, Results and Discussion each to comprise more than one chapter if different topics are addressed in the study.

The subtle variations in thesis style should be discussed with your supervisor.

Length
The regulations specify a maximum number of words for a PhD, MD, DDS, thesis maximum 80,000 words, there is no minimum.

If the thesis does not comply with the regulations, the case for the longer length must be made by the candidate to the Higher Degrees Committee in advance of the thesis being sent to the examiners.

For an MSc(R) and MVM thesis there is no minimum and a maximum of 50,000 words.

You will be asked to confirm the word count when submitting your thesis.

This excludes references, bibliography, table of contents and appendices. Many students produce a thesis which is far too long.

Accept that your first draft will probably require substantial cutting.

Avoid producing a thesis in two volumes -every sane examiner's heart will sink.

Hierarchical structure of text

Adopt a convention that confers a hierarchical structure on the text, i.e. Chapter Titles, Headings and Sub-headings.

Whether headings are numbered or not depends on conventions of specialty and subject. Check this with your supervisor(s).

Citation of references

A great deal of thought is required here. It is likely that the writer will, in the first instance, cite too many references, both in total and for individual subjects.

It is impractical to cite every reference found on a particular point but too many will add unnecessary bulk to the text and will also break up its continuity.

A number of guidelines should be considered:

- cite references only to support major findings or develop the central theme of the study;
- cite authors originally making findings and not 'copycats';
- avoid excessive use of review articles;
- use review articles only to support peripheral, well established dogma;
- avoid destroying the flow and sense of the text by interjecting innumerable references.

It is important when citing references that they are in the form prescribed by the Guide to Authors published by the journal whose convention is being followed.

How to start writing

It is beyond the scope of these guidelines to provide a definitive overview on how to start writing but the following points may be of value.

Decide what to say - refer to the plan drawn up with your supervisors (see below).

Be absolutely clear what you wish to say. A good command of English cannot compensate for a lack of clarity of thought.

Write quickly - work towards a first draft of the section you are dealing with. It is vital at this stage to keep up the momentum and flow of thoughts.

Leave spaces for details you cannot quite remember and do not worry about style too much here - you can add these refinements later.

Avoid developing 'writer's block' - if you find difficulty in knowing what to say next or how to say it do not waste valuable time.

Refer to your plan, speak to a colleague or to your supervisor(s), or consult a paper on the particular topic giving you trouble and see how its authors dealt with it.

Plan of the thesis

Before writing the thesis itself, a plan of its entire contents should be drawn up in discussion with the supervisor(s).

The plan is, in effect, an outline of the entire written work of the thesis; without it, writing becomes more difficult and the writer often confused about what comes next.

This is especially true of the Introduction and Discussion sections where the logical development of ideas on paper is more easily achieved when their arrangement has been decided beforehand.

The plan will initially be rough in outline but progressively more detailed as discussion with the supervisor(s) and others takes place.

When complete, the plan will provide a guide as to what to do and in what order and what is to be omitted.

Whether or not a certain topic is to be covered in the Introduction or discussed in the Discussion or the extent of describing a method or the number of figures to illustrate results are features of the plan.

Once agreed, the plan should be altered only by mutual consent of supervisor(s) and student.

Having agreed the plan of the thesis, a topic e.g. Methods, Results or Introduction can now be selected and a draft of it prepared.
In practice, some of the Methods sections will have been written up already as part of a conference paper or article and it may be convenient to start by completing the Methods section.

This has the added advantage of allowing data collection to proceed at the same time; in contrast, a full time commitment to writing the Introduction or Discussion sections is usually required.

A suggested chronological sequence would be as follows.

Methods

The Methods section should not normally exceed 20% of the length of the entire work (excluding bibliography). It should be written, where possible, in the past tense as it will be concerned largely with describing accepted methodology.

Use of the present tense should be avoided. Diagrams of apparatus and other appropriate pictures which clarify the procedures used are recommended.

The Methods section should include descriptions of equipment and each experimental procedure used, giving such detail as to enable the technique to be carried out successfully by the uninitiated.

The Methods section should also include histological data, standard curves, details of statistics used to evaluate the results and a sub-section (usually) giving a comprehensive list of the names and sources of any drugs and reagents used, the formulae of any physiological saline solutions and biochemical preparations. Where a solution or reagent is common to several procedures, it may be included in a separate sub-section or Appendix.

The format of presenting this information will be to a large extent determined by the convention of the journal which has been adopted for the writing of the thesis. The order of presenting these facts will have been agreed in the plan of the thesis.

Results

The convention adopted should be closely followed, especially with regard to abbreviations; writing should be in the past tense where possible; only experiments which contribute information should be described; failed experiments should be omitted; negative findings, in contrast, may be important.

Results should flow from stage to stage with minimum discussion or conclusion, sufficient only to allow the reader to anticipate the next part without preempting a more detailed subsequent discussion.

Each result should be substantiated by a figure, graph or table. Each figure should be self supporting with a legend detailing its message and the results of the statistical analysis.

Figure-labelling, legend contents and acceptable standards of production of graphs and line drawings are detailed in the appropriate Guide to Authors.

While the length of the Results section should again be considered in proportion to the overall length of the thesis, this is less crucial than in the Methods section and all positive relevant results should be included.

Introduction

This section should provide, from the literature, a progressive description of appropriate subject matter from an overview to a highly focused account of the problem which led to the work of the thesis.

It should not normally exceed fifty pages in length. A careful balance between relevant historical data and current material must be maintained to avoid sounding out-of-date on the one hand, and pre-empting your own work on the other.

The Introduction should provide the background to your investigation with the latter appearing as an almost natural progression from existing facts.

The plan for the thesis will be especially important here. If the plan has been carefully drawn up, the layout of the introduction will have been determined, the sections and even the paragraph order arranged.

The order of topics will have been settled and the writer confident of what is to be included and omitted. A plethora of references is likely to exist as background information to the writer's topic.

These have to be handled to provide readable prose, the sense of which is easily understood and in which the text is not obscured by innumerable references included simply because the writer has found them.

Aims of the thesis

When complete, the Introduction will have shown a gap in existing knowledge to be exploited by the writer's proposed contribution and the objective of the thesis will become clear. At this juncture it is normal practice to include a brief separate section (about two pages) to outline the aims of the thesis.

Discussion

In this section, the contribution of the writer's work is placed in the context of existing literature and conclusions made. The Discussion is not a reiteration of the results hence the approach is from the writer's work, not from the literature as was the Introduction.

The arrangement of the topics to be dealt with i.e. how the various results are handled with respect to existing findings in the literature will have been discussed in drawing up the plan; any logical development of ideas which discusses the findings of the experimental work in relation to existing results will be acceptable.

Bibliography

This should follow the Harvard style (see Appendix 5). You should take care to ensure that you have presented the references in alphabetical order and that you have used the appropriate abbreviations and used the correct punctuation.

Every reference given in the bibliography should be checked against the text. In some areas 'References' is the heading given to the list of works consulted which may confirm the research/thesis, but which are not cited in the text, or may include cited and non-cited works.

Summary

This is written normally after the other sections, although it appears at the beginning of the thesis. It should not exceed 1000 words. The summary highlights the background to the work, the aims of the thesis and details of the methods and results. Finally, the contribution of the results to the existing field should be shown.

Title page

The title page should give the following information in the order listed:

- the full title of the thesis and any subtitle;
- the full name of the author, followed by any previous qualifications and distinctions;
- that the thesis is being submitted for the degree of PhD/MD/DDS/MPhil/MSc(R)/MVM;
- that the thesis is being submitted to the University of Glasgow;
- the college in which the research was conducted;
- the month and year of submission.

Acknowledgements

These should be contained on a separate page. It is customary to acknowledge all who provided direct assistance during the study including, for example your supervisor(s), technicians, fellow postgraduates, funding body, parents, etc.

List of contents

This should be given in sequence, with page numbers for all sections of the thesis, including Chapter titles, Headings, Sub-headings and Appendices.

List of figures and tables

As for the list of contents, this should give in sequence, with page numbers, the titles of all figures and tables contained within the thesis.

List of abbreviations

If your thesis contains many abbreviations it is advisable to include a list of all such abbreviations at the start of the thesis.

Appendices

These may consist of material of such length or of documents, tables or other evidence that, if included in the text, would interrupt its flow.

Access to your thesis

When you submit your thesis to the Graduate School you will be given a 'theses access declaration form' to complete. This form instructs the University Library whether you wish to permit immediate access to the material or to restrict access. Theses of the university are normally freely available for consultation in the University Library, or within another library, immediately after deposit, but a candidate may stipulate an embargo, i.e. a period of three years after deposit during which their consent must be sought before such access is given. A candidate is usually advised by the supervisor if commercial or patent reasons make this restriction desirable.

Points to ponder

When complete, each section should be submitted to the supervisor(s) for comment. The arrangements for this will have been made beforehand with due regard to the supervisor's commitments and the time available to the writer. The process of having your work read by your supervisor(s) is greatly facilitated by common sense and understanding on both sides and by an appreciation that the exercise is designed to improve the quality of work.

Re-reading and re-drafting

No matter how careful you are, you will need to check your work. You are ultimately responsible for the quality of the submitted thesis but you should enlist the assistance of your supervisor(s) in re-drafting what you have written.

You may find it helpful to adhere to the following checklist while re-drafting:

Content

Does the text depart from the main point being made in any section? Check for padding and irrelevance. Could a point be made more effectively by the use of illustrations?

Scientific English

It is important that your choice of vocabulary is appropriate for the scientific work you are describing.

Remember that Scientific English differs markedly from everyday English. The correct use of scientific terms is essential but avoid 'lab talk' phrases such as referring to 'dose-response curves' if you actually mean 'concentration-response curves'.

Using the term 'pH' as a verb as in 'pH the solution to pH 7' is also unacceptable.

Grammar

Is the text grammatically correct? You may wish to utilise the grammar checker contained within most word processing packages. In practice, most are clumsy to use and they cannot be regarded as foolproof.

For example, although they may quite correctly suggest changing 'the data is' to 'the data are', it is almost certain that they will incorrectly advise you to change 'the conclusion from the data is' to 'the conclusion from the data are'. Care is therefore required.

Spelling

Most word processors have excellent spell-checking facilities and these are highly recommended.

You will, however, be required to customise the dictionary by adding scientific terms not in common English use, such as technical phrases, chemical names etc.

Remember too, that spell checks do not tell you if you have the wrong word, 'were' instead of 'where'. Proofreading is still essential.

Paragraphs

Does each paragraph form a natural unit?

Sentences

Are sentences too long and tortuous? Short, well constructed sentences have more impact. Appropriate use of tense should be monitored.

Transitions between sentences and paragraphs

Are these smooth and logical?

Effective construction of an argument requires careful, logical development of your ideas. You will not succeed in this if transitions from one point to another are too abrupt.

Also, ensure that no topic is left 'hanging in the air' - a satisfactory resolution is required even if present knowledge cannot provide a full explanation.

Plurals

Have these been used correctly? Check for example, datum/data medium/media.

Punctuation

Does your use of punctuation conform to accepted convention?

Units of measurement

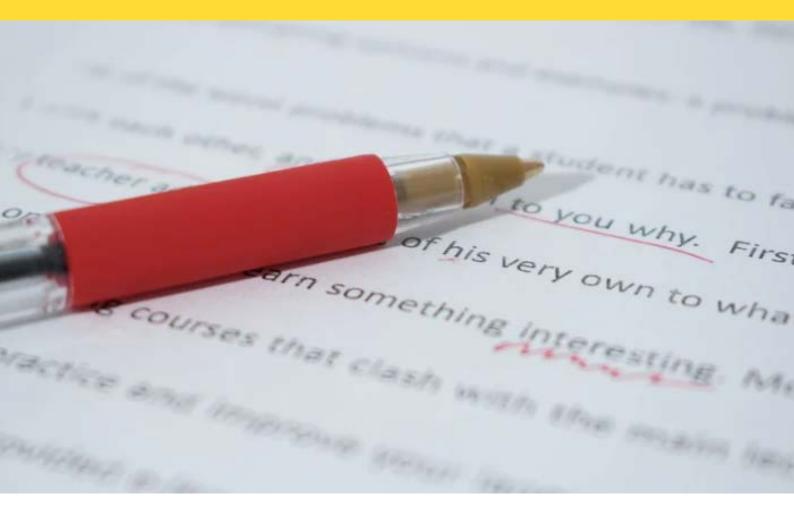Do these conform to the S.I. convention?

References

Are the references cited in the text appropriate and are the names and dates correct and in agreement with those in the bibliography?

PGR Writing Adviser

The university employs a PGR writing adviser who runs regular workshops and provides one to one feedback to PGRs on their writing. Contact: Jennifer Boyle **Jennifer.Boyle@ glasgow.ac.uk**

Appendix 5

Presentation of Thesis Recommendations

These requirements are based on 'Recommendations for the presentation of theses (BS 4821:1990)' published by the British Standards Institution.

This British Standard has now been withdrawn but as there is no replacement the following guidance will still apply.

1. Theses should be produced in a permanent and legible form - normal character size not less than 2mm.

2. Good quality paper (range 70g/m2>100g/m2) of A4 size should be used. Margins should be not less than 15mm, and 40mm at binding edge. Single, one-and-a-half, or double spacing are all acceptable, but format should be single side.

3. Pages should be numbered in a single sequence through the thesis, in single and multi-volume works.

4. The title page should give the full title of the thesis, the full name of the author, the degree for which the thesis is submitted, the organisation to which it is submitted, the college of the university in which the research was conducted, the month and year of submission. The volume number should also be given if the thesis is in more than one volume. A copyright statement in form (c) [name] [date] should be given at the foot of the title page.

5. The abstract should be placed at the beginning of the thesis, following the title page, on a separate page.

6. A table of contents should be provided, plus separate lists of tables and illustrations, and accompanying material if any. End matter may include appendices, glossary, list of references, bibliography, indices.

7. Citations in the text should be linked to the list of references following the Harvard system, with references by the author's name and date in the text and the list in A-Z order.

8. Any abbreviations should be those in normal use; where necessary a key should be provided.

9. The thesis submitted for examination is any form of non-permanent binding that is secure.

10. The final corrected approved thesis (which is submitted after any corrections are approved) should be firmly sewn and securely attached to its boards to ensure sufficient rigidity to support the weight of the work when standing on a shelf. The boards should be of dark coloured cloth. The author's name and title of the thesis should appear on the front cover; and the author's name (including initials), the degree for which submitted and the year of deposition to the library should appear on the spine, lettered from top to bottom. The volume number (if any) should also be given on the spine. This is submitted after any corrections are approved.

11. Ilustrations of all kinds should normally be bound in with the thesis. Any material which cannot conveniently be bound should be packaged so that it can be kept with the thesis, and should be labelled in a similar way.

Additional papers
Published papers relating to the main subject of the thesis, but which do not form part of the thesis itself, may be included in support of the application. In practice few candidates submit papers which
are not an integral part of the thesis.

Page layout and order

Margins:
- Top – 18mm
- Bottom – 18mm
- Left – 15mm
- Right – 15mm
- Gutter – 25mm
  (making a total binding edge of 40mm)

Pages (printing):
- Single sided on A4 paper, 70-100g/m2

FRONT MATTER

Title page
Title of the Thesis
Full name of Author
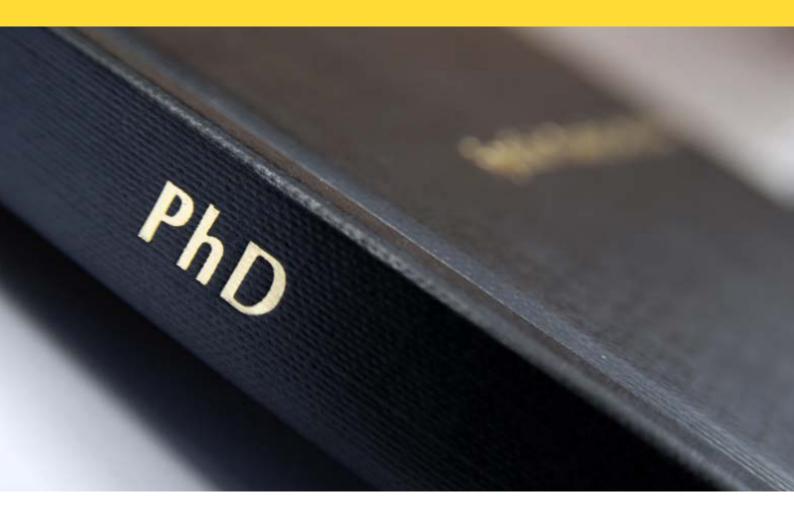Any qualifications (e.g. first degree)

Submitted in fulfilment of the requirements for the Degree of xxx, School of xxxx, College of Medical, Veterinary & Life Sciences University of Glasgow, Month and Year of deposition to the Library

Abstract
(following title page):
Synopsis of thesis, stating the nature and scope of work undertaken etc. This should be on its own on a single page.

Abstract

This dissertation reports a study on t
degree-of-freedom systems with particul
sources of energy dissipation
which

Contents

Pull out headings with page numbers (to include all pages but no reference to the contents page itself)

Order

(Note: all these pages may not be required, depending on the structure of your thesis).

1. Title page
2. Abstract
3. Table of contents
4. List of tables
5. List of figures
6. List of accompanying material
7. Preface
8. Acknowledgement
9. Author's declaration
10. Definitions/abbreviations
11. Text – in chapters
12. Appendices
13. Glossary
14. List of references
15. Bibliography

Text format fonts

- Times New Roman or Trebuchet MS for the body of the thesis
- Arial or Trebuchet MS for Headings

Characters

- Not less than 2.0mm for capitals and 1.5mm for height of lower case – 12 point as the base font size of words
- Even space between characters and words

Line spacing

- 1.5 line spacing

Paragraphs

- Flush left or may be justified (note: formatting problems can be encountered with justified paragraphs)
- With an additional line space between paragraphs (e.g. in 1.5 line spacing, 3 lines (1.5+1.5) between paragraphs)

Headings

- Used to indicate the hierarchal structure of the text
- Normally not more than 4 levels – including chapter headings as first level
- Each level distinguished from the other by position, typography, or both
- Preceding and following space should be not less than the space between the paragraphs
- Not centred – except possibly for chapter headings

Heading numbering

If required, in the format –
1. Heading 1
1.1 Heading 2
1.1.1 Heading 3

Numbering

Page numbering of chapters:

- Arabic numerals should be used throughout. Page numbers should be visibly clear of the text, preferably in the top outer corner of each page, although they may be placed in the footer

Object numbering

- Tables, figures and equations should each follow a separate sequence. Arabic numerals should be used
- Tables and Figures may be numbered in the form - Fig. 1-2 (Figure 2 in Chapter 1)

Title page

- The title page should be counted, but not numbered

Spine of Hardbound Thesis

If you are submitting a physical copy of your final thesis, details on the spine should be:

- Your initial and surname e.g. J. Smith
- Your degree title e.g. PhD, MD, MSc(R)
- The year you qualified, that is the year you submit your final thesis e.g. 2021

OTHER FORMATTING

Footnotes/Endnotes

- Footnotes – throughout the text
- Smaller in character size and more closely spaced (same size as header/footer text is recommended 10pt, although if over 100 words, 12pt should be used)
- Hanging indent format

Tables

- Each should appear complete on one page, close to the first reference to it
- If many tables, they may be collected at the end of the thesis as an appendix
- Ideally, tables should appear in normal portrait format
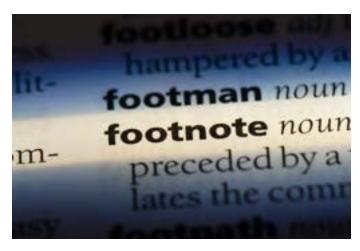
Citations/References

Citations in the text should be linked to the list of references, preferably following the Harvard system which requires the author's name and date to be given in the text and the references listed in A-Z order. References should be given in full in a single section at the end of the thesis. Journal names may be abbreviated using the recognised abbreviation for each.

Examples of references given using the Harvard system:

Milligan, G, Stoddart, L.A. & Brown, A.J. 2006. G protein-coupled receptors for free fatty acids. Cellular Signalling 18: 1360-1365. Grafen, A. & Hails, R. 2005. Modern statistics for the biosciences. Oxford University Press, Oxford. 351pp.

Mantel, L.H. & Farmer, L.L. 1983. Osmotic and ionic regulation In: The Biology of Crustacea – Volume 5 Internal anatomy and physiological regulation (ed, L.H.Mantel), Academic Press, New York, pp. 53-161.

Important: If you use Reference Manager or EndNote you should be aware that the 'Harvard' export format used by both programs gives very different formats for the references. It is recommended, therefore, that users of EndNote use the 'Harvard' option but users of Reference Manager should use the 'British Journal of Nutrition' option.

Appendix 6

Important University Guidelines & Regulations: Plagiarism – Policy Statement (extract)

The following is an extract from the university's **University Regulations**[50] web page.

31.1. The university's degrees and other academic awards are given in recognition of a student's personal achievement. All work submitted by students for assessment is accepted on the understanding that it is the student's own effort.

31.2. Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own, without acknowledgement of the sources. Special cases of plagiarism can also arise from one student copying another student's work or from inappropriate collaboration.

31.3. The incorporation of material without formal and proper acknowledgement (even with no deliberate intent to cheat) can constitute plagiarism. Work may be considered to be plagiarised if it consists of:

• a direct quotation;
• a close paraphrase;
• an unacknowledged summary of a source;
• direct copying or transcription.

With regard to essays, reports and dissertations, the rule is: if information or ideas are obtained from any source, that source must be acknowledged according to the appropriate convention in that discipline; and any direct quotation must be placed in quotation marks and the source cited immediately. Any failure to acknowledge adequately or to cite properly other sources in submitted work is plagiarism. Under examination conditions, material learnt by rote or close paraphrase will be expected to follow the usual rules of reference citation otherwise it will be considered as plagiarism. Colleges should provide guidance on other appropriate use of references in examination conditions.

31.4. Plagiarism is considered to be an act of fraudulence and an offence against university discipline. Alleged plagiarism, at whatever stage of a student's studies, whether before or after graduation, will be investigated and dealt with appropriately by the university.

31.5. The university reserves the right to use plagiarism detection systems, which may be externally based, in the interests of improving academic standards when assessing student work.

Commercial Editing
It is college policy that students should not be permitted to use commercial editing or translating services in the preparation of written work submitted for assessment. Any instances of the use of such facilities will be investigated in the same way as plagiarism, and if necessary will be subject to similar sanctions.

Appendix 7

Counselling Services

https://www.gla.ac.uk/myglasgow/counselling/

The University of Glasgow Counselling Service supports students to manage their mental health and to build strategies that will help them successfully complete their course of studies.

The Service also offers a series of Wellbeing Masterclasses on topics such as managing stress and overcoming procrastination.

You can find further information, and self-refer, via the QR code below:

Peer Wellbeing Support Service

https://www.gla.ac.uk/myglasgow/peersupport/

The University of Glasgow Peer Wellbeing Support Service is run for students by students. We provide a peer-to-peer listening service to support students to manage their day-to-day wellbeing and to integrate into university life by fostering connection via peer support.

You can find further information via the QR code below:

Disability Services

https://www.gla.ac.uk/myglasgow/disability/

The University of Glasgow Disability Service supports disabled students, including those with long-term health and mental health conditions, learning differences (such as dyslexia), and sensory or mobility impairments, to reach their academic potential and experience in full all that the University has to offer.

You can find further information, and self-refer, via the QR code below:

Residence Life Service

https://www.gla.ac.uk/myglasgow/studentservices/residencelife/

The Residence Life Service provides peer to peer support across our University of Glasgow accommodation providers. The Residence Life team is a support service dedicated to students living in University of Glasgow Halls of Residence. We help you settle into life in halls, get to know Glasgow and can signpost you to the supports, services, and social life that University of Glasgow has on offer.

You can find further information via the QR code below:

Website Links

[1]www.gla.ac.uk/myglasgow/students

[2]www.gla.ac.uk/students/sset

[3]www.gla.ac.uk/services/registry/registration

[4]www.gla.ac.uk/myglasgow/students/support/

[5]www.gla.ac.uk/colleges/mvls/graduateschool/mvls-policies-and-procedures/

[6]www.gla.ac.uk/services/seps/index.htm

[7]www.gla.ac.uk/myglasgow/dpfoioffice/gdpr/privacynotices/studentprivacynotice/

[8]www.gla.ac.uk/myglasgow/senateoffice/studentcontract/

[9]www.gla.ac.uk/myglasgow/coronavirus/

[10]www.gla.ac.uk/colleges/mvls/graduateschool/contact/

[11]www.gla.ac.uk/myglasgow/senateoffice/policies/studentsupport/

[12]www.gla.ac.uk/services/humanresources/

[13]www.gla.ac.uk/connect/complaints/

[14]www.gla.ac.uk/postgraduate/accommodation/

[15]www.gla.ac.uk/myglasgow/careers/

[16]www.gla.ac.uk/myglasgow/counselling/

[17]www.gla.ac.uk/myglasgow/disability/

[18]www.gla.ac.uk/myglasgow/humanresources/equalitydiversity/

[19]www.gla.ac.uk/international/support/

[20]www.gla.ac.uk/myglasgow/occupationalhealthunit/

[21]www.gla.ac.uk/myglasgow/registry/

[22]www.gla.ac.uk/myglasgow/students/safetyhealth/reportandsupport/

[23]www.gla.ac.uk/myglasgow/ris/

[24]www.gla.ac.uk/myglasgow/ris/researchpolicies/researchintegrity/advisers/#/collegeofmedical-veterinary&lifesciences

[25]www.gla.ac.uk/myglasgow/ris/researchpolicies/researchintegrity/

[26]www.gla.ac.uk/myglasgow/students/safetyhealth

[27]www.gla.ac.uk/myglasgow/sport/

[28]www.gla.ac.uk/myglasgow/leads/about/staffteams/student/#

[29]www.glasgowstudent.net/

[30]www.gla.ac.uk/myglasgow/nursery/

Website Links

[31]www.gla.ac.uk/schools/mlc/eas

[32]www.gla.ac.uk/explore/accessibility/

[33]www.glasgow.ac.uk/services/it/studentemail

[34]www.gla.ac.uk/myglasgow/students/communications/

[35]www.gla.ac.uk/myglasgow/students/attributes/reflection/mahara

[36]www.gla.ac.uk/colleges/mvls/graduateschool/currentpgrstudentinformation/skillstraining/

[37]www.uofgpgrblog.com

[38]www.uofgpgrblog.com/pgrblog/2020/6/10/our-approach-to-researcher-development-this-com-ing-year-and-how-you-can-help

[39]www.glasgowstudent.net/clubs/

[40]www.gla.ac.uk/research/ourresearchenvironment/prs/pgrcoursesandevents/distancepgrsup-port/#

[41]www.gla.ac.uk/research/ourresearchenvironment/prs/pgrcoursesandevents/

[42]www.gla.ac.uk/colleges/mvls/graduateschool/currentpgrstudentinformation/

[43]www.gla.ac.uk/colleges/mvls/graduateschool/currentpgrstudentinformation/pgrannualre-viewprocess/

[44]www.gla.ac.uk/research/strategy/ourpolicies

[45]www.gla.ac.uk/myglasgow/datamanagement/creatingyourdata/dataplanning/

[46]www.dcc.ac.uk/resources/data-management-plans

[47]www.gla.ac.uk/events/graduations/

[48]www.gla.ac.uk/myglasgow/it/

[49]www.gla.ac.uk/services/senateoffice/policies/uniregs/

[50]www.gla.ac.uk/research/ourresearchenvironment/prs/

[51]ukrio.org/publications/code-of-practice-for-research/

[52]ukrio.org/publications/code-of-practice-for-research/3-0-standards-for-organisations-and-re-searchers/3-16-misconduct-in-research/

[53]www.gla.ac.uk/myglasgow/library/

[54]www.vitae.ac.uk/rdf

[55]www.gla.ac.uk/colleges/mvls/graduateschool/currentpgrstudentinformation/skillstrainingfunding/