

DISSERTATION HANDBOOK



Year 2: EGM303.350.351

Final Year: EGM503

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CONTENTS

Section	Theme	Page
01	Dissertation timeline	3
02	Dissertation overview	4
03	Year 2: Preparing for your dissertation	6
04	Final Year: Dissertation project	12
05	FAQs	16
06	Appendix 1 - Dissertation marking criteria	19
07	Appendix 2 - Dissertation marking rubric	21

01. TIMELINE

YEAR 2

Semester 2
Modules EGM303.350.351 – Field Schools

Week		Weighting	Deadline
1-2	Dissertation preparation		
3	Identify dissertation supervisor and topic		
4-6	Develop research proposal		
6	Submit research proposal	25%	10.03.24

FINAL YEAR

Semester 2
Module EGM503 - Dissertation

Week		Weighting	Deadline
6	Dissertation draft	Formative	10.03.24
11	Dissertation submission	100%	28.04.24

02. MODULE OVERVIEW

2.1 GENERAL ADVICE

Accessing material

We recommend that you access Blackboard using a desktop/laptop device for the best user experience. You can however download the blackboard app to engage with material via your phone perhaps when you are out and about, but when working through material use your computer.

Normal Staff Working Hours

08.45 - 17.00 Monday to Thursday
08.45 - 16.00 Friday

Staff will not respond over the weekend. Please be patient when contacting us via email as we have other teaching, research and administrative commitments. Make sure you use the correct email addresses for staff (you can check contact details at <https://www.ulster.ac.uk/staff-links/links/a-to-z>).

2.2 KEY TEXTS

To plan ahead and provide a focus for your dissertation, you should regularly consult and ideally own a copy the key text. Copies are available in the library and to buy online for approximately £30:

Parsons, T. and Knight, P.G., 2015, *How to do your dissertation in geography and related disciplines*, Routledge.

A couple of good sources for human geography students are:

Clark, T., Foster, L., and Bryman, A., 2019, *How to do your social research project or dissertation*. Oxford: Oxford University Press.

Peters, K., 2017, *Your human geography dissertation: designing, doing, delivering*. London: Sage

Another excellent resource is:

Gustavii, B, 2008, *How to write and illustrate scientific papers*, Cambridge University Press. PDF:
<https://www.dropbox.com/s/w2qy9y1lboxp8sl/Gustavii%20Scientific%20Paper%202008.pdf?dl=0>

And invaluable advice on writing your first research paper is outlined in:

Kallestinova, E.D., 2011, How to Write Your First Research Paper, Yale J Biol Med. 84(3): 181 – 190 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3178846/>

2.3 DISSERTATION SUPPORT AREA

We have set up a website to support your dissertation, including dissertation examples, access to the digital data library, and advice on statistics and scientific writing: <https://www.ulsteruniges.com/dissertation>

Year 2 and final year students have automatic access to the GES Dissertation Support Area on Blackboard.

https://learning.ulster.ac.uk/ultra/courses/_261596_1/cl/outline

You will submit all dissertation-related assignments and receive all feedback and marks through this area.

2.4 LAB AND FIELD SUPPORT

If field- or lab-work is part of your dissertation, please make sure you make the necessary arrangements with your supervisor well in advance. This will ensure that equipment is serviced and ready to go, that the lab is free and that lab technicians are available to help if needed.

If you cannot get the necessary information from your supervisor, you should contact the GES Technical Services Co-ordinator Gordon Neill (g.neill@ulster.ac.uk) so any delays can be avoided.

03. YEAR 2

3.1 Introductory sessions

Week 1 – Dissertation training

09.15-10.15: Introduction to the dissertation process. Dr Rory Quinn

This session will bring you through the dissertation process, from start to finish. Looking at research topics, supervisors, the scientific process and examples of successful dissertation projects from previous students.

10.15-11.15: Research ethics and health & safety. Dr Sara McDowell

This session will focus on research integrity, ethics and risk. You will explore health and safety considerations associated with lab- and field-work, and The Universal Ethical Code for Scientists.

11.15-13.15: Library training. Group 1. Library IT Suite

In these sessions you will focus on desktop research, literature searches and managing references. RefWorks is a web-based reference management service that allows you to import references from online databases and other sources.

Week 2 – Dissertation Training

09.15-11.15: The research proposal – part 1 . Dr Rory Quinn

10.15-11.15: The research proposal – part 2 . Dr Rory Quinn

We will focus on three questions. Why do scientists write research proposals? What information do research proposals contain? What is the desired outcome of a research proposal? Followed by guidance on the assignment.

11.15-13.15: Library training. Group 2. Library IT Suite

In these sessions you will focus on desktop research, literature searches and managing references. RefWorks is a web-based reference management service that allows you to import references from online databases and other sources.

Week 3 – Identify topic and dissertation supervisor

Task: Finalise dissertation topic and supervisor

Instruction: Email dissertation title and supervisor to Rory Quinn rj.quinn@ulster.ac.uk

Weeks 4-6: Develop research proposal

Task: Develop and submit dissertation proposal

Instruction: Submit online - Blackboard Dissertation Support Area

Week 9: Feedback

Feedback session with supervisor to agree dissertation plan

3.2 Dissertation topic and supervisor

In semester 2 of year 2, you identify a dissertation topic and supervisor, and submit a research proposal. The key to a successful dissertation is to choose a project with clear focus and one that will sustain your interest for a minimum of 12 months. The project should be designed to either collect primary data or use existing (secondary) data to address a clear research question. To help in the process, we have compiled a list of dissertation projects with two key references per project to get you started (previously circulated). If none of these topics suit, you can design your own project with input from your supervisor.

3.3 The role of your supervisor

Although the dissertation is essentially an independent piece of work, you are supported by a member of staff who acts as supervisor. Supervisors may be able to give advice on practical issues such as: the subject and title of the dissertation, its organization and structure, and on source material and a short bibliography to get you started.

Supervisors can also be expected to comment on research proposals, literature reviews and a first draft of your dissertation. However, a dissertation is intended to demonstrate your ability to work on your own, and supervisors are not expected to direct your work.

3.4 Research Ethics and Health & Safety

3.4.1 Context

Ethics, safety and risk assessment are important aspects of the research planning process. You cannot do research that is unsafe, illegal or ethically unsound (Parsons and Knight, 2015). The research proposal represents the stage in the dissertation process where you need to address your plans and identify potential safety or ethical issues involved in your research. You must complete the risk assessment and ethical approval sections of the research proposal, and this will form the basis for some discussion with your supervisor.

Some projects have obvious ethical or safety issues. For example, working on the foreshore presents risks associated with data collection in a sometimes inhospitable environment. Working in a laboratory with hazardous substances poses significant risks. Operating for long periods in front of computers without taking defined breaks can lead to eye and back strain. If your dissertation involves working with children, vulnerable adults, or animals then ethical considerations must be considered.

3.4.2 Ulster University Health and Safety Guidance

You should familiarize yourself with the Ulster University procedures, guidance and forms related to managing Health and Safety. These procedures should inform the risk

assessment section of your research proposal. Of particular interest are the documents relating to fieldwork, display screen equipment, manual handling, and the control of substances hazardous to health.

http://www.ulster.ac.uk/healthandsafety/procedures_safety.html

3.4.3 Ulster University Governance of Research Involving Human Participants

If you are conducting research involving human participants, you should familiarise themselves with the Ulster University policy for the governance of research involving human participants. This policy should inform the ethics section of your research proposal.

https://www.ulster.ac.uk/_data/assets/pdf_file/0003/331878/Policy-Human-Research-V5.pdf

3.4.4 Safety in the Field

Access to sites

You must not attempt to conduct investigations on private land/property without the permission of its owners. This applies to land and all other types of property (e.g. shops, leisure services, means of transport). If the property/land is publicly owned permission must be obtained from the relevant authority/management. If requested to do so, you must leave the land/property immediately and without protest.

Fieldwork

Before commencing fieldwork, you are strongly advised to make your own assessment of any potential dangers/hazards and decide upon a suitable method of working. This should be discussed with your Dissertation Advisor as part of the proposal. It may be necessary to revise your assessment of dangers or hazards as your field work progresses.

Before starting fieldwork, you must leave information about your intended programme and itinerary with a parent or another responsible person. You should leave a record of:

1. Date and time of departure.
2. Method of travel to the field location, and around the site once there.
3. Proposed itinerary (give grid references whenever possible).
4. Any potentially hazardous technique or operation to be used and where it is proposed to use it.
5. Expected time of leaving the field location and estimated time of arrival home.
6. Carry a mobile and get local and national emergency telephone numbers. Ensure that your mobile phone works (roaming, reception) in the fieldwork area.

You should ensure in advance that you have suitable clothing and equipment for the proposed fieldwork.

Clothing suitable for the work and the time of year should be worn. Extra clothing should be carried in climatically unpredictable areas where there is risk of exposure. In hot weather, bear the risk of sunburn in mind. Wear good walking boots. A safety helmet must be worn when undertaking work near cliff bottoms or quarry faces, or other places where there is a risk from rock or other fragments.

When working in remote areas, you must carry a map and compass (and know how to take a bearing). When working in remote locations, you should also carry a whistle, a watch and a torch. When working in remote areas, carry a first aid kit, and in remote (potentially cold) environments, you must carry an emergency survival blanket. If you borrow School equipment make sure you know how to use it properly – ask a technician for guidance if you need it.

Working in the field

Lone working is strongly discouraged. Always bring someone with you on fieldwork. When working on surveys (questionnaires, observations etc) you should find another person to join you. In any case, avoid putting yourself at risk by working in locations or situations which could be hostile or threatening.

3.5 Dissertation proposal

3.5.1 Guidelines

You should submit the research proposal via Turnitin using the template on the Blackboard Dissertation Support Area. The research proposal contributes 25% of the mark for the field course modules. Supervisors will provide feedback via the Turnitin Feedback Studio and use this for the basis of discussion in week 9.

Your research proposal should be informed throughout by the scientific literature. The research proposal contains: a section on the research context (a minimum of five references should be cited, word limit of 1000 words), a clear statement of aims and objectives, an outline of the methodology you propose to use in the study, a timeframe for the study in the form of a Gantt chart, a completed risk assessment, and an ethics approval form. Use figures and tables in the research proposal to support your work - especially effective when the word limit is tight.

Marks breakdown: Aims, objectives, research questions (10%); research context (40%); research methodology (20%); risk assessment and ethics (5%); timing and planning (10%); presentation (5%); referencing (10%)

3.5.2 The proposal

Title

The title should be clear, succinct and accurately reflect the content of the proposal.

Aims and objectives

The aim is what you hope to achieve and is usually written in broad terms. Objectives are the specific actions you take in order to achieve the aim. When writing objectives use strong positive statements and strong verbs, using terms such as: collect, derive, construct, classify, develop, devise, measure, produce, revise, select or synthesise. Each objective should lead to an outcome. Try not to exceed five objectives.

Research context

This mini literature review is an evaluation of previous research on your topic. You're expected to demonstrate that: (i) you recognise the relevant and important research in your field, (ii) you understand this research, by organising and evaluating it, and (iii) you see where there is a gap in the research which your study will attempt to fill.

You can organise the research context section in various ways, including: (i) thematically, around key themes or debates, (ii) methodologically, around different methodological approaches used in your field, or (iii) sequentially, from the original research that influenced the field to the most recent developments.

The research context should comprise three sections:

- An introduction that explains the broad context of your research area and the main topics you are investigating. It briefly highlights the relevant issues or debates that have characterised your field of research.
- The main body, an analysis and critical review of the literature according to a number of themes or topics or methods that overlap with your research. It should have headings and show how your research builds on what has been done before. Based on previous research, you provide justifications for what you are doing, why you are doing it, and how you are going to do it. Use figures to illustrate the points you make.
- Conclusion, summarising the current state of the research in your field as analysed in the main body. Identify any knowledge gaps or problems with the existing research, and explain how your investigation is going to address these gaps or build on the existing research.

Methodology

Tell readers how you will conduct your study. You should include information about the methods and equipment you will use, and the data and samples you will collect. It should not be written as a series of commands, but as flowing text and in sufficient detail that a competent scientist could follow your methodology and replicate your results. It must include a brief summary of the data analysis you intend to do. Use subheadings if appropriate (e.g. data collection, data processing, data analysis). Write this section in the future tense as this represents a plan for the future. It should be informed by the literature.

Timeline

Use a Gantt chart to illustrate the proposed timeline, step-by-step, from start to finish. You can easily design this in MS Word (as a table) or in MS Excel.

Task	Month 1 June 2017	Month 2 July 2017	Month 3 Aug 2017	Month 4 Sept 2017	Month 5 Oct 2017	Month 6 Nov 2017	Month 7 Dec 2017	Month 8 Jan 2018	Month 9 Feb 2018	Month 10 Mar 2018	Month 11 April 2018	Month 12 May 2018
Literature review												
Experimental design												
Fieldwork												
Data compilation												
Data analysis												
Progress report												
Progress meeting 1												
Poster presentation												
Writing												
Progress meeting 2												
Submit draft dissertation												
Progress meeting 3												
Writing												
Submit final dissertation												

References

Use the Harvard Referencing System to reference material cited in the proposal. We expect to see a minimum of ten journal papers cited and referenced in the research context section of your proposal.

04. Final Year

4.1 Dissertation

You must submit the dissertation following the instructions to authors outlined below. Feedback will be provided via the Turnitin Feedback Studio. Feedback and marks will not be released until after the final exam board in June as dissertations are subject to moderation by the External Examiner.

Marks breakdown: Abstract (5%); Introduction (12.5%); Research methodology (12.5%); Results (20%); Discussion and conclusions (30%); Presentation (10%); Referencing (10%)

4.2 Dissertation draft

You have the opportunity to submit a draft of your dissertation at the end of week 6, and receive feedback prior to your final submission. We advise you submit a full draft if possible to allow your supervisor to provide the most effective feedback. Partial drafts are also accepted, but feedback will obviously be limited in this case.

4.3 Instructions to authors

4.3.1 Formatting

Word count: 6,000

Figures: Maximum of 10

Tables: Maximum of 4

Font: Arial 11

Spacing: 1.5 line spacing

4.3.2 Word count

Word count: 6000. The word count excludes references, figure captions and tables. Use MS Word to generate the count and include the exact word count on the title page of your report. No appendices or supplementary material allowed.

Penalties for excessive word count:

0% - 10%: no penalty

10% - 20%: 5% penalty

20% - 30%: 10% penalty

30% - 40%: 15% penalty

40% - 50%: 20% penalty

>50%: maximum mark of 40%

4.3.3 General advice on writing

Write to inform, not to impress. Use the passive voice where appropriate (methods and results). Use simple clear language and refrain from overly complex sentence structures. Do not use long words where short words will do. Ask a colleague to read a draft of your dissertation and be prepared for constructive criticism. If one reader does not understand parts of your text, others will have the same problem.

Make sure the dissertation follows a clear logical structure and does not jump around between ideas. Use subheadings effectively but not excessively - each subheading should comprise more than one paragraph. Make sure paragraphs are not too long (more than a single page) or too short (less than three sentences).

4.3.4 IMRaD structure

The IMRAD structure is the most prominent norm for the structure of a scientific report, where IMRAD is an acronym for introduction, methods, results, and discussion. Use an outline to organise your ideas before you start writing your dissertation. Make an outline of the major headings and subheadings. List the key ideas under each heading. Organize your thinking, narrative and arguments at this stage.

The dissertation should be divided into the seven parts:

Title
Abstract
Introduction
Methodology
Results
Discussion
References

Advice is provided below in terms of the style and content for each of these elements.

Title

The title should be short, clear and accurately reflect the content of the paper.

Abstract

Although the abstract comes at the beginning of the dissertation, you should write it after you have drafted everything else. The abstract is a one paragraph summary (maximum 300 words) of the entire paper. The abstract should be self-contained, capable of being understood without the benefit of the main text. It should contain four elements:

1. a sentence or two about the principle objectives (the central question);
2. a sentence or two on the methods used;
3. a few sentences that summarise the results, and
4. a sentence or two about the implications of your findings.

Do not refer to the dissertation in the abstract. If uninformative phrases such as 'is discussed' and 'is shown' appear in the abstract, the above criteria are not met. The abstract should not contain references.

Introduction

The introduction explains why your study is important or necessary. Begin by describing the problem or issue that motivates the research. Next discuss the current state of knowledge in the field by reviewing the pertinent literature; then reveal the knowledge gap or problem that is the subject of your report.

You should present aims and objectives at the end of the introduction. The aim is what you hope to achieve and is usually written in broad terms. Objectives are the specific actions you take in order to achieve the aim. When writing objectives use strong positive statements and strong verbs, using terms such as: collect, derive, construct, classify, develop, devise, measure, produce, revise, select or synthesise. A maximum of five objectives is recommended.

Methodology

If your study is field-based, or geographically focused, the first section of your methodology should concentrate on the study area. Include a location map. Describe the key human/physical/chemical/biological patterns and processes that will later help explain your results. This section contains established knowledge about the study area, not the new data that is the focus of your dissertation. This section is therefore informed by the literature.

The remainder of the methods section tells readers how you conducted your study. It includes information about your methods, equipment, samples, data, data analysis, and statistical analysis. It should be written in sufficient detail that a competent scientist could follow your methodology and replicate your results. Format as paragraphs of flowing text, not as bullet points. Avoid excess detail, you are not compiling an instruction manual.

Methods sections typically use subheadings (e.g. data collection, data processing), are written in past tense and use the passive voice.

Results

In the Results section, you present your findings. Typically, the Results section contains only the findings, not interpretations of the results. But you should describe the patterns, trends and any outliers in the results you present. Make sure all tables and figures are labelled and numbered sequentially. Captions go above tables and beneath figures. Cite all the figures and tables in the text.

When reporting results from statistical tests do not paste tables from software like SPSS. Be selective and report only the essential results, i.e. as a minimum identify which test was conducted and report the symbol of the test statistic, the degrees of freedom placed in

parentheses next to the symbol of the test statistic, the value of the test statistic, the p-value, together with a brief explanation. Example: An independent two sample t-test indicated that millipedes ($M=95$, $SD=.40$) had a significantly higher number of leg pairs than centipedes ($M=13$, $SD=.21$), $t(18)=12.21$, $p=.002$.

For human geography dissertations, you might want to organize your results into thematic sections – please discuss this structure with your supervisor.

Discussion and Conclusions

In this section, you summarize your main findings (interpret your results), comment on those findings, and discuss agreements or disagreements with previously published work. You should also discuss limitations of your study, and use these limitations as reasons to suggest additional, future research. If you have a separate section with conclusions, this should not contain any references.

References

Use the Harvard Referencing System to cite and reference material. All references cited in the body of the paper are listed alphabetically by last name of the first author. Only references cited in the body of the paper are listed here.

The Open University Harvard Referencing Guide is an excellent resource:
https://www.open.ac.uk/libraryservices/documents/Harvard_citation_hlp.pdf

Figures and tables

You are limited to 10 figures and 4 tables. Composite (multi-part or multi-element) figures are effective. Figures should not contain any figure titles. Figure/table captions should contain sufficient information so that a reader can understand a table or figure without reference to the text. Captions are often most effective when they briefly summarize the main result presented in the table or figure. Captions are positioned below a figure and above a table. Figures and tables are numbered in order of appearance and should be cited in the main text at the appropriate point.

If maps are included in figures, they should contain the following cartographic elements: north arrow, distance scale, key and graticule/grid. Remember to define symbols and colour scales, and include labels and units.

Submitting to Turnitin

Save your word-processed file as a PDF and upload the PDF version to Turnitin. This will preserve the formatting of your text and figures.

05. FREQUENTLY ASKED QUESTIONS

Who should I contact if I have problems with my dissertation?

Try and resolve the issue yourself. If you cannot find a solution, contact your supervisor. If you still cannot find a solution, contact the module co-ordinator.

Will I get an extension?

Only in exceptional circumstances will you be granted an extension to your dissertation deadline. When an extenuating circumstance occurs which is out of your control, an EC1 form should be submitted as outlined on your Student Support Area on Blackboard.

Where do I get an EC1 form?

You can complete the online EC1 form on the student portal.

What are 'extenuating circumstances'?

Extenuating circumstances refer to something unforeseeable or unavoidable. They are normally circumstances beyond your control which either prevent you submitting the dissertation, or which affect academic performance during the dissertation process. Extenuating circumstances will usually be health related or of a personal nature. Examples of extenuating circumstances that may be accepted by the Board of Examiners include:

- Illness in the run-up to the dissertation deadline;
- Bereavement in the run-up to the dissertation deadline (normally a close relative);
- Sudden illness or emergency in connection with a family member or dependent;
- Civil disturbance (rioting, intimidation, bomb-scares, bus and rail disruption);
- Traumatic event (e.g. being assaulted, or witnessing an accident or assault).

What circumstances are not accepted as extenuating?

It is not possible to list every circumstance that the Board of Examiners would reject. Unless there are extraordinary circumstances, general pressure of academic work is not taken to be circumstances beyond your control, as you are expected to plan your work schedule. Examples of extenuating circumstances that would not normally be accepted:

- Employment commitments limiting time available for study;
- Pressure of other academic work e.g. other coursework due around the same time;
- Having to take a pre-arranged holiday;
- Wedding preparations;
- Sporting commitments (although exceptions might sometimes be made, e.g. if you were representing your country, or the University);
- Missing a bus;
- Moving house;

- Failure of IT systems, or inability to gain access to IT systems, when you have not taken adequate precautionary measures.

Note these examples are not definitive, and are intended only as a guide. In all cases, the Board of Examiners has ultimate authority to use its discretion, taking into account the full circumstances of a particular case.

Can I change dissertation topic once I have submitted my research proposal?

Yes. If you decide to change topic after submitting your proposal, you must discuss this with your supervisor and agree the new topic. If necessary, a new research proposal will be submitted. Although this new proposal does not form part of the assessment it is nonetheless important, as it will help to ensure that you have thought through the design of the new dissertation project and that it is a relevant and feasible study. You will also need to complete a new risk assessment. Students enrolled on the DPP programme sometimes change dissertation topics to suit their industrial placement.

What if I experience problems with Turnitin and I miss the digital submission deadline?

Don't panic. Do not attempt to submit the digital version of your dissertation as an e-mail attachment either to your supervisor or dissertation co-ordinator as this will clog their mail boxes. Instead, e-mail the dissertation co-ordinator asap after the deadline passes to explain the circumstances and the time-stamp on your e-mail will be accepted as evidence of attempted submission.

Who marks my research proposal and progress report?

Your research proposal and progress report are marked by your supervisor, and form the basis for discussion in subsequent progress meetings.

When can I expect feedback on my dissertation?

You can expect detailed feedback on a draft of your dissertation by week 9 if you submit it by the week 6 deadline. After this point, you can expect your supervisor to answer specific questions (e.g. clarification of methods, interpretation of a result, or the content of a figure/table), but not to comment on full sections of your dissertation.

How soon after submitting my coursework will I get feedback?

The University policy is that coursework is marked and returned within 20 working days of submission. If you do not hear back from your supervisor within this time, and no

alternative arrangements have been made, please contact your supervisor directly for feedback.

Who marks my dissertation?

Your dissertation is double blind-marked; by your supervisor and another member of academic staff with similar teaching/research interests.

How is the final dissertation mark arrived at?

When the 1st and 2nd marks are within 10% of each other, an average mark is usually agreed. If the 1st and 2nd markers cannot agree a mark (this is unusual), a 3rd marker is tasked with blind marking the dissertation. The process is moderated by the Dissertation Co-ordinator and the External Examiners.

Who are the UG Course Directors?

Dr Suzanne Beech (Geography), Dr Joerg Arnscheidt (Environmental Science), Dr Chris McGonigle (Marine Science).

06. DISSERTATION MARKING CRITERIA

6.1 CRITERIA

This is a guide to the criteria used by staff in assigning a mark to your dissertation. To obtain a particular class of assessment a piece of work does not have to fulfil all the criteria listed for that class; judgements are formed on the basis of the overall character of the dissertation. However, the guidelines help to show what markers are looking for in their evaluations. Evidence of strength in some areas may compensate for weaknesses in others.

6.2 GRADE DESCRIPTORS

First Class (> 70%)

Outstanding (80-100%)

Exceptional piece of original research. Shows a critical awareness of the principles and practices of the subject area. Data are expertly presented, and data analysis is exceptional. Clear comprehension of the context and significance of the research is demonstrated. The dissertation shows exceptional ability and rigour throughout. It is of (or close to) publishable quality.

Excellent (70-79%)

Excellent piece of original research. Shows a lot of initiative and rigour in approach and execution. Interesting, relevant and well-defined research questions which are critically evaluated within the context of existing literature. The data presented are of high quality, are collected and analyzed using a well-designed and well-executed methodology. The dissertation is very clearly structured and presented and is articulate.

2.1 (60-69%)

A good dissertation that is well designed, well organized, and shows good knowledge of the subject. The research is solid and set appropriately within the literature but may lack critical awareness and rigour. The data are good and are presented appropriately but there are some shortcomings in analysis which are not fully explored.

2.2 (50-59%)

An acceptable dissertation, which shows a reasonable understanding of the material and evidence for original research, including student initiative and effort. Data are sound but routine. Shows evidence for some analysis and interpretation although the methodology used is not entirely appropriate. Results are related to the literature but lack depth.

3rd class (40-49%)

A weak dissertation which is largely relevant to the topic investigated but which has many flaws and inconsistencies. These include inappropriate methodology, limited original data of suitable quality, inappropriate or limited analysis, lack of depth of understanding or context and limited use of the literature. The dissertation structure is confused or repetitive, but demonstrates some student effort and adherence to dissertation guidelines.

Marginal fail (35-39%)

A poor dissertation that fails in many aspects. Original research is fundamentally flawed through the use of inappropriate methods of data collection and/or analysis. Data are few and of low quality. The aims and premise of the research are poorly thought out. The dissertation has many basic misunderstandings or misinterpretations, is poorly structured and written with basic errors throughout. Literature is cited, but clearly as an after-thought.

Fail (0-34%)

A dissertation that fails to achieve in almost all aspects. It reproduces data from unattributed secondary sources with little or no evidence of original research or thought. The dissertation is short, shows little internal coherence, major elements are missing, presentation and writing are extremely poor and suggest the dissertation was quickly put together

07. APPENDIX 1 – DISSERTATION MARKING RUBRIC

Criteria	1 st (outstanding) 80-100%	1 st (excellent) 70-79%	2.1 60-69%	2.2 50-59%	3 rd 40-49%	Fail (marginal) 35-39%	Fail 0-34%
<p>Abstract (5%) The abstract should contain four elements: 1. the scope and principal objectives of the study (the central question); 2. a brief description of the methods used; 3. a brief summary of the results; 4. a statement of the principal conclusions.</p>	Outstanding abstract. Addresses all four elements in detail, succinctly summarizing the results and main conclusions of the study.	Excellent abstract. Addresses all four elements.	Good abstract. Covers three or four elements in a general sense. Lacking facts and figures.	Acceptable abstract. Covers some of the required elements but lacks detail.	Limited abstract. Omits relevant material and lacks detail.	Inadequate abstract. Omits much relevant material.	Abstract missing, or unacceptable abstract omitting nearly all relevant material.
<p>Introduction (12.5%) The introduction should: 1. present the nature and scope of the problem; 2. review the pertinent literature (within reason); 3. briefly outline the method of investigation. 4. conclude with a clear statement of aims/objectives.</p>	Outstanding introduction. Clearly presents the nature and scope of the problem, comprehensively reviews the pertinent literature, and concludes with a clear and succinct statement of aim(s) and objectives.	Excellent introduction. Presents the nature and scope of the problem, reviews the pertinent literature, and concludes with a clear statement of aim(s) and objectives.	Good introduction. Presents the problem, reviews some of the pertinent literature (with some omissions) and concludes with a statement of aim(s) and objectives.	Acceptable introduction. Presents the problem, reviews some of the pertinent literature (with obvious omissions) and concludes with a statement of aim(s) and objectives.	Limited introduction. Presents the nature of the problem, but background information is inaccurate or lacking, and the aim(s) and/or objectives are incomplete.	Inadequate introduction. Presents the problem, but background information is missing or inaccurate, and aim(s) and/or objectives are weak or missing.	Poor introduction. Fails to present the nature and scope of the problem, and/or does not review any relevant literature and/or fails to present achievable aim(s) and/or objectives.
<p>Methodology (12.5%) The methodology should begin with a background to the study site, describing key physical patterns and processes taken from the existing literature. The methodology should be written in the past tense and in sufficient detail that a competent scientist could replicate the work.</p>	Outstanding methodology. Where appropriate, the study area is introduced, relevant processes and patterns are described, and relevant literature cited. The methodology is clearly explained, informed by the literature, and is written in sufficient detail that a competent scientist could replicate the work.	Excellent methodology. Where appropriate, the study area is introduced, relevant processes and patterns are described and much of the relevant literature cited. The methodology is appropriately explained and written in sufficient detail that a competent scientist could replicate the work.	Good methodology. Where appropriate, the study area is introduced, and many relevant patterns and processes described and cited. The methodology is appropriately explained and written in sufficient detail that a competent scientist could replicate much of the work.	Acceptable methodology. Where appropriate, some aspects of the study area are introduced and described. The methodology is written in sufficient detail that a competent scientist could replicate some of the work but might struggle with aspects.	Limited methodology. Where appropriate, some aspects of the study area are introduced. The methodology lacks detail making it difficult for a competent scientist to replicate much of the work.	Inadequate methodology. Poor introduction to study area. The methodology lacks detail making it very difficult for a competent scientist to follow the methods and replicate the results.	Inappropriate methodology. Poor or no introduction to the study area. The methodology lacks detail is inappropriate or indecipherable.
<p>Results (20%) Results should be presented as professionally drafted tables, figures, and analyses. Patterns, trends and outliers in results should be described and links to figures and tables provided to ensure internal consistency in the report.</p>	Results are highly relevant, accurate and comprehensive. Data are presented professionally and the patterns and trends in the data are accurately described. Data are synthesized in a novel way to present additional insight.	Results are relevant, accurate and complete. Data are presented professionally and the patterns and trends in the data are accurately described.	Results are relevant and accurate but may contain minor errors. Data are well-presented, but may contain some errors in, or omissions of, labels or units. The patterns and trends in the data are described.	Results are relevant and acceptable, with gaps being minor. Labels and units may be missing or incorrect in places. The patterns and trends in the data are described, with some obvious misunderstandings.	Data are incomplete. Labels and units are missing in places, and data presentation is inappropriate in places. Patterns and trends in the data are inadequately described.	Inadequate presentation of data, with many gaps. Inappropriate and inaccurate presentation or treatment of data, with little or no description.	Incomplete data, missing data, no description of patterns and trends. Poorly labelled and presented figures and tables.
<p>Discussion (30%) The discussion should include: 1. the principles, relationships, and generalisations inferred from the results; 2. any exceptions to, or problems with, these principles, relationships, and generalisations; 3. agreements or disagreements with previously published work; 4. limitations of the study, and 5. conclusions, with a summary of the evidence for each conclusion.</p>	Outstanding discussion. Successfully describes the principles and relationships inferred from the results. The discussion is well-supported by the scientific literature, and successfully summarizes agreements or disagreements with previously published work. Aims and objectives set out in the introduction are met. Limitations to the study are discussed and solutions suggested. Conclusions are completely justified by the data.	Excellent discussion. Describes the principles and relationships inferred from the results. The discussion is supported by the scientific literature and summarizes some agreements or disagreements with previously published work. Aims and objectives set out in the introduction are met. Limitations to the study are outlined. Conclusions are justified by the data.	Good discussion. Describes some of the principles and relationships inferred from the results. The discussion is supported by the literature and may summarize some agreements or disagreements with previously published work. Some of the limitations to the study are outlined. Conclusions are drawn, largely supported by the data.	Acceptable discussion. Describes some of the principles and relationships inferred from the results. The discussion is supported in part by the literature. Some of the limitations to the study are outlined. Conclusions are drawn but may contain some gaps in logic.	Limited discussion. Describes some of the principles and relationships inferred from the results. The discussion is only weakly supported by the literature. Limitations to the study are discussed in a trivial sense. Conclusions that are drawn are somewhat illogical.	Inadequate discussion. Describes few of the principles and relationships inferred from the results. The discussion may not be supported by the literature. Limitations to the study may not be discussed. Conclusions may lack logic and may not be supported by the data.	Poor discussion. Describes few of the principles and relationships inferred from the results. The discussion is not supported by the literature. Limitations to the study are not discussed. No conclusions are drawn. Poorly structured, with a weak narrative.
<p>Presentation (10%) The IMRaD structure should be used.</p>	Outstanding. Well-directed presentation, logically and coherently structured, using correct grammar and spelling.	Excellent. Well-directed presentation, logically structured, using correct grammar and spelling.	Good quality presentation. Well structured, using correct grammar and spelling.	Orderly presentation and structure with acceptable grammar and spelling.	Acceptable presentation, structure, grammar, or spelling.	Poor presentation, structure, grammar, or spelling.	Inadequate presentation, structure, grammar, or spelling.
<p>Referencing (10%) The Harvard referencing system should be used.</p>	Extensive evidence of integrating appropriate supplementary sources. Outstanding referencing and bibliography.	Evidence of extensive reading of supplementary sources. Excellent referencing and bibliography.	Evidence of reading a range of supplementary sources. Comprehensive referencing and bibliography.	Evidence of reading directed reading and some supplementary sources. Adequate referencing and bibliography.	Evidence of basic reading only. Limited referencing and bibliography.	Minimal evidence of reading. Inadequate referencing and bibliography.	Little or no evidence of reading. Little or no referencing and bibliography.