

MSc in Oncology

Including PG Certificate and PG Diploma

Dissertation

Part C Guide 2017/18



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The information contained in this Part C Guide is correct at the time of going to press. Any amendments relating to the course or changes to published dates will be announced to students via Canvas, the course virtual learning environment. Information found on Canvas will always be the most accurate and up to date information available. Where anything in this guide contradicts the ICR Academic Regulations, the ICR Academic Regulations take precedence.

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Module details

1.1 Module overview

During Part C, you will develop and demonstrate advanced skills in research methodologies and techniques by undertaking a research-based dissertation, or equivalent, in a clinical setting. Successful completion of the dissertation is required to obtain the full Master of Science qualification.

Students will spend the majority of their time in Part C working on their research project, but will also attend mandatory teaching days that take place once a month at the ICR's Chester Beatty Laboratories in Chelsea. These sessions cover various topics relating to your dissertation and future career.

Part C is compulsory and can be taken after a student has earned 100 credits through Parts A and B of the course. The academic year for Part C runs from January to January; students have time between the end of Part B and the start of Part C to plan and explore the background of their chosen research project.

1.2 Module specification

Dissertation	
Full Title:	Dissertation
Part of Course:	Part C
Compulsory or optional:	Compulsory
ICR Reference Number:	MS3001
Academic Level:	Level 7 (Masters)
Credit Value:	60 Credits

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Contact information

2.1 General enquires

Students are advised to contact the MSc course team regarding any administrative matters at mscadministrator@icr.ac.uk. Any academic matters should be forwarded to the Course Director or Part C tutors as appropriate.

2.2 Key people

Name	Contact Information
Course Director	
Prof Robert Huddart Consultant Clinical Oncologist, ICR/RMH	robert.huddart@icr.ac.uk
Part C tutors	
Dr John Glaholm Consultant Clinical Oncologist, Charing Cross Hospital, Imperial Health Trust	johnglaholm@blueyonder.co.uk
Dr Tom Richards Consultant Clinical Oncologist, University College Hospital	tomrichards@doctors.org.uk
Dr Nicola Rosenfelder Consultant Clinical Oncologist, Royal Free London Hospital	nrosenfelder@gmail.com
Dr Matt Williams Consultant Clinical Oncologist, Imperial College Healthcare NHS Trust	mhw@doctors.org.uk

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Part C structure and aims

3.1 Aims

The aim of Part C of the MSc in Oncology is to advance and define your research skills, through designing research methodologies and/ or mastering techniques, to develop you as a researcher. The dissertation, and the skills developed while completing it, are the key components that distinguish the MSc from the Postgraduate Diploma.

3.2 Learning objectives

Completion of Part C will allow students to:

- Conduct independent research or carry out a critical review of the literature (or a similar piece of work);
- Prepare a professional dissertation;
- Generate data for publication in a peer-reviewed journal, and/or for a poster presentation at a relevant conference.

3.3 Structure

Designing and carrying out an independent research project or critical review is an essential part of any MSc programme; the production of the Part C final project report is therefore a significant component of the full MSc in Oncology. Part C comprises 600 notional learning hours and the vast majority of these will be dedicated to your research project. The remainder will be used to attend compulsory teaching sessions, which are held once a month.

Research project

All students must complete a dissertation, thesis or peer reviewed paper based on a project of their choice. Project proposals must be submitted and approved before this can be undertaken. The

expectation is that you will plan and undertake the project in your own locality with a local facilitator, with the additional support of a Part C tutor and the Course Directors where necessary.

Throughout the course of Part C, carrying out the research project will teach students:

- How to undertake self-directed research;
- How to work with others (supervisors, peers, patients);
- About the practicalities of research;
- To develop a critical approach to the research of others;
- To appreciate those who continue to do research.

Teaching sessions

As well as the research project, Part C students will attend monthly tutorial sessions that will feature workshops and revision periods. These begin at the start of the course year in January, and the topics covered will include:

- Group research discussions;
- Formal project trouble shooting sessions;
- Literature searching skills
- IT skills (Endnote, Office, PowerPoint, Excel);
- Statistics revision (SPSS);
- Presentation skills

Students will also be able to attend one to one tutorials with the Part C tutors at these monthly sessions, at the student's request. A full and up to date timetable for Part C, including all the teaching sessions, is available in the calendar on Canvas. Any changes to this schedule will be announced through Canvas notifications.

3.4 Attendance

Attendance at the monthly teaching sessions is mandatory and you are asked to meet the 75% attendance requirement. Attendance will

be monitored; ensure you register your attendance at each session by tapping your security card onto the card reader (or by signing in in the case of technical difficulties). **Failure to do so will be recorded as an absence.**

3.5 Supervision

All Part C students should seek a local academic facilitator, or supervisor, at their NHS trust. It is recommended that you meet your local facilitator frequently throughout the year. They may be required to give you assistance with the study protocol (for instance, they may have to be the local chief investigator), but they will also provide other support for the project, including discussion of the emerging results and their analysis.

The local facilitator has a responsibility to proofread your dissertation before submission. They will also be asked to provide a statement covering their involvement with the project (source of ideas, practical help given, number of meetings held etc.) and confirm that they have seen and are happy with your final project report.

It will be very difficult to defend a poor project where appropriate input from the local facilitator has not been sought, or advice has been ignored. Conversely, if a local facilitator's input has been inadequate please inform the MSc course team **before submission.**

3.6 Completion

Successful completion of the dissertation is required to obtain the full MSc in Oncology qualification. If you are unable to conduct the research project, then ICR Academic Regulations allow you to exit with a Postgraduate Diploma in Oncology.

3.7 Project approval

Students should begin considering their research project or critical review whilst finishing Part B of the course. A first draft of the dissertation proposal form, available on Canvas, detailing your full project outline should be completed in time for discussion at the first induction meeting (normally held in October). You should submit your form to the MSc course team by the first draft deadline, listed on Canvas, in order for the Part C tutors to appraise your proposal before the meeting. You will then have the opportunity to discuss your ideas with one of the tutors at the meeting.

Following the induction session, and after considering and incorporating any suggestions from the Part C tutors, submit your finalised project proposal by the approvals deadline, typically in November (the exact date will be listed on Canvas). The proposal will then be considered by the Approvals Board. Students will be informed whether their project proposal was successful ahead of Part C registration. Students whose proposal has not been approved in time for registration will not be permitted to register.

All project proposals must also be read and approved by your local facilitator prior to submission. Please leave adequate time for them to do this before the deadline. Inform the MSc course team if this is not possible.

3.8 Timeline for Part C

All projects vary and as such it is hard to be prescriptive over the exact timing of your research project. As a guide, the following timeline should help you plan your progress through Part C. Project planning and proposal submission should occur before the official induction to Part C, which is also indicated on the timeline.

Pre-Part C

Summer	Begin to plan project <ul style="list-style-type: none">- Choose local facilitator and discuss project plans with them- Find out what permissions will be required e.g. R&D and/ or Research Ethics and/ or audit approvals (consider submitting proposal now if permissions are needed)- Discuss project plans with Statistical Support Services
October	Preliminary induction day <ul style="list-style-type: none">- Submit project proposal first draft to discuss with Part C tutors
November	Formally submit project outline <ul style="list-style-type: none">- Undertake approvals with ethics/ R&D/ audit as required
December	Approvals Board <ul style="list-style-type: none">- Receive confirmation that project proposal is approved and your Part A/B progression is satisfactory to enter Part C

Part C

January	First study day and formal registration <ul style="list-style-type: none">- Monthly teaching sessions begin - discuss your project progress with the Part C tutors and your study group
January - July	Recruit subjects/ accumulate data <ul style="list-style-type: none">- Consult medical literature / other background reading to guide project and inform the discussion of data
August	Compile and review data <ul style="list-style-type: none">- Consider how much time it will take to finish collecting and analysing data – is it achievable?- Consider what statistical analysis should be used (and software needed)- Begin to write Introduction and Methodology sections
September - November	Write up project <ul style="list-style-type: none">- Decide how to present the data - if necessary obtain help to prepare charts, graphs, or photographs- Aim to complete writing during early November to allow for editing time / other problems- Get report proofread by local facilitator and make changes- Allow time for printing, binding and delivering of final dissertation
December	Presentation <ul style="list-style-type: none">- Present findings to peers, local facilitator, educational supervisor, Part C tutors and Course Directors
January	Final deadline for submission <ul style="list-style-type: none">- Exact deadline will be listed on Canvas

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Dissertation guidelines

4.1 Introduction to the dissertation

All students will prepare and submit a full, bound, written report detailing the background, findings and conclusions of their chosen research project. The dissertation will typically be assessed by two Part C tutors and will be awarded a mark, which will determine your final MSc in Oncology degree classification.

4.2 Dissertation structure

Your dissertation thesis should include the following sections:

Abstract / Summary

Start your dissertation with a summary (250 words maximum), separate from the main text, that indicates the scope, results and conclusions of your research. This should resemble the abstract in medical journals. It is a key skill to generate a succinct abstract; hence examiners will be instructed to read only the first 250 words.

Introduction

This section should contain a clearly formulated research question linked to the aims and objectives of your study. Include the hypothesis or series of hypotheses that you planned to test (note - these may have changed during your research project). The background to the study should include a brief overview of the condition being studied, indicating the major questions in that area, and cover previous work and publications that may be relevant. If you used a similar introduction in your project proposal, check that your literature review is still up-to-date. You should also point out how your study differs from or improves upon previous work, and justify the project in terms of its importance and whether it could affect the current use of an investigation or treatment.

Methodology

Give an outline of the methodology used in the project, including details such as: patients, ascertainment, randomisation method, controls, power calculations, demographics and background population. This must be accompanied by R&D registration and Ethics Committee details (with relevant letters, forms and questionnaires in the appendix) if applicable. If laboratory investigations were used, please give sufficient detail to allow the reader to replicate them, and make clear your role in these processes. This section should also include analytical rationale and reasons for selecting the statistical analyses used in the project. Candidates will lose marks if they use inappropriate or inadequate statistical analyses.

Results

In this section, describe your results in the style of a learned publication, including fully labelled charts, tables and figures with appropriate legends. Consult your course material and medical journals for examples of good practice. It is crucial to display the data clearly and logically.

Discussion

You should conclude the report by discussing the meaning of the results. In this section, consider: Did you achieve your aims and objectives? Was your hypothesis confirmed? What factors affected your results? How would you design future studies? As a guide, this section should be at least three pages long. The highest marks are awarded when the candidate demonstrates a full understanding of the context and importance of their study, while still being open about its limitations. Some candidates include a frank assessment of their studies strengths and weaknesses.

References

Include a fully formatted list of the references you have used in this last section of the dissertation.

4.3 Dissertation formatting guidelines

The presentation standard of your dissertation should reflect the quality of work contained within it: poorly printed, disjointed or amateurish presentation will not gain full marks. Marks will be awarded for the structure and formatting of the document, as well as the scientific content, so please adhere to the following guidelines when formatting your dissertation:

Word limit

The full research project dissertation should contain no more than 10,000 words, excluding the summary/abstract and reference list. **Any submissions with a word count above this limit will be penalised.** Overly short dissertations (less than approximately 6,400 words) are unlikely to be of an adequate level to receive a pass mark.

Style

Use Ariel font, with a point size of 11. Paragraph spacing should be 1.5 lines. The left and right margins should be set at 3 cm, while the top and bottom margins should be 1.5 cm. Please use single spacing after commas, colons, semi-colons, question marks and exclamation marks, and double spacing after a full stop.

References

Each time you quote published work in the text or in tables/figures you must cite the original paper in the text. Use reference formatting software, such as Endnote, for this. The reference section should contain full citations in Harvard style. Your report should contain at least 30 references, although most good dissertations contain around 50.

Covers

After printing your report, please use the preformatted ICR front cover, provided to you at the presentation day, at the front of your document and a plain card cover as the back cover.

Title Page

Please include the following information on the title page (first page after the cover) of your document:

- MSc in Oncology
- Part C | Dissertation
- Academic year
- Title of your dissertation
- Name

Second page

- Acknowledgments
Acknowledge all the people you would like to thank in helping with your dissertation and time as a student on the course.
- Word count
State your final word count, excluding summary/abstract and references.

Appendices

Add any additional items to appendices at the end of the document, if necessary.

Page numbering

Include page numbers on each page of the document, except the title page. Positioning the page number in the middle of the page is the preferred style.

4.4 Submission guidelines

You must submit three professionally soft-bound paper copies of your dissertation to the MSc course office, and one electronic version to Canvas for plagiarism checking. You should bind your dissertations using comb binding, and should submit your electronic version to the dissertation assignment in the Part C module on

Canvas. Guidance for how to do this is available on the assessment pages of Canvas.

All four copies should be received by 23:00 on the day of the submission deadline, which is stated on Canvas. **Failure to meet this deadline will result in the submission being marked as late and a penalty will be applied.**

Please also include a coversheet with your submission that details the name and contact details of your local facilitator. The coversheet should include a statement confirming the extent of their involvement in the research and that they have seen and approved the final dissertation. Please also indicate how much of the work carried out in the dissertation is your own, and how much was conducted by your colleagues. Note: this does not detract from potential marks as it is recognised that research is often multi-disciplinary.

If you think you will be unable to submit your dissertation by the deadline please discuss this with the Part C tutors, Course Director or the MSc Course Manager as soon as possible.

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Assessment

5.1 Assessment overview

Part C is assessed by the quality of the research project dissertation. Please refer to the Part C module on Canvas for more guidance on the general aspects of assignment submission and criteria for Part C assessment.

5.2 General assessment guidance

Appraisal of the research project dissertation forms the basis of assessment for Part C. The dissertation will be assessed by two independent examiners, usually Part C tutors.

The dissertation must be written in your own words, but you can quote published work if it is included in inverted commas and cited appropriately. All dissertations will be checked for plagiarism and where identified will be formally penalised as an examination offence, as set out in the ICR Academic Regulations available on Canvas.

5.3 Marking criteria

Dissertations are assessed according to the marking criteria described in the Assessment section of the Student Handbook or Canvas. **The pass mark is 50%, with a distinction awarded at 70% and above.** It is worth noting that a distinction cannot be awarded for the MSc as a whole if the project mark is below 70%. If there is a discrepancy in the marks given by both examiners of 12% or more, a moderation panel will be held to discuss and agree a final mark. The final mark will always be verified at the Examination Board.

If the dissertation fails to reach the required standard to pass then there will be the option to rewrite and resubmit with corrections and/or amendments, or to change to a different project.

5.4 Oral presentation

It is a general requirement that work submitted for an MSc should be orally examined. In this course, this is undertaken as a formative oral presentation on the Part C Presentation Day, usually held in the December prior to the January dissertation submission date. This oral presentation is therefore mandatory and you must make all reasonable efforts to attend.

You will be asked to present a 10 - 12 minute summary of the main findings and conclusions of your project to your peers and other invited Part C tutors and Course Directors. This will be followed by 5 minutes of time for questions. Your performance in the presentation will not contribute to the overall dissertation mark.

If you do not attend the presentation you will be called to present to a panel of course staff on the morning of the MSc Examination Board. Please inform the MSc course team as soon as possible if this is the case.

5.5 Defence viva

Students will be asked to attend a viva to defend their research if the mark awarded for the dissertation is immediately below the pass mark (48-49%), or immediately below the distinction mark (68-69%). Students will not be asked to attend a defence viva if they have been awarded the minimum pass mark, distinction or a higher mark.

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Other resources

6.1 Learning resources

The following learning resources are relevant to this module:

Key Text

You are strongly advised to read the following text:

- Organising and managing your research: A practical guide for postgraduates. Phelps R, Fisher K, Ellis A (2007) Sage Publications

E-learning resources

You are advised to utilise the following resources:

- Skills: skills.icr.ac.uk - web resource providing transferable skills training to students.
- Nature Masterclasses: masterclasses.nature.com – online resource providing training in scientific writing, with a focus on writing for publication.

6.2 Tips for writing a dissertation

The following tips are provided to you to help you write up a successful research project dissertation:

1 – You do not have to start writing at the beginning

Start with whichever section you feel most comfortable with. Move between sections as you wish. Start with aspects of the study that are of most interest to you – this will help you engage.

2 – Never stop writing

Write as frequently as you can, and make a note of any thoughts you have about your project when not at your computer so you do not forget them and can incorporate them at a later date.

3 – Use Word's 'Table of Contents' and 'Headings' facilities

This will allow you to see the structure of your document coming together on one page, and will make formatting the document at the

end much easier. You will also be able to move around sections quickly and cross-reference across the document. The 'Writing up your dissertation' teaching session will cover this functionality.

4 – Read your draft out loud to yourself

This will enable you to check the length and structure of your sentences, and ensure your arguments and conclusions are clear and sound.

5 – Back up or print out draft versions frequently

Save work in different places (e.g. work, USB, home computer, email) and date stamp them to prevent any accidental losses.

6 – The end is the beginning

The Introduction should be written last. You will not know what concepts to introduce to your reader until you have assembled and coherently discussed your findings.