



UNIVERSITY OF ZULULAND

RESEARCH PROPOSAL GUIDE

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TABLE OF CONTENTS

1	INTRODUCTION	3
2	FORMAT OF THE RESEARCH PROPOSAL	3
2.1	Cover page (compulsory)	4
2.2	Table of content (compulsory)	4
2.3	Introduction	4
2.4	Literature review	5
2.5	Problem statement, delimitation of field and substantiation method	5
2.6	Aims, objectives and/or purpose of the study	5
2.7	Intended contribution to the body of knowledge (compulsory)	5
2.8	Hypothesis (where applicable)	6
2.9	Research methodology/processes	6
2.10	Ethical and safety issues (compulsory)	7
2.11	Resources (compulsory)	7
2.12	Feasibility (compulsory)	7
2.13	Intellectual property (compulsory)	7
2.14	Knowledge dissemination (compulsory)	8
2.15	Candidate's declaration (compulsory)	8
2.16	Supervisor declaration (compulsory)	8
2.17	Bibliography/References (compulsory)	8
2.18	Preliminary chapter division (compulsory)	8
3	THE PROCESS	9
4	TIME FRAMES	10
5	EVALUATION OF RESEARCH PROPOSALS	11
6	RESEARCH ETHICS AND PLAGIARISM	11
	<u>ANNEXURE: ILLUSTRATIONS OF CLAUSES THAT COULD BE FOUND IN A RESEARCH PROPOSAL</u>	13

THE RESEARCH PROPOSAL

1 INTRODUCTION

This section applies to proposals for mini-dissertations, dissertations and theses. It does not apply to Honours projects.

Although the candidate is the primary researcher, a research proposal must be compiled together with the supervisor(s). However, ultimately the candidate is responsible for the development of a research proposal, and any failure to develop and have a proposal approved within the prescribed time frames will normally rest with the candidate (except in particular detailed and recognized and documented circumstances).

The quality of the proposal usually indicates:

- The level of a candidate's academic maturity and the candidate's ability to conduct the proposed research
- The supervisor's level of professionalism in providing guidance as to what is required
- The quality of the supervision services that the supervisor is likely to provide the candidate during the course of the research
- The standard of work that one can expect from the candidate when the thesis or dissertation is ultimately presented for examination

2 FORMAT OF THE RESEARCH PROPOSAL

Technically, a proposal must be of the same standard as is expected of a thesis or dissertation. Structure, content and referencing must be coherent and consistent; and the language must be understandable and grammatically correct. The document must be suitably spell-checked, text-matched and language-edited, either by the candidate or by another person. All pages must be numbered.

There is no prescribed length for a research proposal, but candidate must ensure that proposals are succinct and to the point. The proposal is not the thesis and while it should contain enough information to indicate viability of the intended research, it should not be overly detailed. Proposals that are unnecessarily verbose or that contain superfluous material will not be accepted.

The University also does not stipulate the font or font size of a proposal, nor the line spacing. However, candidates are encouraged to consider Arial Font, size 12 and line spacing for paragraphs set at 1.5 and for quotations at 1. At all times be brief and concentrate on writing clearly and in understandable language.

The format of the research proposal will depend to a great extent on the discipline in which the study is being undertaken and the research approach that will be employed. Candidates are free to design their proposals to suit their proposed research, and to select appropriate headings, and to place them in the appropriate order. In some instances the headings may be combined.

Irrespective of one's preferred approach, or one's chosen wording of headings, or the order in which the material is presented, all research proposals should contain the following material:

2.1 Cover page (compulsory)

A cover page indicating proposed degree, the field of study, the faculty, the title of the dissertation/thesis, the names of the candidate and the supervisor(s), and the estimated date of submission.

Every postgraduate research proposal must have a title. The title may be changed later if necessary. The supervisor is responsible for guiding the candidate in formulating a title that is descriptive, meaningful and aligned with the research objectives and research methodology. The title should be brief and to the point (usually no more than 12 words) and should not be too general. To avoid over-generalisation, where appropriate, the geographical area and/or the sample cohort should be specified. The words "a case study" should never appear in a title. The following examples are illustrative:

- "Partnership as a Strategy in Implementing Sustainable Community Development in Mandeni Municipality"
- "Accumulation of heavy metals from water, sediment and fish from Mfolozi/Msunduze estuary and the effects of Cu on the stress protein of *Liza macrolepis*"
- The title "The Relevance of Social Media in Richards Bay Public Schools" is to be preferred over "The Relevance of Social Media in Public Schools: A Case Study of Schools in Richards Bay".

2.2 Table of Contents

The candidate should set out the headings contained in the proposal and the pages where the headings occur.

2.3 Introduction

A brief outline of the proposed study, or the main theme of the research.

2.4 Literature review

A review of literature and/or other resources that constitute the knowledge-base in the specific area of study. A literature review should cover the main areas of the existing literature that are relevant to the subject. However, guard against giving an undesirable “summary” of existing literature. For a research proposal one needs to present only a general indication of what elements of the literature one will use and it is sufficient to indicate only the main relevant works that have been consulted. A more in-depth review and analysis will be undertaken in the dissertation/thesis.

2.5 Problem statement, delimitation of field and substantiation method

A statement of the research problem. Indicate the specific problem or gap in the current knowledge that requires new thinking and support the statement by referring to relevant and especially recent research in the area. State clearly why there is a need to solve the particular problem or address the area of concern or to contribute to new developments in the chosen field.

It is very important that the problem (actual research question) is clearly formulated. The possible application or value of the research and expected results can be highlighted here.

If the research is part of a larger, multidisciplinary project, the candidate should indicate what part his or her own research will play in the larger project.

2.6 Aims, objectives and/or purpose of the study (compulsory)

A statement of the aims of the study, which may contain references to general or specific objectives. Indicate the reason(s) for selecting the research topic and what the research is intended to achieve.

With empirical investigations (based on observation or experiment) the general aims usually refer to the direction the research is likely to go in addressing the research question. This direction should be mapped out, based upon one’s initial understanding of the challenges set by the research question and the preliminary literature review, as well as the preliminary ideas on the route that is likely to be followed. Specific aims are formulated especially to guide the actual investigations that will be conducted.

2.7 Intended contribution to the body of knowledge (compulsory)

This topic is related to the aims, objectives and purpose of the study. Postgraduate research is not undertaken merely to produce words on paper. Research is more than writing and must have a qualitative component.

Both Master's and Doctoral research must add value in some way. Master's research must produce something that is different from what is already known, even if the result is not new. For example, the work might confirm what is already known by adding new information to the body of existing knowledge. Doctoral studies, however, must produce something new and advance or expand the body of knowledge. The proposal should therefore state clearly what the intended contribution to advancing or expanding the body of knowledge will be.

2.8 Hypothesis (where applicable)

Where appropriate, reference may be made to a research hypothesis, or expectation of the central theoretical statement or guiding argument. This will depend on the nature of the research problem and on disciplinary approaches. In the sciences, for example, it is customary to state a hypothesis, while in humanities and social sciences, it is more likely that a research problem would be specified.

A hypothesis is a provisional or interim answer to the research problem/question. In formulating a hypothesis one is speculating upon or predicting a possible answer to the research question that might be reached at the end of the study. Of course one cannot be sure at the beginning exactly how the question will be answered at the end, so in reality a hypothesis is no more than a target one sets to aim at; or a preliminary view that one intends to test. As one investigates the intricacies of the problem/question one will be able to test whether or not the preliminary answer was satisfactory.

Another way of explaining a hypothesis, is to call it a theory. Having determined the problem/question, one now states one's theory (interim idea) as to how the problem can be solved or the question can be answered. One then sets out to prove whether the theory (or preliminary answer) is correct, partially correct, or incorrect.

In most research hypotheses or theories are found to be only partially correct, so the investigation will usually entail finding an ever more satisfactory answer to the stated problem/question.

2.9 Research methodology/processes

A description of the research methodology, the procedures that will be used to conduct the research. In this section of the proposal one indicates how one intends going about achieving the identified objectives, with specific reference to, and a breakdown of:

- the design (in narrower sense, for example an inside-group design or two-group design with pre- and post-measurements, or double-blind, placebo-controlled cross-study design);
- the proposed methodology (methodology refers to the method that the candidate will apply in analysing the material, and the method of argument and reasoning that the candidate will adopt);
- if there are co-workers what aspect they will be addressing, and how the research project is multidisciplinary;
- test persons/research group/participants (characteristics, method, selection, size);
- measuring instruments and/or software;
- pilot studies, validity procedures and quality control;
- proposed method of statistical data processing (e.g., using SPSS), if applicable;

Where the candidate intends to conduct the research in the form of a series of interrelated articles the outline should provide an indication of the aspects that the candidate intends to address in each article.

2.10 Ethical and safety issues (compulsory)

Ethical, health, safety and environmental and other legal considerations and requirements. What is included in this section will depend upon the nature of the research and research methodology. The candidate must indicate the extent to which he or she is familiar with the relevant policies. The candidate should then stipulate what ethical and safety issues could arise from conducting the proposed research and what he or she will do to manage the risks involved.

2.11 Resources (compulsory)

A statement indicating the nature of the resources required to conduct the research, whether University resources are adequate, and if not, what would be done to overcome the inadequacies.

2.12 Feasibility (compulsory)

A statement concerning the feasibility of the research in terms of infrastructural and financial resources, time constraints and the accessibility of information.

2.13 Intellectual property (compulsory)

A statement indicating what intellectual property rights could arise from the research and what would be done to ensure that rights are adequately protected. Possible commercialisation opportunities should also be mentioned.

2.14 Knowledge dissemination (compulsory)

A statement indicating how and where the candidate intends publishing the material generated by the research in addition to producing the thesis/dissertation. It is important that candidates and supervisors present the research at conferences and that parts of the research are published in accredited journals.

2.15 Candidate's declaration (compulsory)

A declaration by the candidate in which it is indicated that the candidate is aware of the University's research and ethics policies and procedures and intends complying with the relevant requirements. The declaration should also contain a statement of originality and a plagiarism declaration.

2.16 Supervisor declaration (compulsory)

A declaration by the supervisor(s) in which it is indicated that appropriate supervision had been given, that the proposal has been quality assured, and that the proposal is submitted with supervisor approval and consent.

2.17 Bibliography/References (compulsory)

An annexure containing a bibliography of works consulted in drafting the proposal. Usually one lists only the sources that have been mentioned in the proposal, but in some instances it may be appropriate to list sources that guided the formulation of the proposal, even if not specifically cited.

The University does not prescribe a specific referencing style and in consultation with their supervisors, candidates are free to adopt the most suitable style, following disciplinary conventions. However, it is important to apply the adopted style consistently. The proposal will normally be presented in the same format as the one to be adopted in the dissertation or thesis.

2.18 Preliminary chapter division (compulsory)

A preliminary table of contents and work schedules should be attached as annexures. While the structure and content of such annexures are likely to change as the research progresses, the preliminary drafts indicate the extent of planning that the candidate and the supervisor have undertaken, the candidate's understanding of what is expected, and the candidate's level of preparedness to undertake the research.

Naturally, the research topic and methodology will determine the chapter divisions

and sub-divisions, and many options arise. It is also useful to allocate the expected number of pages to a chapter or sub-section, thus helping to conceptualise the shape and size of the project. However, sometimes faculties and/or disciplinary conventions prescribe particular formats. Two examples are given below. A third can be found in the attached Annexure.

Example A

1. Orientation
2. Literature study
3. Research design
4. Presentation of data
5. Summary, findings and recommendations

Example B

1. Introduction/orientation, problem statement and aims
2. Literature survey
3. Empirical investigation (may be called experimental investigation) or Methodology
4. Results
5. Discussion
6. Conclusions and recommendations

3 THE PROCESS

When the proposal is ready the following steps must be followed (Note that all correspondence must be electronic):

Step 1: The supervisor arranges with the HOD that the candidate presents the proposal at a departmental seminar for comment.

Step 2: The candidate revises the proposal in light of the comments received and thereafter submits an electronic version of the proposal to the supervisor.

Step 3: The supervisor (not the candidate) submits the electronic version of the proposal to the Faculty research representative.

Step 4: The Faculty research representative sends the electronic version of the proposal to three reviewers, at least one of whom must be from the candidate's department. Supervisors and co-supervisors may not be reviewers. Should a department not have a sufficient number of staff members who are qualified or suitably experienced to review a proposal, an external person who is versed in the discipline could be used.

Step 5: The reviewer completes a feedback report on the proposal within 2 weeks and submits it electronically to the Faculty research representative.

Step 6: The Faculty research representative e-mails the reviewers' reports to the supervisor.

Step 7: The candidate addresses and/or incorporates the suggested

changes/comments

Step 8: After the revision the supervisor e-mails the final proposal to the Dean's secretary and arranges a presentation of the proposal to the Faculty.

Step 9: Immediately after the presentation the supervisor, Dean/Deputy Dean, staff members from the specific department as well as the Faculty research representative discuss the proposal and suggest final changes if necessary.

Step 10: The proposal is sent to the Faculty ethics representative.

Step 11: Once ethical clearance is received the HOD submits to the Dean of the Faculty:

- A letter to be presented at the Faculty Board indicating that the proposal has been presented to a Faculty panel (giving names of the members of the panel) and that the panel has found it acceptable. Attached to the letter are the cover page of the proposal and the letter from the Faculty Ethics Committee.
- The full proposal document, together with the necessary faculty clearance documents for onward submission to the Research Office.

Step 12: The Research Office staff will record the documents in its data bases and present them, via the Registrar's Committee Section, to the University's Higher Degrees and Research Ethics Committees for final approval.

4 TIME FRAMES

Normally research proposals should be accepted by the respective Faculty structures and ultimately by the appropriate Senate committees (the Higher Degrees Committee and the Research Ethics Committee) within the following time frames:

- A Coursework Master's candidate should submit a proposal within 8 months of registration and gain acceptance within 12 months
- A full-time Master's candidate should submit a research proposal within 4 months of conditional registration and gain acceptance within 6 months
- A full-time Doctoral candidate should submit a research proposal within 6 months of conditional registration and gain acceptance within 8 months
- A part-time Master's or Doctoral candidate should submit a proposal within 8 months of conditional registration and gain acceptance within 12 months

The date of acceptance of a proposal is the date upon which approval of both the Higher Degrees Committee and the Research Ethics Committee has been obtained.

Should the time frames not be met, the supervisor shall report the delay to the HOD, give reasons for the delay and suggest appropriate action to be taken in the matter. The HOD shall in turn report the matter to the committee charged with overseeing postgraduate degrees in the Faculty. The relevant faculty committee shall consider the HOD's report and take appropriate action. Normally such action shall be de-

registration of the candidate, but in appropriate circumstances the deadlines may be extended for no more than three months. No further extensions will be permitted.

5 EVALUATION OF RESEARCH PROPOSALS

When completed, research proposals will in the first instance be formally assessed by a Faculty committee to ensure that the nature of the proposed research and the research methodology, and the overall quality of the research proposal meet required University standards. The following criteria will be considered:

- Compliance with the stipulated format
- The conceptualisation and objectives of the research
- The feasibility of the research
- The suitability of the methodology and analysis
- The scientific integrity of the research

Faculties may specify additional evaluation criteria, so be sure to locate the relevant Faculty guide for further information.

Each faculty will have its own processes for this evaluation, but normally the candidate will present the proposal to the committee in the form of a seminar, so that questions, comments, and suggestions can be fed back immediately. Where research proposals have not been accepted, the candidate must be advised in writing of the reasons therefor. If revision is necessary, the proposal must be resubmitted and reassessed by the faculty committee (not necessarily by means of a seminar). If the proposal is not accepted, this should be regarded as a normal process of growth in preparing a proposal, not as a failure or disgrace.

Proposals that have been accepted are presented, via the Research Office and the Registrar's Division, to the University Higher Degrees Committee and the University Ethics Committee for formal approval at University level. Any of these committees may

- Approve the proposal, with or without conditions
- Decline approval and refer the proposal back to the candidate for revision

6 RESEARCH ETHICS AND PLAGIARISM

The University is committed to ensuring that research is conducted with integrity and in a manner that protects the rights of all participants. In particular, the University aims to create and maintain a research environment in which the underlying values of human dignity, equality, non-discrimination, social justice and fairness are respected. This means that researchers are enjoined to conduct research that is

socially and ethically relevant, to pursue truth, intellectual honesty and openness to ideas, and to maintain the highest professional and ethical standards.

All research and research-related activities must comply with the appropriate ethical standards, and ethical concerns are not restricted to activities aimed at human and animal research or the gathering of research information, such as the conduct of surveys or interviews, the processing and analysis of research data, and the reporting of research findings.

Plagiarism constitutes a breach of academic integrity, compromises the integrity of the individual(s) involved, and damages the reputation of the academic community. The University has a responsibility to uphold academic integrity and to promote trust in scholarly work undertaken at the Institution and to prevent plagiarism within the Institution.

All candidates must study the University's policies on research ethics and plagiarism, and consider in their proposals the specific ethical issues raised by their research. Particular forms of research, such as human health research, research involving animals, or children and other vulnerable persons, give rise to special ethical considerations; but there are also ethical issues associated with conflicts of interest, supervision, co-authorship, publication of research findings.

PLEASE NOTE:

The attached Annexure contains samples of what could be written in a research proposal. The headings and words used in the text are not prescriptive and are meant only to provide some guidance.

Candidates may vary the wording of the headings, and their order, and may even combine some of the categories. (Even in the Annexure, the wording of the headings and their order do not correspond exactly with the headings in the main part of the Guide.)

In a candidate's proposal the content of the clauses (e.g. the ethics clause) could be similar to those in the Annexure in some respects, but will naturally vary according to the specific circumstances.

In all instances the important thing is to ensure that the proposal evaluators are able to assess whether the all the essential material that this Guide requires is set out in the proposal.

ANNEXURE: ILLUSTRATIONS OF CLAUSES THAT COULD BE FOUND IN A RESEARCH PROPOSAL

UNIVERSITY OF ZULULAND



RESEARCH PROPOSAL

For the degree of

DOCTOR OF

In the field of

.....

With the provisional title:

.....

FACULTY OF

Candidate:

Student number

Supervisor/Co-Supervisor(s):

.....

Estimated date of submission:

NOVEMBER 2015

TABLE OF CONTENT

		Page
1	INTRODUCTION	15
2	LITERATURE REVIEW	16
3	PROBLEM STATEMENT	19
4	AIMS OF THE STUDY	20
5	RESEARCH HYPOTHESIS	21
6	INTENDED CONTRIBUTION TO THE BODY OF KNOWLEDGE	22
7	RESEARCH METHODOLOGY	22
	7.1 Description and Selection of Participants	22
	7.2 Description of Procedures	22
8	ETHICAL CONSIDERATIONS	23
9	RESOURCES	25
10	INTELLECTUAL PROPERTY AND INNOVATION	25
11	HARVESTING THE RESEARCH	25
12	DECLARATION BY CANDIDATE	26
13	DECLARATION BY SUPERVISOR(S)	26
	PRELIMINARY TABLE OF CONTENTS	27
	WORK SCHEDULE	29
	BIBLIOGRAPHY	30

1 INTRODUCTION

In August 2011, seven Durban graffiti writers were arrested on a Sunday morning while “writing on a wall”. The “writing on the wall” was pre-organised by a group of graffiti writers and widely advertised on various social networks. The wall is situated in Sydney Road and known as the “legal wall”, layered with five years of graffiti work. The organisers of the “graffiti jam” as it was known, thought that they had consent from the owner of the wall to paint on it. Their intention was to organise a legal gathering to create a “memorial wall” in honour of one of their fellow graffiti writers who had died. Their arrest was widely publicised and sparked a debate around the morality of graffiti as a legal art-form as well as an illegal act of vandalism. The subsequent criminal charges of malicious injury to property brought against the writers were also extensively debated.¹ One of the arrested writers had a previous conviction for malicious injury to property, and if he were to be convicted on new charges he would have faced a possible prison sentence.² This incident made me question the appropriateness of a charge of malicious injury to property in respect of graffiti writings, and if it were found to be an inappropriate charge, raised the further question as to whether there are any alternative statutory provisions regulating and managing graffiti in South Africa.

Most people view graffiti as a form of vandalism, which can be defined as a wilful or malicious destruction of public or private property.³ The Oxford Dictionary defines a vandal as a “person who wilfully or maliciously damages property”.⁴ Currently there is no crime of vandalism in South Africa, and therefore vandalistic acts fall under the common law crime of malicious injury to property. There is also no differentiation between different forms of vandalism and so all acts are viewed under the same umbrella of malicious damage to and destruction of property.

Graffiti is commonly defined in most dictionaries as “words or drawings scribbled, scratched or painted on a wall etc.”.⁵ Graffiti, derived from the Italian word *sgraffio*, to scratch, has been around since the beginning of humankind and is still evident in rock drawings found in caves around the world.⁶ Graffiti was common in ancient cultures and early England.⁷ According to Freeman⁸ many early examples of graffiti were found in Pompeii and included election slogans, drawings and obscenities. Graffiti is a wide concept that includes the early mural paintings, political slogans and

¹ Chapman “Writing on the wall” *Mahala* (16-08-2011) <http://www.mahala.co.za/art/writing-on-the-wall> (accessed 07-06-2012) 1.

² Chapman “Writing on the wall” 3.

³ Farlex *The free dictionary* <http://www.thefreedictionary.com/vandalism> accessed 28-05-2012.

⁴ Bradford (Ed) *The South African Pocket Oxford Dictionary* (2001) 1079.

⁵ Farlex *The free dictionary*.

⁶ Ganz *Graffiti World* (2009) 8.

⁷ Halsey & Young “The Meanings of Graffiti and Municipal Administration” *Australian & New Zealand Journal of Criminology* (2002) 170 165-186.

⁸ Freeman *Graffiti* (1966) 148.

propaganda during World War Two,⁹ and the more contemporary hip hop tagging that gave rise to contemporary and elaborate street art.

The development of graffiti gave rise to urban paintings or street art that became known as post-graffiti or neo-graffiti and which is now seen as a “renaissance of public art”.¹⁰ The most basic form of contemporary graffiti is a “Tag”. Tags are monochromatic, quickly executed renderings of the graffiti writer’s street name.¹¹ “Throw-ups” developed from tags and are larger versions of tags with outlines, and traditionally bubbled or styled letters, grouped together and sometimes filled in with different colours of paint.¹² A “Piece” is short for masterpiece and is normally a large, elaborate and colourful work that can incorporate both character drawings and writings, and usually made with great technical skill.¹³ Other forms of graffiti include slogans and stencilled images.

An in-depth study of graffiti will reveal that it is far more than mere words or drawings scribbled, scratched or painted on walls. It is an expression of a culture with many different aspects to it. Ferrell¹⁴ for example states that “graffiti marks and illuminates contemporary urban culture, decorating the daily life of the city with varieties of colour, meaning, and style”. Graffiti can be seen as a “visual controversy” that has subsisted worldwide for over forty years, and whether liked or disliked, provokes passionate debate, establishing itself as an important aspect in the cultural landscape and “consciousness” of a city.¹⁵ White¹⁶ states that there exists a

“common misconception, that graffiti is simply a random act of defiance by mischievous adolescents that cannot be supported by facts. It’s part of an established culture supported by music, web sites and magazines”.

Halsey and Young¹⁷ also noted this misconception in their survey of public discourse on graffiti. They concluded that a study of graffiti culture would render these forms of stereotyping unfounded.

2 LITERATURE REVIEW

On 6-8 September 2000, world leaders met in New York at the headquarters of the United Nations Organisation (UNO) to establish national and global priorities to be reached by 2015 (The Millennium Development Goals Report, 2011). The meeting is

⁹ Ganz 8.

¹⁰ Waclawek 29.

¹¹ Waclawek *Graffiti and street art* (2008) 15.

¹² Waclawek 16.

¹³ Waclawek 18.

¹⁴ Ferrell *Crimes of Style, Urban graffiti and the politics of criminality* (1993) 3.

¹⁵ Waclawek 8.

¹⁶ White “Graffiti – Looking beyond the symptoms” *Graffiti and Disorder Conference*. Australian Institute of Criminology (2003) 2.

¹⁷ Halsey & Young 170.

widely known as the Millennium Development Goals Summit. The meeting's objective was to finalise the work of the Millennium Forum which had been set-up earlier to discuss issues such as poverty eradication, environmental protection, human rights and protection of the vulnerable (<http://www.un.org/millennium/declaration.htm>). The meeting resulted in the birth of what is today known as the Millennium Development Goals (MDG) (The Millennium Development Goals Report, 2011). Goal 6 of the MDG relates to Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS). The main thrust of MDG 6 states the following: 'combat HIV/AIDS, malaria and other diseases, halving the rate of infections by 2015 and begin to reverse the spread of HIV/AIDS'.

The Human Immunodeficiency virus (HIV) causes Acquired Immune Deficiency Syndrome (AIDS) (Peakman and Vergani, 1997; Mars, 2000; ACSM, 2003; Riott, 2006; Black, 2008). Since first cases of HIV/AIDS were reported in 1981, it is estimated that more than 60 million people have been infected with the HIV virus and approximately 30 million people have died of AIDS (<http://www.who.int/gho/hiv/en/index.html>). Approximately 34 million people were living with HIV in 2010 and HIV/AIDS accounted for 1.8 million deaths worldwide. Sub-Saharan Africa accounts for 69% of new HIV infections, 68% of all people living with HIV and 72% of AIDS-related deaths even though its population constitutes 12% of the global population (The Millennium Development Goals Report, 2011). In South Africa, 17.8% (5.5 million) of the population is estimated to be living with HIV (http://www.unicef.org/infobycountry/southafrica_statistics.html; Mars, 2011). There are approximately 50.6 million people living in South Africa and without HIV, the population would be 55.0 million (South African Institute of Race Relations, 2012). KwaZulu-Natal has the highest prevalence of HIV at 39.5% (Department of Health, 2011).

The human body has its own defence mechanisms called the immune system which the body uses to recognise and defend itself against infectious agents (Fan et al., 1989; Silverthorn et al., 1998; Karim & Karim, 2005; Boyer, 2006; Riott, 2006; Black, 2008; van Dyk, 2008). The function of the immune system can be surmised in the following manner: to protect the internal world (internal body) also known as the 'self' from infectious agents from the external world (environment) also known as 'non-self' (Boyer, 2006; Karim and Karim, 2008). The functions of the immune system are summarised by Silverthorn et al (1998) as:

1. To protect the body from disease-causing invaders referred to as pathogens.
2. To remove dead or damaged tissue and cells.
3. To recognise and remove abnormal cells.

The human body possesses two types of immunity: innate and acquired immunity (Peakman and Vergani, 1997; Silverthorn et al., 1998; ACSM, 2003; Riott, 2006;

Black, 2008, Walsh et al., 2011). The innate immunity is the first line of defence available to the body against pathogens (Peakman and Vergani, 1997; Riott; 2006; Black, 2008; Karim and Karim, 2008; Walsh et al., 2011). The innate immunity is also called the non-specific defence (Karim and Karim, 2008, van Dyk, 2008). It is immunity that one is born with and it exists as a result of genetically determined characteristics (Black, 2008). Adaptive or acquired immunity on the other hand, is immunity that one acquires as a result of exposure to a specific pathogen or antigen (Black, 2008; Walsh et al., 2011). It is also called specific defence (van Dyk, 2008). Infection with the HIV triggers an immune system response (Peakman and Vergani, 1997; ACSM, 2003; Black, 2008). To fully understand how this immune response is triggered, it is important to first understand the pathogenesis of HIV.

HIV is a retrovirus (Fan et al., 1989, Mars, 2000; Black, 2008; Karim & Karim, 2008; Kline; 2009). HIV also belongs to a sub-group of lentiviruses which are known to cause disease extremely slowly ((Fan et al., 1989, Mars, 2000; Black, 2008; Karim & Karim, 2008; Kline; 2009)). All retroviruses have common features: an outer envelope, two copies of ribonucleic acid (RNA) and a very important enzyme called reverse transcriptase which it uses to convert its RNA to deoxyribonucleic acid (DNA) once it is inside the cell. RNA and DNA are commonly referred to as macromolecules necessary for life as they carry the genetic impressions of that organism, the former used by viruses and the latter by living organisms. HIV targets the cells that express the CD4 receptor site (Mars, 2000; Karim & Karim, 2005; Black, 2008; van Dyk, 2008; Kline, 2009). The cells that are mostly affected are the CD4+ T lymphocytes (T helper cells), macrophages and monocytes, B cells, Langerhans (antigen-presenting cells of the skin and mucosa) and the dendritic cells of the germinal centres (part of the nervous system) (Black, 2008; van Dyk, 2008; Kline, 2009).

In the first stages of the viral life cycle, known as attachment, HIV uses a glycoprotein also known as 'gp120' to bind to the CD4 receptor of the host cell (Mars, 2000; Karim & Karim, 2005). In the shortened name of the glycoprotein 120, 'gp' stands for glycoprotein and '120' stands for molecular weight in kilodaltons (Karim & Karim, 2005). The glycoprotein 120 then goes under structural changes which allow the virus to binds to a co-receptor. Binding to a co-receptor occurs to a group of chemokine receptor proteins known as CCR5 and CXCR4 (Karim & Karim, 2005; Acheson, 2007; van Dyk, 2008). The binding of the virus to either the CCR5 or CXCR4 is known as the virus tropism (van Dyk, 2008). HIV virus can either bind to chemokine receptor CCR5 thus becoming known as "R5 tropic" or CXCR4 thus becoming known as "X4 tropic" or bind to both thus becoming known as "dual tropic". Once the binding has occurred, another glycoprotein known as 'gp41' is responsible for the next process. The gp41 inserts its extensions to the host cell which allows the HIV and CD4 cell membranes to come closer together which leads to the next phase of HIV pathogenesis which is called infusion. Once HIV enters the host cell, it breaks open, releasing two single stranded viral RNA and three replication enzymes:

integrase, protease and reverse transcriptase (Karim & Karim, 2005; van Dyk, 2008).

The reverse transcriptase then transforms the single stranded viral RNA into double stranded proviral DNA (Karim & Karim, 2005; van Dyk, 2008). Integrase the other enzyme released into the host cell by the virus on infusion; fuses the proviral DNA with the host cell's DNA and manufactures numerous copies of the viral RNA. The third enzyme released by HIV on entry into the cell, protease, enables the new viral RNA and viral proteins to be released from the host cell as fully fledged HIV which then kills the host cell and move out to look for new cells to infect (Karim & Karim, 2005; van Dyk, 2008). The invasion of the host cell by the HI virus is summarised into seven critical steps (Van Dyk (2008) :

- Step 1: The HI virus attaches to the CD4 cell's receptors and co-receptors through its envelope glycoprotein (gp120).
- Step 2: The CD4 cell and the HI virus joins membranes via the envelope glycoprotein (gp41).
- Step 3: The HI virus injects its RNA (together with the reverse transcriptase) into the CD4 cell.
- Step 4: The viral RNA is changed into proviral DNA by the reverse transcriptase in a process called reverse transcription.
- Step 5: The proviral DNA joins with the cell's DNA (through an enzyme called integrase) in the core of the cell, causing accelerated production of viral RNA and viral proteins.
- Step 6: The viral RNA and viral proteins assemble into more immature HI viruses.
- Step 7: The new mature HI viruses break free from the cell (through an enzyme called protease), killing it and then sets off to look for new cells to infect.

3 PROBLEM STATEMENT

Example A:

Graffiti in South Africa is currently viewed as an "illegal act of vandalism" which must be prosecuted under the crime of malicious injury to property in the absence of any specific provincial or local legislation that deals directly with the criminalisation of graffiti. This approach, based mainly on the *Bowden* judgment, does not take into account broader social considerations and other ways of regulating behaviour, appears to be incorrect.

Example B:

The prevalence of obesity has reached epidemic proportions, and co-morbidities associated with obesity have also increased, including insulin resistance, microalbuminuria, dyslipidemia, hypertension, and hyperglycemia. These co-

morbidities predispose individuals to early mortality. Exercise has been recommended as an effective treatment for metabolic diseases in lowering microalbuminuria concentrations and increasing insulin sensitivity. However, the intensity and duration of exercise that elicits the maximum benefits for sedentary, obese individuals at risk for cardiovascular and metabolic diseases is not yet known. In addition, an acute bout of exercise causes microalbumin levels to increase, but it is unclear how long these elevated levels of microalbumin take to revert back to normal physiologic levels.

4 AIMS OF THE STUDY

Example A:

The aim of this study is to consider the role of graffiti in society and how it should be regulated. I will investigate the desirability and appropriateness of criminal prosecution as a way of managing graffiti writing in society. I will consider the appropriateness of a charge of malicious injury to property in cases of graffiti writing, by applying the general principles of criminal law and specially the principles relating to malicious injury to property in South African law. I aim to show that the elements required for malicious injury to property are absent in graffiti writing and other forms of street art. I will propose that a suitable management plan, which may include administrative actions and appropriate criminalisation, needs to be developed to provide for the management of graffiti while at the same time recognising the graffiti writer's and street artist's rights to culture and freedom of expression. This study will formulate specific guidelines in respect of the development of such a management plan.

I will, amongst others:

- Consider the importance of graffiti within the South African urban landscape and diverse cultural society
- Consider graffiti as a culture
- Consider the graffiti artist's right to freedom of expression
- Evaluate malicious injury to property as a preferred charge for acts of graffiti
- Evaluate any provincial and local legislation dealing with the criminalising of graffiti in South Africa
- Consider, with reference to international law, whether graffiti should be criminalised, managed without criminalisation, or managed with a combination of criminalisation and alternative management applications
- Formulate specific guidelines for managing graffiti and street art within a South African context.

Example B:

1. To determine whether an acute bout of different intensity exercise (moderate versus vigorous) impacts insulin resistance and microalbuminuria in obese, sedentary female students.
2. To determine the time frame for microalbuminuria and insulin resistance to revert to normal physiologic levels after an acute bout of moderate and high intensity exercise.

Example C:

- 1 To determine whether a differentiated exercise programme will have an effect on the immune status (CD4 lymphocytes and viral loading) in HIV positive individuals.
2. To determine whether a differentiated exercise programme will have an effect on oxidative stress biomarkers and antioxidant activity of HIV positive individuals.
3. To determine whether a differentiated exercise programme will have an effect on self-reported pain of ambulatory HIV positive individuals.
4. To determine whether differentiated exercise programmes will have an effect on the quality of life of HIV positive individuals.

5 RESEARCH HYPOTHESIS

Example A:

1. Participating in an acute bout, at moderate and vigorous intensity exercises reduces insulin resistance and increases microalbuminuria in obese, sedentary female students
2. Microalbuminuria and insulin sensitivity will increase after exercise and take 24 hours – 48 hours to revert to normal physiologic levels after an acute bout of exercise in obese, sedentary female students.

Example B:

1. Participating in differentiated exercise programmes will positively impact CD4 lymphocytes and viral loading of HIV positive individuals.
2. Participating in differentiated exercise programmes will decrease oxidative stress biomarkers and increase antioxidant activity of HIV positive individuals.
3. Participating in differentiated exercise programmes will lead to a decrease in self-reported pain of ambulatory HIV positive individuals.
4. Participating in differentiated exercise programmes will lead to an improvement in the quality of life of HIV positive individuals.

6 INTENDED CONTRIBUTION TO THE BODY OF KNOWLEDGE

According to National Research Foundation records, this research would be the first academic study on this topic in South Africa. Given the transdisciplinary and comparative nature of the work, it should make an innovative and worthwhile contribution to the fields of law, criminology and fine-arts. As indicated above, graffiti has always been treated as an act of vandalism and prosecuted under malicious injury to property, which I intend showing is conceptually incorrect; and in providing an approach that considers the interests of all the relevant stakeholders, my research will create a contemporary and innovative approach to regulating graffiti, suitable for a culturally-diverse society.

7 RESEARCH METHODOLOGY

7.1 Description and Selection of Participants

The participants will be screened for health, other CVD risk factors as well as exercise history. They will be recruited from the University of Zululand main campus. Recruitment will be performed via posters, lecturers, students and word of mouth. Participants will be of any age but will have to meet the requirements of a BMI of 30kg/m² or above. Fifteen participants will be recruited to perform 1 session of moderate intensity exercise and 1 sessions of high intensity exercise. Each participant will be given instructions to follow throughout the testing duration. The sessions will be over 2 weeks with each participant performing moderate and vigorous exercise sessions over separate weeks. Participants will begin with a familiarization exercise session in the week preceding testing to allow effects of the exercise bout to leave the participants system. Participants will begin with a moderate intensity bout of exercise the day after baseline values have been taken and will be asked to return at the same time each day, for the following 3 days. The same procedure will be followed for the vigorous exercise bout. Previous studies involving similar biochemical changes have involved similar numbers (Libby, 2002). Participant numbers are limited by budgeting constraints.

7.2 Description of Procedures

All participants will be required upon arrival at the Department of Biokinetics and Sport Science to read and sign an informed consent form (Appendix A). Participants will be screened to make sure that they meet the inclusion criteria. Fasting cholesterol will be taken to exclude participants with other risk factors for Metabolic Syndrome. The following baseline parameters will be measured: height using a Lanchester stadiometer, weight using a standard scale, insulin sensitivity (using laboratory tests from blood drawn: HOMA INDEX (FASTING-GLUC+INSUL), microalbuminuria (using laboratory tests from urine sample: U-

MICROALBUMIN/CREAT RATIO), blood pressure using a manual sphygmomanometer, heart rate using Polar heart rate monitors, and waist-to-hip ratio using a standard measuring tape. Participants will be asked to partake in familiarization exercise session to prepare them for the procedures and get accustomed with the equipment. Participants will be instructed not to perform strenuous exercise before and during the testing, not to exceed recommended water intake or follow a diet that is high in protein. Participants will be asked to remain seated for 30 minutes to negate the effects of walking (exercise) to the department. The participants will perform moderate and vigorous aerobic exercise on a cycle ergometer, whereby the required intensity will be calculated using their Heart Rate Reserve (HRR) set between 65% - 75% and according to the Rate of Perceived Exertion (RPE) scale at between 12-13 for the moderate intensity group and between 75%-85% HRR and 14-15 RPE for the high intensity group. All participants will exercise under supervision of a biokineticist. All participants will wear a Polar heart rate monitor to ensure they exercise at the correct intensity. The exercise session will be 30 minutes with intervals to ensure that the participants reach the required exercise intensity. After each participant has completed the exercise sessions, they will be required to give a small urine sample and a blood sample for measurement of insulin sensitivity and microalbuminuria. These samples will be taken at 24 hours post-exercise, 48 hours post-exercise and 72 hours post-exercise. Participants will be required to come in at the same time every day to give blood and urine samples. The samples will be taken by a qualified nurse and analysed at Lancet Laboratories. There will be a control group consisting of 10 normal BMI (18-25kg/m²), sedentary participants. The control group will follow the same procedure as the obese group.

8 ETHICAL CONSIDERATIONS

I have read the University's Policy and Procedures on Research Ethics and its Policy and Procedures on Managing and Preventing Acts of Plagiarism, and I understand their content. My supervisors and I have considered and discussed the ethical issues that arise from this research, and these are dealt with below.

Munro¹⁸ defines ethics as:

“Ethics is a set of moral principles which is suggested by an individual or a group, is subsequently widely accepted, and which offers rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistants and students.”

¹⁸ Munro *Ethics and design research at South African higher education institutions*. Design Education Forum of Southern Africa www.defsa.org.za (2011).

The University's Research Ethics Policy defines research ethics as:

“... [T]he principles and practices that guide the ethical conduct of research. These should embody respect for the rights of others who are directly or indirectly affected by the research. Such rights include rights of privacy and confidentiality, protection from harm, giving informed consent, access to information pre- and post-research and due acknowledgement. Ethical conduct in research also includes the avoidance of inflicting animal suffering of any kind and protection of the environment.”

All research must be ethically sound, but specific circumstances – health research, research involving animals and human participants, especially children – give rise to special ethical considerations.

I declare that to the best of my knowledge:

- My research does not fall into any category that requires special ethical obligations. However, I will use public images that could be considered to be the results of criminal activities. Although the artists are usually anonymous, my research into the culture of graffiti, might reveal the true identity of these graffiti writers.
- The research does not create any conflict of interest, real or perceived
 - I am not involved in or associated with any project or activity that will become the subject-matter of my research, nor are any of my family members or close friends or associates involved in any way.
 - Except as might be disclosed in this proposal, I do not have any direct or indirect financial interest in the conduct of this research, or do any of my family members or close friends or associates.

I undertake to abide by the general principles set out in the University's policies and the obligations which the policies impose upon me, and to mitigate any ethical and other risks that might arise. In particular, I undertake to:

- Respect the dignity, safety and well-being of others, including the graffiti writers, and unless express written permission is given, I will respect anonymity and confidentiality.
- Consider and be sensitive to different cultures, languages, beliefs, perceptions, and customs of persons who participate in or are affected by my research
- Ensure that the research is relevant both to the broad legal and development needs of the country and to the individual needs of those who may be affected by my research

- Conduct the research and produce my thesis on my own, subject to normal supervisory and collegial assistance
- Acknowledge and attribute to others the ideas, designs and writings that are not original
- Reference my work accurately according to my chosen referencing guide, I will comply with copyright requirements and seek the necessary permissions, where required
- Make use of text-matching software throughout the research writing process, as discussed and required by my supervisors, and will submit appropriate reports in this regard with my proposal and thesis when they are in final draft form.

Should circumstances arise that impact upon my ethical obligations, I will disclose them to my supervisors and we will take appropriate action in terms of the relevant University policy.

9 RESOURCES

This research has no special resource implications. Current resources are adequate and apart from the usual research and travel grants, no additional institutional resources allocations are required.

10 INTELLECTUAL PROPERTY AND INNOVATION

Other than the usual copyright issues, I do not expect any special intellectual property rights to emanate from this research.

11 HARVESTING THE RESEARCH

My research topic, the thesis structure and the research methodology create the possibility of publishing articles from the material generated. I envisage submitting four articles to accredited journals, covering the following themes:

- A
- B
- C

I will also seek to present conference papers on the topic, both locally and internationally.

Since the research is intended to break new ground in South African law, there is also a real likelihood of publishing a monograph on the topic.

12 DECLARATION BY CANDIDATE

I acknowledge that I have read and understood the University's policies and rules applicable to postgraduate research, and I certify that I have, to the best of my knowledge and belief, complied with their requirements.

I declare that this proposal, save for the supervisory guidance received, is the product of my own work and effort. I have, to the best of my knowledge and belief, acknowledged all sources of information in line with normal academic conventions.

I further certify that the proposed research will be original, and that the material to be submitted for examination has not been submitted, either in whole or in part, for a degree at this or any other university.

I have subjected this document to the University's text-matching and/or similarity-checking procedures and I consider it to be free of any form of plagiarism.

Signature:

Date:

13 DECLARATION BY SUPERVISOR(S)

I am satisfied that I have given the candidate the necessary supervision in respect of this proposal and that it meets the University's requirements in respect of postgraduate research proposals.

I have read and approved the final version of this proposal and it is submitted with my consent.

Signature:.....

Signature:.....

Print Name:.....

Print Name:.....

Date:.....

Date:.....

PRELIMINARY TABLE OF CONTENTS

- 1 INTRODUCTION (5—10 pages)**
 - 1.1 Background to study
 - 1.2 Problem statement
 - 1.3 Aims of study and value of research

- 2 GRAFFITI (55—65 pages)**
 - 2.1 Definition of graffiti
 - 2.2 Different forms of graffiti
 - 2.3 History of graffiti and the historical discourse surrounding graffiti
 - 2.3.1 Pre-graffiti
 - 2.3.2 Graffiti
 - 2.3.3 Post-graffiti
 - 2.4 Graffiti as a form of delinquency
 - 2.5 Graffiti as an art-form
 - 2.6 Graffiti in South Africa
 - 2.7 Value of Graffiti

- 3 GRAFFITI AS A CULTURE (20—30 pages)**
 - 3.1 Introduction
 - 3.2 Right to culture
 - 3.3 Protection of right to culture

- 4 GRAFFITI AS FREEDOM OF EXPRESSION (20—30 pages)**
 - 4.1 Introduction to freedom of expression
 - 4.2 Constitutional right to freedom of expression
 - 4.3 Protection of right to freedom of expression

- 5 CURRENT MANAGEMENT OF GRAFFITI IN THE SOUTH AFRICAN LEGAL SYSTEM (40—50 pages)**
 - 5.1 Vandalism in South Africa
 - 5.2 Malicious injury to property as a crime in South Africa
 - 5.2.1 Historical origin of Malicious injury to property
 - 5.2.2 Definition
 - 5.2.3 Elements of the crime
 - 5.2.3.1 Conduct

- 5.2.3.2 Unlawfulness
 - 5.2.3.3 Capacity
 - 5.2.3.4 Intent
 - 5.3 Provincial and local legislation
 - 5.3.1 Provincial legislation
 - 5.3.1.1 Cape Province
 - 5.3.1.2 Free State
 - 5.3.1.3 Mpumalanga
 - 5.3.2 Local Legislation
 - 5.4 Additional management systems that may currently exist in South Africa.
- 6. MANAGEMENT OF GRAFFITI IN SELECTED INTERNATIONAL LEGAL SYSTEMS (60—70 pages)**
- 6.1 Introduction
 - 6.2 International overview
 - 6.3 England
 - 6.4 Germany
 - 6.5 Australia
- 7. SHOULD GRAFFITI BE CRIMINALIZED (10—15 pages)**
- 7.1 The value of criminal law
 - 7.2 The principles of criminal law
 - 7.3 The purpose of criminalising graffiti
 - 7.4 Effect of criminalising graffiti
- 8. GUIDELINES AND RECOMMENDATIONS ON THE MANAGEMENT OF GRAFFITI IN A SOUTH AFRICAN CONTEXT (25—30 pages)**
- 8.1 Definition of graffiti
 - 8.2 Recognition of graffiti
 - 8.3 Positive management of graffiti
 - 8.4 Negative management of graffiti

WORK SCHEDULE

Example A:

4 December 2012 – 16 January 2013	Finalize research proposal, register research project and re-register 2013, working first draft Chapter 5
7 January 2013	Submit Chapter 5
16 January 2013	Meeting with supervisors
17 January – 28 February 2013	Start working on Chapters 3 and 4
1 March 2013	Submit draft Chapter 3 and 4
1 – 10 March 2013	Corrections Chapter 5 and resubmit
11 March – 12 April 2013	Working on Chapter 2
13 April 2013	Submit Chapter 2
13 – 23 April 2013	Corrections Chapter 3 and 4, finalize Chapter 5 and resubmit
24 April - 24 May 2013	Working on Chapter 6
25 May 2013	Submit Chapter 6
26 May – 6 June 2013	Corrections Chapter 2, finalize Chapter 3 and 4 and resubmit
07 June – 15 July 2013	Working on Chapter 7 and 8
16 July 2013	Submit Chapter 7 and 8
17 July - 31 July 2013	Corrections Chapter 6, finalizing Chapter 2 and resubmit
August 2013	Meeting with supervisors
1 August 2013- 31 August 2013	Writing Introduction and Conclusion
September 2013	Corrections and finalizing chapters 7 and 8, editing
October 2013	Finalizing
November 2013	Submission

Example B:

	March	April	May	June	July	July – Aug	Sept – April 2013
Compilation of proposal	x						
Submit Proposal		x					
Present to Department & Faculty & recruitment		x					
Participant recruitment	x	x					
Testing Moderate Intensity Group at Main Campus			x				
Testing Vigorous Intensity Group at Main Campus			x				
Analysis of data				x			
Compilation of manuscript & submission for publication				x	x	x	x
Submission of dissertation for examination							x

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