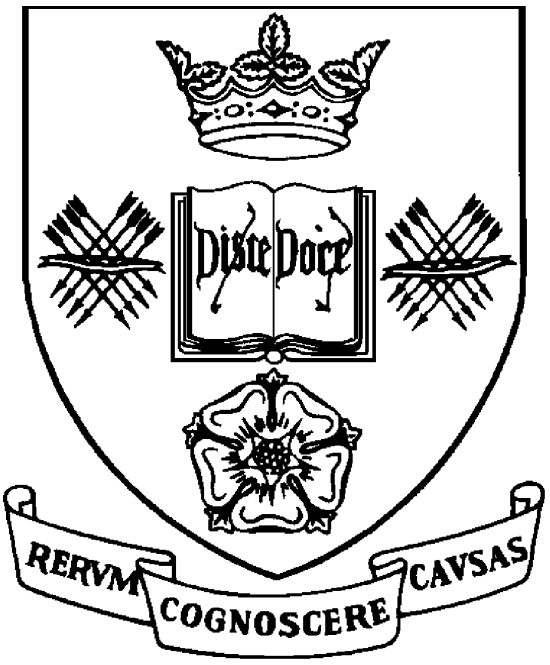

MSc(Res) Course Booklet

MSc(Res): Chemistry

2024 / 2025

University of Sheffield

Chemistry

Welcome

On behalf of Chemistry at the University of Sheffield, I want to warmly welcome you to Sheffield. You have chosen to study in a School that is proud of its reputation for excellence in both teaching and research, and which prides itself on taking a close interest in everyone who studies with us.

This booklet gives you all the information that you need to go about your course during your year with us. We do expect you to read this carefully, and make sure that you understand just what is required for success on your course.

We are all here to support you, and to see you succeed. The booklet explains everything that you need to know about the course and get support and help when you need it. Whatever you are used to in your previous place of study, it is the common practice here to ask for help whenever you need it.

Just occasionally, things do go wrong. If you have personal difficulties, please do contact your personal tutor, or the course director. Also please do follow the University rules on conduct, including plagiarism and collusion. It is important that you do not put your studies at risk by not fully understanding the regulations of the university.

Above all, we wish you a most stimulating time here in Sheffield, and hope that the course will take you on in your career.

Best wishes for session 2024/25

Dr. Colin Crook
Course Director, MSc(Res) Chemistry,
Director of Postgraduate Taught Courses
Chemistry

Contents

PART I Teaching

1.1 Programme details

Awards:	MSc(Res) Chemistry
Awarded by:	University of Sheffield
School:	Mathematical and Physical Sciences
Length and Mode:	1 year full-time
Credits:	180 credits at Level 7
ECTS:	90 ECTS
Programme director:	Dr. Colin Crook

1.2 Programme level description

Master's level awards are set at Level 7 of the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (FHEQ) published by the Quality Assurance Agency for Higher Education (QAA) (https://www.qaa.ac.uk/docs/qaa/quality-code/qualifications-frameworks.pdf).
Descriptors for the Level 7 qualification are in two parts: (1) what each student must demonstrate in order to gain the award, and (2) the wider abilities that the typical student is expected to develop.

The MSc(Res) in Chemistry is awarded to students who have demonstrated:

1. A sound knowledge at the frontiers of research in selected topics in chemistry.
2. An understanding of critical awareness of selected topics in chemistry.
3. Sound knowledge of a topic of research in chemistry.
4. An understanding of a the basic methodology of research.
5. An understanding of the collecting and reporting of research data.
6. Developed knowledge and understanding of research ethics.
7. They are able to find, communicate and critically evaluate information from the frontiers of chemistry, through a variety of written and oral media using discipline-specific conventions where appropriate.
8. Can work independently and as part of a team deploying effective organisation, personal responsibility, and planning skills.
9. Describe skills, attributes and experience, and critically reflect on professional development to foster lifelong learning skills

Typically, holders of the MSc(Res) in Chemistry will be able to demonstrate:

1. Skills in the application of fundamental principles to the solution of chemical problems at a research level.
2. Enhanced practical laboratory skills.

3. Ability to plan research.

4. Skills in the presentation of research results.

5. Competence in written and oral communication, including critical evaluation.

6. Quantitative and qualitative problem solving, including situations with limited information.

7. Numeracy and computation, including error analysis and different methods for presentation of data.

8. Use scientific information sources, including information retrieval and critical analysis of the published literature.

9. Apply IT skills to chemical data analysis and solving chemical problems.

10. Work independently and as a member of a team.

11. Work effectively, to plan work, and to manage their time.

12. Reflect on their own development and communicate their skills, attributes and experiences to others and build skills and attributes for lifelong learning.

13. Design experiments to test a hypothesis.

14. Carry out science with the highest ethical and moral standards.

and will have:

The qualities and transferable skills necessary for employment requiring:

1. The exercise of initiative and personal responsibility; decision-making in complex and unpredictable situations.

2. The independent learning ability required for continuing professional development.

1.3 Award of the MSc

To be considered for the award of the MSc degree, a student must take all the core modules and all of the modules belonging to their chosen pathway. Each module is assessed individually and is given an integer mark on a 100-point scale. The pass mark for each unit of assessment (module) is 50 on the 100-point scale and this must be obtained to receive the credits for the module. The credit values of all modules are listed on page 6.

A student requires 180 credits to receive a Master's degree automatically. That is, all modules must be passed. The MSc will be awarded with distinction to any student whose final credit weighted average mark is 69.5 or higher and has 90 credit units marked at 70 or greater. Any student who

obtains a final average mark of at least 59.5 but lower than 69.5 and 90 credit units marked at 60 or greater will be awarded an MSc with merit. When calculating the average mark, individual marks are weighted in proportion to the number of credits carried by each module. Students who pass all modules but who do not meet the criteria for a merit category will be awarded a pass.

In summary:

A **PASS** is awarded if a student earns all 180 credits.

A **MERIT** is awarded if the student's overall GPA is 59.5% or above, and they have at least 90 credits with a grade of not less than 60%.

A **DISTINCTION** is awarded if the student's overall GPA is 69.5% or above, and they have at least 90 credits with a grade of not less than 70%.

Important notes: A student who passes 60 credits is entitled to receive a Postgraduate Certificate in Education. It should be underlined though, that students may also choose to pursue this qualification, as set out in the course Regulations, without taking the entire MSc course, but selecting them from the beginning.

1.4 Course Structure

This section contains brief outlines of the modules that are available for the MSc(Res) in Chemistry. You will receive more detailed Module outlines at the start of the module and the content may be slightly different to the information published here. This is because staff are constantly updating their teaching considering developments in current research and new thinking.

The modules are summarised below:

Optional modules

A student will take 60 credits from this group:

CHM4017	Methods and Models in Theoretical Chemistry	S1 and S2	15 credits
CHM4020	Pharmacology, Medicinal Chemistry and Drug Design	S1 and S2	15 credits
CHM436	Technologies for Sustainability	S1 and S2	15 credits
CHM438	Current Topics of Industrial Catalysis	S1 and S2	15 credits
CHM439	Current Topics in Chemistry of Light	S1 and S2	15 credits
CHM440	Current Topics in Advanced Materials Chemistry	S1 and S2	15 credits
CHM445	Current Topics in Biophysical Chemistry and Biophysics	S1 and S2	15 credits
CHM446	Current Topics in Catalysis and Asymmetric Synthesis	S1 and S2	15 credits

1C Mandatory A student will take:

CHM6404	**Chemistry Research Project**	full year	120 credits

2. A student who has been awarded *sixty credits* will be eligible for the award of the Postgraduate Certificate in Chemistry

In the next section there is a description of these modules

1.5 Module Outlines

(1) Optional Modules (Students need to choose 4 from these 8 options)

CHM4017 Methods and Models in Theoretical Chemistry Semester 1 & 2 15 Credits

Module Leader: Dr. Grant Hill
e-mail: grant.hill@sheffield.ac.uk

The principles of theoretical chemistry can explain and predict chemical phenomena across all the main branches of chemistry (organic, inorganic, physical, analytical), and can shed light on molecular aspects of physics and biology. A wide range of methods and models are covered, including density functional theory, coupled cluster, time-dependent quantum mechanics, and more. Students learn to assess these methods and models' suitability for different tasks, and put the theory into practice by using them to interpret chemical phenomena in hands-on projects.

This module aims to instil in students an enthusiasm for theoretical chemistry and an appreciation of its application across the full scope of chemistry. There are two sub-aims for how this will be done:

- Extending students' comprehension of key theoretical chemistry concepts and providing an in-depth understanding of a wide range of theoretical chemistry topics.
- Developing students' ability to make informed decisions about the quality and suitability of theoretical methods based on the chemical problem at hand, critical knowledge of the underlying theory and practical experience of theoretical chemistry

The module will be delivered by a combination of lectures and workshops.
All of the assessment for this module is coursework based:

- 35% report based on the hands-on workshops
- 15% glossary of key terms and concepts
- 50% essay on topics at the forefront of theoretical chemistry

Reference Material

Primary:
F. Jensen, Introduction to computational chemistry (3rd Ed), John Wiley & Sons, 2017.

J. Kohanoff, Electronic structure calculations for solids and molecules: theory and computational methods, Cambridge University Press, 2006.

M. Brouard and C. Vallance, Tutorials in molecular reaction dynamics, Royal Society of Chemistry, 2010.

Extra material:
J. Harvey, Computational Chemistry, Oxford Chemistry Primers, Oxford University Press, 2018.

CHM4020 Pharmacology, Medicinal Chemistry and Drug Design S1&2 15 Credits
Module Leader: Prof. Beining Chen
e-mail: b.chen@sheffield.ac.uk

The discovery and development of new drugs requires a multidisciplinary approach, bringing together anatomy, physiology, pharmacology and toxicology. In this module, students learn about these areas as they build on their organic and medicinal chemistry knowledge from earlier in their degrees. It covers concepts including pharmacodynamics, pharmacokinetics and basic toxicology, and looks in detail at strategies for optimising the pharmacodynamic, pharmacokinetic properties of drugs. There is also a focus on . Students learn about the fundamental chemistry behind the synthesis of specific drugs throughout the module.

By the end of this module, students will be able to:

- Describe the basic anatomy and physiology of relevance to human diseases
- Apply key concepts of pharmacology and toxicology to drug design
- Explain the underpinning chemistry that affects pharmacokinetics and pharmacodynamics
- Recognise and apply design strategies in lead optimisation
- Demonstrate problem solving ability in drug design including using primary literature as information source.

The module will be delivered by a combination of lectures, workshops and online study of problems

The module is assessed via an open book, 24 hour exam.

Reference Material

Primary:

Graham Patrick, An Introduction to Medicinal Chemistry, Sixth Edition, 2017, **ISBN:** 9780198749691

Edward H Kerns and Li Di, Drug-like Properties: Concepts, Structure Design and Methods, Second Edition, 2016, 9780123695208.

Introduction to Toxicology. John Timbrell. 2003. Chapters 2-5
Molecular and Cellular Toxicology. Stanley.

Extra material:

https://toxtutor.nlm.nih.gov/index.html

CHM436 Technologies for Sustainability **S 1&2 15 Credits**

Module Leader: Prof Anthony Ryan
e-mail: tony.ryan@sheffield.ac.uk

Our current manufacturing technologies for chemicals, plastic and construction materials, are carbon intensive technologies that support our materials rich way of life and in order to maintain our living standards we need to decarbonise those technologies. In order to achieve this overarching aim, we need to make better use of both fossil-based and renewable resources, and move towards a zero-waste, circular economy. Topics include the current status of the industry, life-cycle analysis, non-fossil fuel & feedstocks, and reuse, remanufacturing and recycling.

This module aims to:.

- Introduce students to life cycle analysis and how LCAs can be used to determine the sustainability of a process or product.Introduce students to life cycle analysis and how LCAs can be used to determine the sustainability of a process or product
- Explain how to reduce waste and environmental impact for large scale manufacturing processes in fine chemicals and construction materials.
- Develop students' abilities to explain and scientifically argue sustainability concepts applied to manufacturing to a range of audiences.

The module will be delivered by a combination of lectures, workshops and online study of problems

The module is assessed via an open book, 24 hour exam.

Reference Material

Primary:

Life cycle assessment student handbook, Mary Ann Curran (Ed.); Wiley and Scrivener Publishing, Salem, Massachusetts, 2015.

Metal-Catalysis in Industrial Organic Processes, G. P. Chiusoli and P. M. Maitlis (Eds.); RSC Publishing, Carmbridge, 2006.

Extra material:

Life cycle assessment: a guide to best practice, W. Klöpffer, Wiley-VCH, Weinheim, 2014.

Industrial catalysis: a practical approach, J. Hagen, Wiley-VCH, Weinheim, 1999

Zeolites in industrial separation and catalysis, Santi Kulprathipanja (Ed.), Wiley-VCH, Weinheim, 2010.

CHM438 Current Topics in Industrial Catalysis **S 1&2 15 Credits**

Module Leader: Dr Anthony Haynes
e-mail: a.haynes@sheffield.ac.uk

Reactions catalysed by metals are hugely important in the chemical industry, where they are used to produce bulk chemicals at large scales and fine chemicals at smaller ones. This module explains the heterogeneous and homogeneous catalytic processes behind some of the most economically important chemical reactions. It covers the chemical basis of these processes, and the advantages and disadvantages of heterogeneous and homogeneous systems. There is a focus on reaction mechanisms and the role of the metal centre, and fundamental physical processes such as adsorption and reaction kinetics. Concepts are illustrated by analysing, in detail, catalytic reactions including hydrogenation, oxidation, carbonylation and polymerisation.

This module aims to:

- Describe and explain the physical and chemical basis of homogeneous and heterogeneous metal-catalysed processes
- Illustrate the importance of metal-catalysed reactions in industrial chemical production
- Discuss the mechanisms of catalytic processes, and the experimental evidence upon which these are based
- Demonstrate recent developments in the field with state-of-the-art examples from the literature

The module will be delivered by a combination of lectures, workshops and online study of problems

The module is assessed via a min-review on recent developments in the field of homogeneous catalysis, and a grant proposal-like essay on heterogeneous catalysis.

Reference Material

Primary:

M. T. Weller et al, Inorganic Chemistry, OUP, 7th ed, 2018, ch. 22

C. E. Housecroft & A. G. Sharpe, Inorganic Chemistry, Pearson, 4th ed (2012) 5th ed, 2018, ch. 24, 25

R. Whyman, Applied Organometallic Chemistry and Catalysis, OUP, 2001 (Oxford chemistry primer 96).

“Introduction to Surface Chemistry and Catalysis”, 2nd Ed., G. A. Somorjai, Y. Li, Wiley, (2010)

“Surface Science: Foundations of Catalysis and Nanoscience”, K.W. Kolasinski, Wiley, (2012)

“Physical Chemistry” P. Atkins, Oxford University Press, (from 6th Ed; 1998)

CHM439 Current Topics in Chemistry of Light **S1 & 2 15 Credits**

Module Leader: Prof. Julia Weinstein
e-mail: julia.weinstein@sheffield.ac.uk

Understanding processes caused by light is key in chemistry, physics, biology and engineering, and has recently led to many major scientific breakthroughs. This course explains how light and matter interact in molecules, nanostructures and materials. It will explain photoinduced electron and energy transfer – essential processes in nature and everyday life – using examples of natural and artificial photosynthesis. Modern techniques for studying light-induced processes, on time-scales from seconds to femtoseconds, are also covered. The theory is taught in the context of applications in photocatalysis, photonics and optoelectronics, solar energy conversion, and light-induced processes in medicine.

This module aims to:

- To present basic fundamental considerations, experimental methods, and applications of "photochemistry" - the science of light-matter interactions – in molecules, nanoscale structures, and materials.
- To introduce the chemical basis of light-induced processes in the broad context of sustainability and solar energy conversion, from fundamentals to applications (for example, photocatalysis, artificial photosynthesis, light-emitting devices, solar energy, photonics, information processing).
- To present, compare, and contrast state-of-the-art technologies used to interrogate, and apply, light-induced processes.
- To critically evaluate current methods and approaches used to understand and apply light-induced reactions in science, medicine, and engineering.

The module will be delivered by a combination of lectures and workshops.
Students will complete two problem solving-based pieces of course-work, with choice from a range of topics.

Reference Material

Primary:

Photochemistry (Oxford Chemistry Primers, 39), by C. E. Wayne, R, P. Wayne.

P. Atkins, Physical Chemistry, any edition - chapters on photochemistry and excited states.

Modern Molecular Photochemistry, by N. J. Turro. Any edition.

Extra material:

Recent reviews and research articles will be suggested throughout the course

CHM440 Current Topics in Advanced Materials Chemistry S 1&2 15 Credits

Module Leader: Dr. Peter Portius
e-mail: p.portius@sheffield.ac.uk

This module explains how structural, electronic, thermal, chemical, energetic and other properties of materials can be harnessed to help solve technological and environmental challenges. The functional materials covered are based on supramolecular assembly, leading predominantly to crystalline materials. Students learn about design strategies, molecular properties, and material function, using concepts from coordination and solid-state chemistry, organic chemistry and thermodynamics as well as methods specific to energetic materials. The role of materials properties in applications such as sensing, molecular separations, gas adsorption, catalysis, drug delivery, propulsion, gas generation and blasting will be discussed in the context of energy, health care, transport, engineering and the environment.

This module aims to:

- introduce a variety of materials developed and used in state-of-the-art research and technology with a focus reflecting current research interests at the University of Sheffield such as supramolecular materials, metal-organic frameworks and energetic materials
- explain the chemical principles behind the design and synthesis of these different classes of materials.
- explain how the chemical structure of these materials enables their function and properties.
- explain the mechanisms of materials reactivity.
- describe how the properties lead to the materials' applications in various areas such as sensing, molecular separations, gas adsorption, catalysis, drug delivery, pyrotechnics, propulsion, gas generation and blasting
- relate the importance of materials chemistry in tackling modern technological and environmental challenges.

The module will be delivered by a combination of lectures and workshops.
Students will complete a mini-review of a topical area of research related to course material requiring independent study, and will complete a problem set related to course material.

Reference Material

Primary:

No single text covers the entire course, so additional reading material, predominantly from the primary literature will be included alongside the lecture material

Extra material: for the parts dealing with energetic materials The chemistry of explosives, Jacqueline Akhavan, RSC, 2022; Thomas Klapotke, Chemistry of high-energy materials, DeGruyter, 2015.

CHM445 Current Topics in Biophysical Chemistry and Biophysics S 1&2 15 Credits
Module Leader: Dr Barbara Ciani
e-mail: b.ciani@sheffield.ac.uk

This module covers the basic theory and applications of techniques necessary to study the physical properties of biological macromolecules. The course aims to explain how thermodynamics concepts and advanced spectroscopic measurements allow determination of biomolecule structures, function and interactions in solution. Students learn about methods for analysing the properties of ensembles of many molecules as well as how to perform and interpret measurements on single biomolecules. The content includes biophysical approaches to studying protein and nucleic acid structures and mechanisms of DNA damage recognition as well as the development of molecules for diagnostics, therapeutics and theranostics.

This module aims to build:

- knowledge and understanding of how biological and physical chemistry concepts and techniques can be applied to study biomolecular structure and interactions.
- understanding of how these concepts and measurements are applied to design experimental strategies for answering biophysical questions
- a description of some of the applications of biophysical chemistry approaches in life sciences and medicine.

The module will be delivered by a combination of lectures, workshops and online study of problems

The module is assessed via an oral presentation, and a research proposal on a topic allied to the module.

Reference Material

Primary:

- Methods in Molecular Biophysics (Structure, Dynamics, Function). Igor N. Serdyuk, Nathan R. Zaccai and Joseph Zaccai. Cambridge University Press (2007). Not online.
- Biophysical Chemistry (Techniques for the study of biological structure ad function) - volume II. Cantor and Schimmel. Freeman (1998). Not online.
- How Proteins Work. Michael P. Williamson. Taylor and Francis (2012). Available online (‘Revision Tools’ folder within the 'teaching materials').

Extra material:

- Pre-recorded videos on Blackboard

CHM446 Catalysis and Asymmetric Synthesis **S 1&2 15 Credits**

Module Leader: Prof Joe Harrity
e-mail: j.harrity@sheffield.ac.uk

Chemists' ability to synthesise organic molecules with defined stereochemistry is the backbone of many useful applications, from medicines to new materials. Modern methods of organic synthesis rely on sophisticated and efficient chemical reactions that create exquisite levels of functional group selectivity and stereochemical control. This module will explain the cutting edge processes that achieve these objectives, in the context of catalysis and stereoselective synthesis. There is a focus on transformations that are promoted by a sub-stoichiometric amount of catalyst. Concepts behind controlling stereochemistry in important synthetic chemical reactions will also be explained.

This module aims to:

- Provide students with knowledge and appreciation of advanced organic chemical reactions involving main group and transition metal catalyst systems, as well as organocatalysts.
- Provide students with the knowledge and skills to understand how organic reactions can be designed to generate desired products selectively.
- Make students aware of the uses of these reactions in the context of modern organic synthesis.

The module will be delivered by a combination of lectures, workshops and online study of problems

The module is assessed via a problem sheet based on the course, and a literature review addressing themes which relate to the course content.

Reference Material

Primary:
J. Clayden, N. Greeves and S. Warren, "Organic Chemistry", Oxford University Press, 2nd edition, 2012,

M. T. Weller et al, Inorganic Chemistry, OUP, 7th ed, 2018.

Extra material:
Organotransition Metal Chemistry. John Hartwig, 2012, University Science Books, ISBN: ISBN 9781891389535.

(iii) Research project (Mandatory)

CHM6405 Chemistry Research Project – 120 credits

Module Leader: Dr. Colin Crook
e-mail: c.j.crook@sheffield.ac.uk

This module is the major research project associated with the Master of Science (Res) in chemistry, where students undertake an extended and original research by working to solve a topical problem in an area of chemistry which reflects their interests.

Students will be trained in research methodology using state-of-the-art facilities to help them develop the advanced technical skills they need for their projects.

They will also put their previous research training and transferable skills into practice through literature searches, communicating their work and presenting their findings.

The module will be delivered via laboratory work, research supervision and independent study.

The module will be assessed by Literature Review (15%), Project Performance (20%) (assessment of attitude/effort and competence/intellectual contribution, Dissertation (MSc Thesis) (35%), Oral Presentation (10%), Poster Presentation (5%), Viva Voce exam based on Dissertation (15%).

1.6 Learning and Teaching Methods

The MSc(Res) course contains both taught and supervised modules. Teaching methods are varied from module to module, and primarily include lectures, seminars, small group work, workshops, self-directed learning and research into case studies, practical classes, oral and poster presentations, data handling, dragons' den presentations and individual research project work. Class size also varies depending on the number of students registered on the module and the teaching format.

Normally, we use our structured on-line learning environment, Blackboard, to give you access to schedules, lecture notes, literature references, lecture recordings and other learning resources. We also use Blackboard as the portal for you to submit work for assessments and you receive your marks through the Grade Centre. We provide you with useful feedback on your work, mainly through email or by scheduling an appointment if appropriate. Blackboard will be available to you as soon as you register, and you can access it by logging into 'MUSE' on the University web site and following the link.

Normally, the taught materials will be delivered in allocated lecture theatres. The teaching schedule will be timetabled, and you will be able to access your personal timetable via iSheffield.

Your research project will most likely involve laboratory work which requires students to take health and safety training before going into the laboratory.

PART II Assessment and Regulations

2.1 Assessments

The assessment for this course takes place in a variety of styles and formats depending on the modules that you choose. They are summarised below:

Examinations
Examinations are not normally taken by MSc students, as most taught modules are generally assessed through coursework. The exception to this is CHM488 which has an invigilated online exam in January.

Coursework
Students must complete a number of formative and summative assignments. Formative assignments give feedback to students on their performance but do not count towards final marks (however, it may still be a requirement to complete these). Marks for summative assignments do count towards the final mark for each module. The minimum pass mark is 50%.

Most modules have more than one assessment point, and these may happen at various points throughout the module. Assessments are mapped out to avoid overlapping as far as possible. In some cases, overlapping may be unavoidable. It is very important to keep a good record of upcoming assessments so you are not struggling to meet deadlines. **As extensions will invade the next module's teaching time and so are strongly discouraged unless it is absolutely necessary.** Most of the course work assessments require you to submit your work via the Blackboard Turnitin submission system. system.

2.2 How to Submit Work for Assessment

Preparing and files for electronic submission
Each piece of coursework has a specific deadline for submission, which will be communicated by the Module Leader. Coursework must be submitted by the deadline in electronic form on Blackboard. We do not expect to need hard copies for any assignment but if we do you will be told in advance what to do and where to leave it.

Please ensure that you upload the file type that the module leader requests for electronic submission. You need to be familiar with the Blackboard coursework submission. Most assignments must be submitted as a single electronic file, even if they consist of several independent parts or questions. You should not submit your work in multiple files unless this was specifically required in the assignment instructions. In the rare cases when an assignment requires the submission of several files, instructions for naming individual files with different names will be provided in the assignment instructions.

Each electronic file that you submit must be given a filename that consists of your nine-digit registration number. For example, a student whose registration number is 189208772 will submit an assignment produced in Microsoft Word format under the file name, "189208772.docx". Please do not use any other prefix or suffix as this complicates the handling of files.

Submitting work through Blackboard
We will almost always ask you to submit work through Blackboard. There is more information about Blackboard and Turnitin available here.

Module-specific format requirements

In addition to the general rules described above, each individual module leader may add additional formatting requirements to their assignments. These specific rules may concern for example word or page limits, font size and the use of figures and references in the work.

Penalties for using inappropriate formats
If either the printed or electronic version of an assignment does not follow the formatting and file-naming instructions described in the previous sections, it may be rejected and the student may be asked by email to re-submit an appropriately formatted version before the assignment is sent to the markers. Because the rejection and resubmission will obviously take place after the submission deadline, the work will incur late submission penalties (see following section).

Submitting electronically after the deadline
The submission box on Blackboard closes automatically at the deadline for submission. If you have been granted an extension due to special circumstances, or if you simply miss the deadline, you will no longer be able to submit your work electronically through Blackboard. In this case send your assignment directly to the module leader as an attachment to an email.

Late submissions of assignments due for marking will be accepted for up to five working days after the deadline, but will be penalised as required by University regulations, as outlined here.

2.3 How we Mark your Work

Anonymous Marking
To remove both conscious and unconscious biases, we anonymise work before marking whenever this is possible, as is required by the University. To do this, we need your work to be submitted in a standard format so that we can anonymise it, mark it and then identify you so that you can receive your own mark. In written examinations you will write in standard answer books designed to hide your personal details from the markers. Whenever possible, module leaders will only identify the author of an assessed piece of work after the work has been marked and moderated, or double-marked. We will make an exception for students' work that is clearly not of a standard that could pass, where we might judge that it is in the interest of the student to be helped and advised of the problem as soon as possible, in the hope that the student does not repeat fundamental mistakes in subsequent modules.

When Marking Cannot Reasonably be Anonymous
The assignments that will not be marked anonymously are the Literature Review part of the CHM455 Research, Presentation and Professional Skills, debate or presentations that might be assessed during your pathway modules, multimedia material and some of the courseworks Here anonymous marking is not reasonably possible, either because you will need to meet your markers face-to-face on at least one previous occasion or because you will be assessed on the basis of your ability to demonstrate presentational skills to your markers, face-to-face or live, online.

Moderation of Marking and Double-Marking
In case of controversy, two members of staff will mark assessed work if this is deemed necessary by the course director. They will produce a single mark and feedback either by agreement (moderated marking) or by marking independently and averaging their marks (double marking). The module leader will then produce the final mark by applying appropriate penalties to any piece of work that was submitted late or produced by unfair means. For more details on penalties, see the sections on late submissions and use of unfair means.

Retakes of Failed Modules

Students failing a module will have the opportunity for a capped reassessment.
The student will attend a tutorial with the module leader. A student who wishes to be reassessed must register with the University for a re-examination and pay a re-examination fee. Please refer to the following webpage for re-examination/re-assessment, www.sheffield.ac.uk/ssid/assessment/resits-reassessment/pg.

The circumstances of the re-examination, such as the assessment format, objectives, starting date and deadline for submission, will be determined by the module leader. **By University regulations, work submitted for a re-examination can only be awarded a maximum mark of 50%,** equivalent to a bare pass, even if its quality exceeds the minimum requirement for a pass. Any student who achieves this 50% pass mark at a re-examination will be awarded the full credits for the re-assessed module; however, a student who obtains a mark lower than 50% at a re-examination will not be allowed any further-re-assessment for the same module.

Please also note that students may be required to remain in attendance after the official end of the course if needed to be re-assessed in order to be re-assessed for failed modules.

2.4 Research Project

Indicating your project preference
In order to try and match students with research projects that will develop the skills we will ask you what sort of project you would like to do. We do this via a Google form, the link for which will be shared with you at the start of the programme.
In the form, you will be firstly asked which subject area you wish to work in. The options here are Organic Chemistry, Inorganic Chemistry, Physical Chemistry or Biological Chemistry. Please be aware that our MSc:Drug Discovery Science requires the first choice of project supervisors who work in Biological Chemistry, and so it is unlikely (but not impossible) to arrange a project in this area.
You will also be asked about your preferred methodology. The options here are a synthesis project, a measurement based project, a project with a mixture of synthesis and measurement, or a computational chemistry project.
Finally, you will also be asked if there is any additional information to take into account, for instance if you have any previous relevant experience, or if there are any constraints on your funding which require you to work in a particular area.

Do be aware that there are a fixed number of academics working in any given subject area, and each supervisor can only run one or two projects. While we work hard to find the most suitable supervisor and project for you, resources will unfortunately not allow free choice of who students work with.

How we allocate projects
Projects will be allocated by mid November 2024. We will try to ensure that every student is allocated one of the five projects they selected. In the past, about 40% of students can be given their first choice. Most other students will receive their second or third choice.

Your supervisor(s)
Please be aware that supervisors are all different people at various stages of their careers with different sized groups, different ways of running their laboratories and they may have different attitudes to work and supervision. Some supervisors may be almost constantly

available, others will require you to schedule appointments to discuss your project. Your individual professional interaction with your supervisor is likely to be a factor in how much you enjoy working on your project, if not how much progress you make. These are real-life differences between people that cannot be levelled out and are an inevitable consequence of providing you with so many real projects in real labs. Supervisors will be asked to rate the engagement of the student in their interaction; clearly a student who does not contact a potential supervisor will be judged not to have engaged.

Preparation for the Project

Any laboratory-based activity risk mitigation because of the procedures that you undertake must undergo an assessment by your supervisor, to be reduced to a minimum and a risk assessment must be documented. If the project that you choose involves handling human material that is potentially infected with infectious human pathogens, you may then need to be vaccinated against these pathogens in advance, where that is possible. By far the most frequent pathogen of concern, for which prophylaxis is possible, is Hepatitis B Virus (HBV) and we have a system in place for ensuring that students who need to be vaccinated are provided with vaccination at no cost to themselves. See the section below, entitled 'Health and Safety in the Laboratory'.

Before you will be allowed to work on your project, you will need to complete on-line courses on fire safety and introduction to safety. Further details will be sent to you in due course by our Health and Safety Officer.

What Your Project Supervisor will Expect from You

Attendance in the laboratory and leave entitlement.

You are expected to be in attendance in your supervisor's laboratory for the equivalent of 5 full days a week for the whole period of the project module except for the 10 days of leave to which you are entitled. You can use this entitlement to go on holidays or for study if you need to be reassessed for other modules during the project period. However, you must inform your supervisor as soon as possible of the dates at which you plan to go on leave and at least 2 weeks in advance, so that they can plan laboratory work around these dates.

Information on absences.

You must inform your supervisor and the Chemistry Office in case of any unplanned absence from the laboratory. Unplanned absences caused by medical circumstances will not be counted from your leave entitlement provided you submit an extenuating circumstances form with appropriate evidence (physician's note) to the Chemistry Office. Special circumstances claims that are not backed by medical evidence will only be granted at the discretion of the module leader, who may consult your laboratory supervisor on this matter.

Contact details.

You should provide your Supervisor with your contact details (email/ phone number) in case of emergencies, and the supervisor should ensure that you have their email address and phone number so that you can contact your Supervisor in case of absence.

Supervisory meetings.

You must meet formally with your Supervisors twice each month and supervisors should fill in the Supervision Record Form. The students should then stick the records into their lab books. If Ethics approval is needed for your project, you must append the ethics letter to your dissertation. Failure to do this may incur penalties when markers are assessing your work and could cause the University to reject the dissertation until the Ethics statement has been added.

Attendance of lab meetings/Chemistry seminars.
Students are required to attend all laboratory meetings and to give progress reports on their projects through lab meeting presentations at least once during the projects.

What you can expect from your Project Supervisor

Daily supervision.
A named individual must be available every day as your first point of contact. That person will provide guidance on experimental problems, Health and Safety regulation and lab etiquette. This will either be the project supervisor, or any competent member of their group nominated by your supervisor. This can also be the group member of another group if in shared labs. The day-to-day supervisor should be named on the document that describes the project. If you are not sure who is taking this role, you should ask your supervisor.

Formal supervisory meetings.
Your project supervisor should meet with you at least twice each month to discuss progress and problems (see paragraph on supervisory meetings in previous section). The project student should set and record this type of meeting. Many supervisors will meet their students more frequently. We require a report of meetings, twice per month.

Integration into the laboratory.
Your supervisor should provide support in understanding the background and issues relating to the project; involve you in lab meetings and seminars and give you opportunities to present your results and receive constructive comments from the group.

Support in writing the Project dissertation.
Your supervisor should provide you with constructive feedback on drafts of your dissertation. Students can only expect this help if the work is handed to the supervisor at agreed times. Supervisors are expected to provide a schedule, with your agreement, for writing and submitting the draft dissertation (see the following section) and should be available to suggest potential questions that might be presented to you in the event of a viva voce examination.

Health and Safety in the laboratory

Fire and First Aid
You must complete the on-line fire awareness training. When working in the lab, you must also know where the nearest assembly point and fire exits from your workplace are and where the fire extinguishers are located, but don't use them if you have not been trained to do so. **You must be aware of where First Aid boxes are, and who in the School are dedicated First Aiders.**

Working out of hours
Your normal laboratory working hour is between 9 am and 6 pm, Monday to Friday. MSc and MChem students are not permitted to work outside normal hours.

Good laboratory practice
You must know who is designated to advise on Health and Safety in your laboratory. You must ask to be introduced to them and ask about hazards involved in your work unless your supervisor has already dealt with these matters. You must know and adhere to the laboratory rules regarding wearing lab coats, safety gloves and safety goggles. Food and drink must

never be consumed or brought into a laboratory. Smoking and applying makeup are also forbidden.

Chemical hazards in the Lab
Once you begin your project, you should read and sign the COSHH forms for the experimental procedures being undertaken. You must learn how to dispose safely of the chemicals that you use, training will be provided for this.

Biological safety
You must dispose of biological material (tissue samples, cultures of cells or microorganisms) used in your work according to defined, safe methods. These will be described in copies of COSHH forms or in licences for Genetic Manipulation projects which you must place in your own records.

Your Progress in the Laboratory

Keeping your Laboratory Notebook
All your experimental work - even unsuccessful attempts - must be recorded in a laboratory notebook at the time that they are performed. Your lab book will be inspected by your supervisor to extract information. So long as its content is clear, the elegance of the presentation is not an issue; your supervisor will judge it to be more important that the work is being recorded as it is being done. You may refer backwards to previous protocols if you write notes to indicate changes to the previous experimental methods.
The lab book is an important document that allows your supervisor and your tutor to review the progress of your project. It will contain the experimental details from which your dissertation will be written, and which will allow your experiments to be repeated by yourself, your supervisor's group and by other scientists. It will be needed for your work to be written up and published.
Finally, it is a legal document that must be kept according to specific guidelines to protect the University of Sheffield's Intellectual property rights on your results. You must use the lab book provided by the University, which has permanent binding and has numbered pages. Your lab book will remain the property of the University and must be returned to your supervisor at the end of the course. You may copy it with your supervisor's permission, but you do not have the right to publish your results.

The brief guidelines below are taken from *Keeping a Laboratory Notebook published by BTG plc.*

- The laboratory notebook must be written in permanent ink.
- The entries must give full details of all laboratory materials and methods, and all computer analyses. They should be sufficiently detailed so that another individual could easily replicate the work.
- Results should refer back to the original entry in the lab book, if other entries have been made in the interim.
- Pictures and computer printouts should be permanently fixed into the book. They should fit onto the page, and the witness should sign across the join. Where additional supporting material cannot be kept in the book, reference to that material should be made, and the material stored in an orderly manner.
- Unused pages/parts of pages should be ruled through. Pages should not be left incomplete.
- Errors should be simply crossed out, corrected and initialled. Never use correction fluid or tear out pages.
- All pages should be signed and dated by the author.

- All pages should ideally be signed and dated by the supervisor.
- In instances where the supervisor feels results may be patentable, a witness should also sign and date the lab book.

Progress and training
Each formal supervision meeting will include an evaluation of the progress of your work in relation to the objectives of the project. Interim evaluation of your professional competence and advice for improvement. You need to discuss any support that you need with your personal tutor.

Timetable for writing the dissertation
The final version of your dissertation must be completed and submitted electronically by the deadline usually around mid-September. The exact date will be notified to you in due course. Your supervisor and you should agree on a timetable for production of drafts that would allow the supervisor to provide constructive feedback and to check the final version in the months preceding the deadline.

The timeline should take into account your supervisor's absences (for instance, holidays and travel to conferences). As a rough guide, you should send your supervisor a draft of the 'Materials and Methods' section by the end of July and a draft of the full dissertation by the third week of August. Students who do not submit the draft of the full dissertation by the deadline will not be allowed to continue to work in the labs.

Marking of the Project

Your final project marks consist of the following elements.

Evaluation of progress and performance (20%)
The final assessment of your laboratory competence by your supervisor (but moderated by senior academic staff) will contribute 20% to the final mark for your Project module, provided that the Laboratory Project runs normally, and no lockdown or other restrictions will bein place due to Covid-19.
The project performance assessment will include Attitude/Effort and Competence/Intellectual contribution.

Project Dissertation (35%)
In the MSc(Res) in Chemistry, your supervisor and members of your supervisor's group will not be markers of your dissertation. The two markers of your dissertation will volunteer to mark the project on the basis of their expertise. They are academically independent of one another and of your supervisor.
Markers arrive at their initial marks without discussion. After marking, if the marks are significantly discrepant, then the markers will be provided with one another's assessments of your work and will be asked to discuss their marks to reach a satisfactory convergence.
In the event of highly discrepant marks, we will introduce an experienced third marker to act as a moderator. Whenever this happens, the final moderated mark will be subject to the approval of the external examiner who will be presented with all the marks and comments.

Viva Voce Examination (15%)
After you submit your final thesis, a viva voce exam based on your project dissertation will be conducted by two markers who have marked your thesis to assess your understanding of the project, credibility and interpretation of experimental data that you obtained during your project.

Literature review (15%)
Early in your project, you will conduct a literature review covering a subject area closely aligned to your research project. This will help you with your scientific writing, give you a fuller understanding of the background science of your project, as well as developing critical thinking skills.

Poster Presentation (5%)
A very common way that young researchers communicate their research to the wider scientific community is through presenting posters at conferences. To help you develop this skill, you will produce an A3 poster of your research.

Oral Presentation (10%)
Part way through your research project, you will present an oral presentation of your results so far. You will be assessed on the visual communication of your presentation, your spoken presentation, and how well you have understood and communicated the science of your project.

2.5 Important dates and timeframes for 2024/25

Please be aware of the following dates which are correct at the time of publication, but may be subject to revision if necessary, during the year.

Friday 27th Sept - Welcome meetings
7th October - Teaching Starts
Early October - Submit project preferences
Late October - Research project allocation
Beginning of September - Submit thesis
Early September – Research project viva

Other assessment deadlines will be announced in due course by individual module leaders.

PART III Course Rules

3.1 Attendance and Absence

As a full-time student, you are required to attend for the whole period of the course including all lectures, tutorials and examinations that are components of your course. **You are also expected to work full time in your supervisor's laboratory during the periods of the Research Project Modules.**

Please see more guidance about attendance and attendance monitoring here.

If you think you may need to take a leave of absence, more information is available here.

Short term absence, Self-Certification, and Extenuating Circumstances

If you are ill, you **must** inform the Chemistry Office (chemdeptoffice@sheffield.ac.uk) with details, cc your personal tutor and course director, and complete the relevant form.

Short term absences of less than 7 days
Students should self-certify short term absences (less than 7 days total) using the iSheffield Digital Check-in System, logging absences for each lecture, tutorial and workshop missed.

Absences longer than 7 days that do not affect an assessment
If a student is unable to study (e.g. due to illness) for longer than 7 days and this does not affect an assessment or it is unknown whether it will affect an assessment, they should complete a form to report an absence of longer than 7 days. It is expected that students provide evidence, where suitable, to support their absence.

Attendance of all elements of the programme is mandatory. Significant unexplained absence could result in the university and the UKVI being informed of lack of engagement.

Absences affecting an assessment
Please see the Extenuating Circumstances guidance.
If you are unable to attend an examination, you must inform the University Examination Office (Level 6, University House; Tel: 0114 22 21282/21305) and the Chemistry Office without delay

Special arrangements during examinations
If you have any disability or illness which makes it necessary for you to have special arrangements during exams, **you must inform the University Health Service** who will then contact the University Examinations Office to make arrangements.
It is also advisable to discuss such problems with your Course Director as soon as possible in the academic year to ensure the appropriate actions are taken and the necessary help is obtained. All such discussions are treated confidentially.

3.2 Calculators and Dictionaries

To be taken into exams, these must be individually approved by the University prior to the examinations, and must carry a distinctive marker.

Please see more guidance here.

3.3 What should and should not be in an assignment

Citations and references

The standard citation and referencing format used throughout the course will be module specific. Different referencing styles/formats will be explained in the module CHM455 research, presentation and professional skills.

Pictures, diagrams and tables

We encourage you to include useful illustrative figures that help the understanding of your text (photographs, drawings, diagrams, screen captures) or tables in assignments provided that they are your own work. For example, this could be a table that you generated by assembling pieces of information obtained from several published sources or a figure that you compose and draw yourself. Computer screen captures will be accepted as being your own work if they show images produced by software operated by you (for example BLAST, the UCSC Genome Browser, ENSEMBL, Pymol or CellDesigner).

A figure or table that you add should be seriously useful for reference and should not be added for decoration. It is not adequate to include a blurred, illegible image just because a figure is obviously required.

All figures and tables that you include should be accompanied by informative titles and legends (which in the case of computer screen capture should include a reference to the software used and the parameters that you supplied). A figure should be comprehensible in its context without the reader referring to the text and the legend makes this possible.

If the figure or table contains text (for instance, sequence data) then the text must be legible and you must supply the text in a form that can be recovered as text, for analysis, to enable the markers to assess it. Do not convert text to a bit-mapped image by dumping the screen (for instance) into an image format. Figure legends, of course, must also be fully legible.

Figures or tables adapted from an original made by someone else will never have the same value as work done entirely by you, **and will only be accepted when all three of the following conditions are met:**

- You have removed irrelevant details or you have added new elements so that the diagram fits with the message of the text of your own assignment.
- You have rewritten the original legend to match the changes in content and you have paraphrased it to avoid plagiarism and show your own understanding.
- Your legend cites the source(s) of the original and explains briefly how you adapted it, as in for example “Adapted from Fig. 3 of Dempsey et al. (2002) by omitting proteins not involved in the pathway discussed here”.

Markers will appreciate a figure or table produced by you if its contents and legend are linked to the main text in a manner that demonstrates that you understand the topic. Please note that simply pasting or re-drawing a figure or table might look attractive but is of no academic value (it does not demonstrate your understanding) and will not contribute to a student’s mark. In fact, a reproduced figure without proper explanation in the text could reduce a student’s mark because it has taken up space that could have been used to demonstrate understanding of the topic.

Markers will not expect your figures or diagrams to look professionally produced though we will expect your skill to improve during the course.

We suggest you use Microsoft PowerPoint or a similar application to generate diagrams or to add captions to photographs, but even scans of hand-drawn diagrams will be accepted. On the other hand, please do not paste in distorted or low contrast images (grey on grey) taken with your phone camera. If you do not yet have the skills or software to improve contrast

then it would be better if you scanned the images on one of the available online printers/copiers. You will receive training on how to produce your own figures or adapt a published one during the course.

See here for guidance on Avoiding the Use of Unfair Means in Assessment.

Your assessed work is the main way by which you demonstrate that you have acquired and can apply these skills. Using unfair means in the assessment process is dishonest and also means that you cannot demonstrate that you have acquired these essential academic skills and attributes.

3.4 What constitutes unfair means?

The University Guidelines on Unfair Means can be found here.

3.5 How can students avoid the use of unfair means?

To avoid using unfair means, any work submitted must be your own and must be original (that is, is not a double-submission and does not include the work of any other person, unless it is properly acknowledged and referenced. For more guidance on referencing, please see these pages.

The following websites provide additional information on avoiding unfair means:

- The library also has information on reference management software.
- The English Language Teaching Centre (ETLC) operates a Writing Advisory Service through which all students can make individual appointments to discuss a piece of writing.

All written assignments will be submitted via Turnitin, a software which automatically detects plagiarism.

3.6 Discipline and penalties

Penalties for using unfair means in assessed work.
Where unfair means are found to have been used, the University sanctions penalties ranging from awarding a grade of zero for the assignment through to expulsion from the University. Where concerns are raised about use of unfair means, please refer to this guidance.

Penalties for inappropriate use of figures and tables.
If the module leader identifies a figure, table or legend that has been reproduced without changing its contents (compared to the cited original source) then the module leader may impose a mark penalty of 2% for the entire module and not just an affected component. Penalties in each module will be cumulative. If an assignment contains several copied figures or tables the penalty will be 2% x the number of offending items.

Failure to cite sources.
It is plagiarism to claim authorship of a figure or table, by not citing its source, either when the material is unaltered (straight copying) or even when the table or figure has been altered (see above).

Penalties for late submissions of drafts (literature review, project presentation and dissertation)
Please also note that although the Literature Review drafts are not marked, you will be penalised by a deduction of 10 marks from the final mark if the drafts are submitted after the deadline or if you do not meet your supervisor to get feedback on the draft. In addition, students who submit the draft Literature review 5 days or more after the deadline will not be entitled to receive any feedback on their draft as such late submissions will make it impractical for supervisors to assess their drafts.

3.7 Regulations relating to the publication of research

Students must consult their supervisor before submitting any manuscript for publication or presenting their results to conferences, even if they believe themselves to own the Intellectual Property (IP). Premature publication of data could interfere with supervisor's planned submissions, hinder patent applications or could damage the Supervisor's and the School's reputations.

Irrespective of IP ownership, any submitted manuscript must adhere to the Vancouver Protocol, the internationally recognised standard for determining authorship, and comply with the University of Sheffield policy on authorship of academic publications, available at www.sheffield.ac.uk/rs/services

These requirements imply that the supervisor, as initiator and original designer of the project, must be given the opportunity to contribute to any manuscript arising from the project. It is highly unlikely that you should be the sole author on work produced in your supervisor's laboratory.

By undertaking a research project offered as part of this MSc course, you are agreeing to adhere to this publication policy and to the rules and guidelines mentioned in the previous paragraph. Should these rules be broken, the incident would be investigated as a potential case of misconduct. If you are in any doubt, please speak to your supervisor first, or if you cannot resolve matters in this way, please contact the course Director, Dr. Colin Crook.

PART IV Support

4.1 Key points of Contact

Course Director and Director of Postgraduate Taught Courses: Dr. Colin Crook, Dainton Building, room C82, e-mail: c.j.crook@sheffield.ac.uk
Chemistry Office: Dainton Building, room C70, e-mail: chemdeptoffice@sheffield.ac.uk
Senior Tutor: Dr. Ben Partridge, Dainton Building, room C77, b.m.partridge@sheffield.ac.uk

The team in the Chemistry Office can help with general enquiries about timetables, university forms, staff contact details, coursework submissions, exam timetables etc. If they are unable to assist, they will point you in the right direction.

Chemistry Office communication
We will need to contact you throughout the year to inform you of general matters or to discuss specific issues. When you register as a Postgraduate student you will be allocated a university computer account with a fixed memory allocation and an e-mail account that can be accessed remotely. You must check your email account on a daily basis as this is the most used way for us to send out important information to you, but we may reserve to contact you by phone in case of confidential matters, if necessary.
The University is wireless networked so you can use your laptop computer there to check email or for private study. The University will ONLY use the university e-mail address to communicate with you. You must check DAILY for important information.

4.2 Academic Support - Preparing for Life After the MSc(Res)

Your electronic transcript
You will receive a digital transcript of your results in early December via our secure online Gradintelligence system. You don't need to take any action in order to receive your transcript. Find out more here.

You can continue to use Gradintelligence after you graduate to give others (e.g. employers) permission to view your transcript, which provides official evidence of your postgraduate achievements.

Accessing your transcript
If you don't already have a Gradintelligence account set up by us, we'll create one for you. You'll receive a notification email from edocs@sheffield.ac.uk once your document is available.

If this is your first Gradintelligence document, you'll need to activate your account and create a username and password to access your transcript. The email, and on-screen activation instructions, will guide you through this process.

Official paper copies
If you need an official paper copy of your transcript for exceptional circumstances (e.g. regulatory purposes), you can order one from SSiD (www.sheffield.ac.uk/ssid/transcript)

The Careers Service at the University of Sheffield

A range of talks during the autumn semester have been arranged for PGT students in the Medical School, information has been included in your Intro Pack. We encourage you to attend these.

The Careers Service offers extensive guidance, advice and support on any job or career related issue to students of the University. See their pages here.

301 Student Skills and Development Centre
301 Academic Skills Centre is the University's facility that provides opportunities for students to develop the essential academic and study skills to underpin their learning at University. See the 301 pages here.

Requests for Progress Reports and other Administrative Documents
If you need a letter confirming your attendance on the course, statements of your current (preliminary) marks and other course-related administrative documents, please contact The Chemistry Office (chemdeptoffice@sheffield.ac.uk) by email. Please be aware that processing of these requests will take a minimum of two working days. At the end of your course, the University will issue you with the access to your Sheffield Higher Education Achievement Report.

Requests for Reference Letters
Please be aware that students do not have an automatic right to reference letters, so please obtain a member of staff's permission before including their name as a referee either on your CV or in a job or a PhD application.
Your Academic Tutor and your Project Supervisor should be the first members of staff you consider contacting when seeking references in support of your applications for jobs or other courses. However, students need to be aware that their tutor and project supervisor can decline to write reference letters, particularly during the first semester, when they feel that students have not given them enough information on their career plans and skills.
We strongly advise you to participate in Personal Development Planning (PDP) as the best way of providing your Tutor with the information they will need to provide supportive references. Members of staff will also decline requests to write reference letters when they think that a student is applying for a position for which they are not qualified.

English Language Support
Chemistry has a programme of language support provided by the University's English Language Teaching Centre (ELTC) specifically arranged for our MSc students, and you will be told the details of this at the start of the programme. The ELTS also offers a range of courses and support services for both UK and international students, including a writing advisory service and English language classes. Facilities at the Centre include computer and listening laboratories as well as audio-visual equipment and resources, all of which are available for individual use. Further information can be found on the ELT website at: http://www.shef.ac.uk/eltc/. You should also consult your Personal Tutor if you are having difficulties with language. **Correct use of English in written and oral work is expected and poor performance in these areas will be penalised in the marking.**

4.3 Your Wellbeing

General Administrative Enquiries
If you have administrative questions, the Student Services Information Desk is likely to be able to provide answers. Please access their pages here.

Socialising and Eating
You are welcome to use the Chemistry social space on G floor.

University Accommodation Contracts: Important Information!

If you are renting University accommodation, you may have signed either a 42-week or a 51-week contract. If you have a 42-week contract, you will need to extend it to 51 weeks before it runs out, to benefit from University accommodation for the entire period of study. This extension is likely to involve moving to different accommodation at the end of the initial 42-week period.

If you already have a 51-week contract, you do not need to extend it but please note that the University may still require you to change accommodation during the summer months to prepare for the new intake of students in September. For information on University Accommodation, please see here.

Registering with the University Health Service

If you are not already registered with a local GP, we recommend you register with the University Health Service at the earliest convenience. Registration will make it easier for you to see a doctor or nurse and obtain signed evidence if an illness prevents you from studying.

If you need to see a dentist for emergency treatment you can contact the Charles Clifford Dental Hospital on 0114 2717800, ring the emergency number for dental treatment on 111 or locate a dentist near to you on the NHS Choices website www.nhs.uk/Service-Search/Dentist/LocationSearch/3

Please note that charges will probably apply for dental treatment and we recommend that you take out private insurance if you are an overseas student.

Your academic tutor

One of the roles of your personal tutor is to act as the first point of contact should a problem arise. You can contact your tutor to discuss personal issues at any time. Your tutor can help you by providing personal advice or find the appropriate support service offered by the University. If you want to discuss a personal issue with your academic tutor, your tutor will treat the information in complete confidence if you ask them to do so, or you can ask your personal tutor to notify the course administrator and course leader, who will also handle your request in complete confidence.

You are required to have a minimal of **two** one-to-one meetings with your academic tutor each semester to review your progress and discuss any issues that you might have. It is important that you make appropriate arrangements with your tutor and the meetings needs to be recorded via the PAT system.

What can you do if you are concerned about another student?

In case you become worried about the emotional, physical or mental health of another student, you will find advice on what to do at www.sheffield.ac.uk/ssid/worried

We have a lot of experience with helping students deal with problems and we will always treat your concerns in confidence. Helping students often involves directing them to the right professional source of help. Please feel able to contact the Senior Tutor, Dr . Ben Partridge (b.m.partridge@sheffield.ac.uk)

And the Chemistry Office (chemdeptoffice@sheffield.ac.uk).

Student Support Services - Central Welfare and Guidance

The University's Central Welfare and Guidance team offer student support for students in crisis situations. More information can be found on University Wellbeing pages.

‘Togetherall’
University of Sheffield students who are going through a tough time can now access free online support with Togetherall.

The Disability and Dyslexia Support Service
If you have a disability, a medical condition or a specific learning difficulty, we seek to ensure that your chances of academic success are not reduced because of it. The DDSS can also advise you in case you are concerned about mental health (such as anxiety or depression). We strongly encourage you to contact the Disability and Dyslexia Support Service (DDSS). DDSS is a confidential and friendly service.

If you are likely to need alternative exam arrangements and do not yet have these in place, DDSS can liaise with the exams team on your behalf. They do need time to organise this and you would normally need to contact the DDSS very early in the course. Please talk to the Chemistry Office (chemdeptoffice@sheffield.ac.uk) if you are not sure about DDSS arrangements.

Belief, No Belief and Religious (BNBR) Life Centre
The BNBR Life Centre is here for all staff and students. Our chaplains and religious advisers provide a listening ear and pastoral support to all people whatever their identity, religion, belief or no belief. We are available in person, online, and via phone or video calls.

The University of Sheffield Students’ Union (SSU)

The Union is run by students for students. Through the Student Advice Centre, the SSU provides free, professional and confidential advice and support on a wide range of welfare and related issues such as money, housing, academic problems, employment, or immigration. More information can be found on their website. The SSU also manages social activities, sports and other leisure pursuits.

Support for International Students
The Sheffield Student Information Desk (SSiD) provides a wealth of online information about Tier 4 visas; please read this information regularly and look out for updates in our Global Campus emails.

The student immigration rules are complex and change frequently. If you have questions about your immigration status, you must seek advice from a qualified and authorised immigration adviser – not from friends or staff in academic departments. The University’s immigration advisers are based in the International Student Support Team.

Acknowledgement: this handbook is produced by referencing to relevant university guidelines and course handbooks from similar courses such as MSc in Drug Discovery.