

**THE OFFICIAL SEMINAR, DISSERTATION  
AND THESIS STYLE MANUAL  
BIORESOURCES ENGINEERING  
SCHOOL OF ENGINEERING**

Version 2.0

**GW Ascough**

Submitted in partial fulfilment of the requirements  
for the degree of BSc/BSc(Hons)/BScEng/MSc/MScEng/PhD

Bioresources Engineering  
School of Engineering  
University of KwaZulu-Natal  
Pietermaritzburg  
January 2013

## PREFACE

I ..... declare that

- (i) The research reported in this thesis, except where otherwise indicated, is my original work.
- (ii) This thesis has not been submitted for any degree or examination at any other university.
- (iii) This thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
- (iv) This thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
  - (a) their words have been re-written but the general information attributed to them has been referenced;
  - (b) where their exact words have been used, their writing has been placed inside quotation marks, and referenced.
- (v) Where I have reproduced a publication of which I am an author, co-author or editor, I have indicated in detail which part of the publication was actually written by myself alone and have fully referenced such publications.
- (vi) This thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the thesis and in the References sections.

Signed:

Supervisor:

Co-supervisor:

## **ABSTRACT**

The abstract is a short stand-alone summary of the full document and is printed on a separate page directly after the preface. Please refer to Section 2.1.2 for more information.

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## 1. INTRODUCTION

This is the official style manual for Bioresources Engineering in the School of Engineering for seminars, dissertations and theses. It is meant to complement the Dissertation and Thesis Style Manual of the Faculty of Science and Agriculture, University of KwaZulu-Natal, Pietermaritzburg.

All students submitting work for examination for Bioresources Engineering in the School of Engineering will be expected to follow the style conventions laid out in this document. This document is the official style manual and replaces all previous style manuals.

### **PURPOSE:**

There are several reasons for adhering to a style convention. Firstly, by standardising the format of presentation, examiners have a consistent standard to use for the evaluation of documents submitted for examination. Secondly, it gives the student practice at following conventions for publishing work. When submitting papers for publication, the specific journal to which the paper is submitted will expect the author to follow their style conventions exactly. Finally, presentation is everything. A poorly presented piece of work, with many errors and inconsistencies, will detract from the quality of the information presented in the work. This could result in a dissertation or thesis not being accepted, even though the quality of the work done for the degree is of a suitable level.

This document will present the conventions to be used for structure, layout, format, figures and tables, equations, and referencing in seminars, dissertations and theses submitted to Bioresources Engineering in the School of Engineering.

## **2. STRUCTURE OF THE DOCUMENT**

The structure to follow for seminars, project proposals, dissertations and theses will be presented in this chapter. For dissertations and theses, these do not have to be strictly adhered to, as the nature of project may require a modified structure of the document. The structure of the final document should be decided on through consultation with the student's supervisor. The structure of the document is often dependant on the nature of the investigation undertaken. A typical structure of a dissertation or thesis is presented in the following sections. All seminars, project proposals, dissertations and thesis documents have length limitations. Please liaise with your supervisor or module coordinator concerning these restrictions.

### **2.1 Lead Pages of the Document**

The lead pages of the document comprise a title page, abstract, preface, acknowledgements (only for dissertations and theses), supervisors approval (only for dissertations and theses), a table of contents and lists of (i) tables, (ii) figures and, if necessary, (iii) abbreviations, symbols and a glossary of terms. With the exception of the title page, all leading pages are numbered in roman numerals. This section provides more details concerning these pages.

#### **2.1.1 Title page**

The title should describe, in as few words as possible, the scope of the material presented in the document. The same term should not appear more than once in a title. Refer to the seminar template in the Appendix for the correct layout of the title page.

#### **2.1.2 Abstract**

The abstract should not be longer than 350 words in the case of a dissertation or thesis and 300 in the case of a seminar or project proposal. It should provide a brief précis of what is presented in each of the sections in your document. It should be written in such a way that the reader feels encouraged to read the rest of your document. A summary of the most salient points and conclusions should appear in the abstract. Generally, references are not

included in the abstract. In the case of an abstract for a dissertation or thesis, it is important to include some of the major results and conclusions. Typically your abstract should include:

- (a) what was studied,
- (b) how it was studied,
- (c) what was learned from the study, and
- (d) what the significance was of what was learnt.

### **2.1.3 Preface**

The preface contains a signed declaration by the student. Refer to the Faculty Style Manual for the exact wording of this disclaimer. At this point in time it should be noted that plagiarism in any form is unacceptable. Please refer to Section 4.1 for more information on plagiarism.

### **2.1.4 Acknowledgements**

An acknowledgements page is generally included in theses and dissertations. In this section all people or organisations that gave significant assistance during the duration of the research period can be thanked. Typically, this is limited to supervisors, funders, technicians, peers and family that aided the research process.

### **2.1.5 Supervisor's approval**

In dissertations and theses, a page should also be included which states that the supervisor approves of the document being submitted for examination, and which is signed by the supervisor. Refer to faculty guidelines for the required wording.

### **2.1.6 Table of contents**

The Table of Contents should exactly match the headings in the text. This means that the wording, capitalisation and punctuation that appears in the text, should appear in the same way in the Table of Contents. The formatting of the headings in the Table of Contents does

not need to exactly match the formatting of the headings in the text, *e.g.* **bold** printing. Preferably, 12pt font size should be used in the Table of Contents. Leader lines to the page numbers should be used. The sub-headings at the different levels should be indented and aligned as shown in the Table of Contents in this document. It is in the student's best interest to become familiar with using the word processing software's automatic Table of Contents generator, as this will ensure accurate page numbering and replication of headings. Refer to the Table of Contents in this document for an example of the formatting for the Table of Contents. The heading below and in the table of contents for this document illustrate how text should be wrapped when a heading does not fit into one line.

### **2.1.7 Long headings need to wrap over to the next line as demonstrated in this example**

### **2.1.8 List of tables**

It is common practice to present a List of Tables after the Table of Contents. This list should contain the table number, the caption of the table and the page on which the table occurs. Again it is beneficial to use the word processing software's Index of Tables option to automatically generate the List of Tables. The List of Tables should appear in order of table number. The caption of the table should be listed using a hanging indent and the page number should be right aligned (leaders should be used). Refer to the example below:

#### **LIST OF TABLES**

	Page
Table 2.1 Summary statistics of the MAP obtained from simulations performed in the Northern Province.....	23

### **2.1.9 List of figures**

Similar to a List of Tables, a List of Figures is included in the document. This appears after the Table of Contents and List of Tables. Refer to the example below:

## LIST OF FIGURES

	Page
Figure 2.1 Distribution of runoff obtained from simulations performed in the Northern Province.....	23

### 2.1.10 List of abbreviations or symbols, or glossary of terms

If there are many jargon terms or a long list of abbreviations / symbols used frequently in the body of the seminar, it is sometimes useful to include a Glossary of Terms or a List of Abbreviations / Symbols. This will aid readers who are not familiar with the topic to understand some of the technical nuances of the subject material. These are optional and should only be used if it is deemed necessary. In the document, all acronyms must be written out in full and defined the first time it is used and, once defined, the acronym must be used consistently in the remainder of the document.

## 2.2 The Main Body of the Document

Pages belonging to the main body of the document are numbered numerically. The document should present the material pertinent to the title in a logical sequence. Each subsequent chapter should build on the material presented in the previous chapter. The reader should be led through the thought process in a logical manner. The document should flow in a smooth manner from one chapter to the next. This can be achieved by linking the subsections and chapters, helping the reader to understand how each section fits into the document. An example of a linking sentence is given below:

"Having discussed the importance of the factors that affect x, it is apparent that y is of significant importance and it will be addressed in the following chapter/section."

The main body of dissertations and theses differ significantly from seminars and project proposals. The body of the seminar and project proposal should not contain any of the author's own thoughts on the subject, and these should be contained in the "Discussion and Conclusions" chapter.

In the case of dissertations or theses, the document will typically have the following structure:

- (a) Introduction
- (b) Literature Review
- (c) Methodology
- (d) Results (or Results and Discussion)
- (e) Discussion (or Discussion and Conclusions)
- (f) Conclusions
- (g) Recommendations
- (h) References
- (i) Appendices

The actual structure of the document should be established in consultation with the supervisor.

All chapters in the document must start on a new page.

### **2.2.1 Introduction**

The introduction to the document should give background to the topic under review and why it is of relevance. It should give a clear description of the subject, set the scene by referencing the key papers in the field and then set the scope and purpose of the study. After the background material to the topic has been presented, the introduction must contain a clear statement of the aim and objective(s) of the document to enable the reader to decide if he/she wants to read the entire document. A study normally has one overall aim and a number of objectives that are needed in order to achieve the overall aim. For example:

The aim of this document is to provide a guideline towards scientific writing according to an adhered style and structure. Specific objectives include:

- (a) to familiarise students to a suitable document structure,
- (b) to provide examples of the different styles that need to be adhered to, and
- (c) to provide students with general tips and recommendations.

If necessary, it may also be valuable to also mention what is not in the scope of the document. At the end of the introduction a "road map" should be used to inform the reader of what is contained in the document.

### **2.2.2 Other chapters**

All the chapters between the Introduction and the Discussion and Conclusions should follow a logical order. The reader should at all times know the context of what is being presented and thus be able to relate the current content to the larger overall purpose of the study.

### **2.2.3 Discussion and conclusions**

In the case of a seminar and a project proposal, the Discussion and Conclusions chapter is where the student demonstrates how he/she has assimilated the information that he/she has reviewed and draws conclusions from the material reviewed. The discussion should be more than just a summary of main points presented and should include some of the student's insight into the subject matter. **No new information** (*i.e.* material not presented in the body of the document) may be presented in the discussion. and, as such, references are seldom used in the discussion. An exception is where the student may choose to refer to a study already presented in the body of the document. For example, "The method followed by Bloggs (2003) is of significant importance since ...".

In the case of a dissertation or a thesis, the Discussion and Conclusion chapter realigns the research outcomes with the original aim and objectives of the study. It is essential that conclusions are made on whether the objectives contained in the Introduction chapter have been achieved.

### **2.2.4 References**

This is where comprehensive references to all literature cited in the text should be presented. Refer to Chapter 4 for more information. The references should be presented in

alphabetical order and should be left justified. A hanging indent should be used to separate the references. No blank line should be left between references. No references should be placed in the list if they are not used in the document and all references used in the document must appear in the list of references.

### **2.2.5 Appendices**

If it is essential, additional information can be placed into the Appendix section of the seminar. However, this material must be referred to in the text.

Having discussed the structure of the document, the formatting of the document will be discussed in the following section.

### **3. DOCUMENT FORMATTING**

This section will deal with all the formatting conventions when writing a seminar, dissertation or thesis.

#### **3.1 Fonts**

The typeface that is preferred is 12pt Times New Roman, with line spacing of 1.5 and “full” justification. Be sure to use a True Type Font to ensure transportability of the document from one computer to another. If a non-standard font is used, formatting errors could occur when using a different computer or printer.

#### **3.2 Title Page, Numbering, Font Sizes, Justification and Capitalisation**

The following sections present the format that should be followed for the various components of the document.

##### **3.2.1 Title page**

The title of the document must be placed at the top of the title page and be centred, all in uppercase and in bold. For a seminar the title must be in 14 pt, and for a dissertation or thesis the title must be in 16 pt.

The name of the author must be in lower case, centred and in bold. The name should consist of the initials and surname, where the initials are not separated by periods. For a seminar this must be in 12 pt and for a dissertation or thesis this must be in 14 pt.

The rest of the title page must be in 12 pt regular.

### 3.2.2 Numbering

Headings should be numbered in the following manner:

Main heading:	1.	INTRODUCTION
Sub-heading:	2.1	Factors Affecting Evapotranspiration
Second level sub-heading:	2.1.1	Rainfall

#### Note:

- A tab stop of 1.27 cm can consistently be used after the numbers.
- Typically one would not go beyond the third level of numbering (*i.e.* 2.1.1) as this becomes too cumbersome. Rather group such information using bullets instead of a fourth level of numbering. An absolute maximum of 4 levels is recommended for dissertations and theses. However, going beyond the third level of headings can make the document too disaggregated and it affects the flow of the writing.
- There are no periods after the last number used, except in main headings as indicated.
- Headings such as ABSTRACT, PREFACE, or TABLE OF CONTENTS are not numbered.
- In the Appendix, you may specify an Appendix letter (*e.g.* A) and refer to subsections of Appendix A using numbering. For example, A.1 would refer to the first sub-heading of Appendix A.
- Single sub-heading section should be avoided.

### 3.2.3 Main headings

These must be centre aligned, 14 pt bold and all in uppercase letters. A blank line should be placed between the heading and the paragraph under the heading. Heading titles are not terminated with a full stop, *e.g.*:

## **3. FACTORS AFFECTING HEADING STYLES**

### **3.2.4 Second level headings**

These headings must be fully justified and be in 12 pt bold. The first letter of each word is capitalised. This excludes common words such as for, and, on, with, etc. If the sub-section title exceeds one line, then a hanging indent should be used. A tab stop of 1.27 cm may be placed between the last number and the start of the title. Again there is no full stop at the end of the title. These headings are preceded and succeeded by a blank line, *e.g.*:

## **2.3 Causes of Soil Erosion**

### **3.2.5 Third level, and greater, headings**

These headings have full justification and are to be in 12 pt bold. Only the first letter of the title is capitalised, unless the title includes proper nouns. A hanging indent must be used if the title exceeds one line in length. A 1.27 cm tab stop may be used between the last number and the first letter. Again, there is no full stop at the end of the title. A blank line comes before and is inserted after the heading, *e.g.*:

#### **2.1.4 Estimation of reference potential evaporation using the Penman-Monteith equation**

**Note:** In this document the third level headings have more than just the first word capitalised as they refer to specific elements such as Table of Contents, and List of Figures.

### **3.2.6 Tables and figures**

The font to be used for the table and figure captions is 12 pt regular. If the table or figure is centre aligned, then the caption should also be centre aligned with the Table or Figure. Otherwise, the caption should have full justification. Table or figure numbering should contain the number of the chapter and the number of the table or figure in that chapter. For

example, Table 3.1 refers to the first table in Chapter 3 and Figure 5.4 refers to the fourth figure in Chapter 5.

### 3.2.7 Equations

Equations should be created using a suitable equation editor that is supplied with most word processing software packages. The font size used in the equations should also be 12 pt and be in the same text as the rest of the document. Some equation editors use either plain text or mathematical text for variables ( $v$  versus  $\nu$ ). The same convention should be used for all equations, *i.e.* be consistent. Equations should be numbered using right alignment with the chapter number and the number of the equation in parentheses, *e.g.*:

$$E = mc^2 \tag{3.1}$$

where

$E$  = energy [J],

$m$  = mass [kg], and

$c$  = speed of light in a vacuum [ $\text{km}\cdot\text{s}^{-1}$ ].

### 3.2.8 Lists

List of up to three points can be included in the text as illustrated here: (a) this is point number one, (b) this is point number two, and (c) this is point number three. Lists of more than three items should rather be placed in a table (*cf.* Section 3.2.6) or as an alphabetically numbered list with one item per line, as demonstrated below. Alphabetical numbers should be indented 0.5 cm from the left margin, with the text indented an additional 0.5 cm. Although the list is printed in multiple lines, it still remains a single sentence. As an example;

- (a) this is item one,
- (b) this is item two,
- (c) this is item three, and
- (d) this is item four.

Use the following format if each numbered item contains a complete sentence:

- (a) Bullets should not be used.
- (b) Numerical numbers are not used to avoid confusion with headings.
- (c) Lists containing fewer than three points are normally not printed in separate lines.

### **3.3 Page Margins and Page Numbering**

The following page margins should be used consistently throughout the document:

Right hand margin: 2.5 cm

Left hand margin: 2.5 cm

Top margin: 2.5 cm

Bottom margin: 2.5 cm

Page numbers should be placed at the bottom of the page and centred. Roman numerals are used for the front pages and integers are used in the body of the document. Page 1 starts at the Introduction. There is no page number on the title page. Therefore the Abstract will usually be page ii. Follow the example used in this document.

The next section will deal with referencing in the text and preparation of a reference list.

## 4. REFERENCING

This section will detail the correct manner in which referencing is to be done. This style convention should be followed in both seminars and dissertations or theses.

### 4.1 Ethics

Where any statement of fact is not common knowledge (*e.g.* water is wet), or is not of the author's own creation, the information should be credited to the source. Failing to do so is plagiarism and may result in prosecution or the rejection of the document submitted for examination. If a statement is copied verbatim from another source, those words must be enclosed in double quotation marks (" ") and referenced. All paraphrased material (*i.e.* quotes that are altered to better suit the document) should be clearly referenced to the original source. In addition, any figures, tables, or data that are taken from another source should also be referenced at the point where the information is given. Students are encouraged to discuss this matter with a staff member if they are at all unclear as to appropriate referencing and use of other material.

### 4.2 Source Material

Typically the information that is sourced for literature reviews should be from peer reviewed journals, paper, conference proceedings or reports. With the advent of the Internet, there is a vast amount of information available. However, this is often from non-peer reviewed sources. These articles tend to be popular press type articles and are generally not acceptable for a scientific review document. However, a large number of organisations make their peer reviewed documents available on the WWW. Examples of these are the Food and Agriculture Organisation (FAO), or the research departments of the United States Department of Agriculture (USDA). Discretion should be used when using information that has been obtained from the WWW. The bulk of the references should be from peer reviewed publications.

### 4.3 Citing References

The convention for citing literature in the text and in tables and figures is given below.

#### 4.3.1 Referencing in the text

The convention to be used for citing literature will be as follows. The name of the author(s) will appear in the text followed by the date of the publication. This information will usually be placed in parentheses. For example, this is a statement of fact (Soap, 2003). The names and the year of publication are to be separated by a comma. Where there are two authors, both names are listed separated by 'and', *e.g.* (Soap and Bloggs, 2003). Where there are more than two authors only the first author will be listed followed by '*et al.*', *e.g.* (Soap *et al.*, 2003). The correct format is as shown.

Where a number of consecutive facts are to be credited to the same author(s), the following convention can be used. This is illustrated in the following example:

"Soap *et al.* (2002) gave the following discussion of tractive performance in ..."

This is more desirable than simply putting the reference in parentheses at the end of the paragraph. It is also desirable to vary the placement of references in sentences, *i.e.* place some at the beginning and some at the end.

Where the original reference cannot be obtained, the reference is referred to in the following manner: (Smith, 1983; cited by Jones, 2003). Both references must appear in the reference list. However, it is desirable to obtain the original reference and to make minimal use of the cited by approach.

Where more than one reference is used to cite information, the references should appear in chronological order and then in alphabetical order if the years are the same. For example: (Smith, 1983; Jones, 1999; Thomas, 1999).

### 4.3.2 Referencing tables and figures

Tables and figures should be referenced using the same convention as referencing in the text. **Tables and figures must be referred to in the text before they appear in the document** and should be referred to as "...shown in Figure 1.2" or "the values are contained in Table 2.1". When the source has been modified, the word 'after' is placed before the author's name. This is to account for any changes that may be made when reproducing the table from the original. See the example below:

Table 2.1 Site details of the Umdlovu catchment (after Smith *et al.*, 2002)

Sub-catchment	Area [km <sup>2</sup> ]	Land use
A1	5.63	Sugarcane
A2	7.25	Grazing

### 4.4 Reference List

The purpose of producing a reference list is to enable the reader of the document to obtain a copy of the material cited. For this reason, sufficient details must be supplied so that the reader can easily find the reference. In order to ensure that enough information is provided in the reference list, the style conventions detailed in the following sections must be followed exactly. It is important that the convention be used consistently throughout the reference list. The reference list should be in alphabetical order. Where the same author(s) has more than one publication, these should be listed chronologically. Where the same author(s) has more than one publication in the same year, these are differentiated by adding a lowercase letter to the year. For example: Smith, J. S. 1999a and Smith, J. S. 1999b. The letter must also be included when citing the reference in the text. The authors name is presented first and then followed by the initials. The formats for the different types of references are described below.

The different formats will be presented by reference type. The punctuation and special formatting requirements must be followed as shown in the format definitions. A hanging

indent should be used in order to differentiate references without having to leave a line open between references.

#### 4.4.1 Books

[Surname], [Initials]. [Year]. [*Title of book*]. [Publisher's name], [City of publisher], [Country of Publisher].

Example:

Allen, JS. 1988. *The Complete Dictionary of Abbreviations*. MacMillan & Sons, Inc., New York, USA.

Cool, JC, Schiff, FJ, and Viersma, TJ. 1991. *Regeltechniek* (Control Engineering). Delta Press, Overburg, Germany.

#### 4.4.2 Part of a book

[Surname], [Initials]. [Year]. [Title of chapter/paper in book]. In: ed. [Surname], [Initials], [*Title of book*], [Chapter], [Pages]. [Publisher's name], [City of Publisher], [Country of publisher].

Example:

Overstreet, HA. 1925. The psychology of effective writing. In: ed. Pierre, WH, *Effective Report Writing: Principles and Practices*, Ch. 3, 87-109. Graphic Publishing Co., Chicago, USA.

#### 4.4.3 Bulletins

[Surname], [Initials]. [Year]. [Title of bulletin]. [Bulletin number]. [Publisher's name], [City of Publisher], [Country of publisher].

Example:

James, D. 1980. United States fruit and vegetable harvest predictions - 1990. USDA-1007. GPO, Washington, USA.

#### 4.4.4 Computer documentation and programs

Note: The year of publication and trademark symbol (™) are unnecessary.

[Title of program or documentation] [Version / Release number], [Chapter / pages]. [Publisher's name], [City of Publisher], [Country of publisher].

Example:

Lotus 1-2-3 Rel. 2, Ch. 6. Cambridge, USA: Lotus Development Corp. *SAS User's Guide: Statistics* Ver. 5, pp. 60-70. SAS Institute, Inc., Cary, USA.

#### **4.4.5 Dissertation or Thesis**

[Surname], [Initials]. [Year]. [Title of dissertation or thesis]. Unpublished [Type of thesis], [Name of School/ Department], [Name of Institution], [City of Institution], [Country of Institution].

Example:

Ascough, GW. 2001. Procedures for estimating irrigation water requirements from crop water requirements. Unpublished MScEng Dissertation, School of Bioresources Engineering and Environmental Hydrology, University of Natal, Pietermaritzburg, RSA.

#### **4.4.6 Government documentation**

[Title of Act]. [Year]. [Name of source document] No. [Act number] of [Year],  
[Number reference for Act]. [City of publication], [Country of publication].

Example:

National Water Act. 1998. RSA Government Gazette No. 36 of 1998: 26 August 1998, No. 19182. Cape Town, RSA.

#### **4.4.7 Patent**

[Surname], [Initials]. [Year]. [Title of patent]. [Country of patent] Patent No. [Number of patent] (In [Language of patent if not in English]).

Example:

Boulart, J. 1983. Process for protecting a fluid product and installations for the realisation of that process. French Patent No. 2513087 (In French).

#### **4.4.8 Personal communication**

Note: In the text, cite the reference in the usual manner and include the complete reference in the reference list.

[Surname], [Initials]. [Year]. Personal communication, [Name of institution/ company/ private enterprise], [City], [Country], [Date].

Example:

Soap, JS. 2003. Personal communication. Department of Reference Citing, Pretoria, RSA, 14 October 2003.

#### **4.4.9 Conference proceedings**

[Surname], [Initials]. [Year]. [Title of paper]. In: eds. [Surname], [Initials], [*Title of conference proceedings*], [Pages]. [Name of publisher], [City of publisher], [Country of publisher].

Example:

Miller, FR and Creelman, RA. 1980. Sorghum -- A new fuel. In: eds. Londen, HD and Wilkinson, W, *Proceedings of the 35<sup>th</sup> Annual Corn and Sorghum Industry Research Conference*, 219-232. American Seed Trade Association, Washington, USA.

#### **4.4.10 Standards**

[*Title of book in which Standard appears*], [Edition (if applicable)]. [Year]. [Number of Standard]. [Title of standard]. [Name of publisher], [City of publisher], [Country of publisher].

Examples:

*Agricultural Engineers Yearbook of Standards*. 1983. S358.1. Moisture measurement -- Grain and seeds. ASAE, St. Joseph, USA.

*ASAE Standards*, 36<sup>th</sup> Ed. 1989. S352.1. Moisture measurement -- Grain and seeds. ASAE, St. Joseph, USA.

#### **4.4.11 Papers**

[Surname], [Initials]. [Year]. [Title of paper]. [Organisation] Paper No. [Number of paper]. [Name of publisher], [City of publisher], [Country of publisher].

Example:

Anthony, WS. 1989. Performance characteristics of cotton ginning machinery. ASAE Paper No. 89-1010. ASAE, St. Joseph, Michigan, USA.

#### 4.4.12 Journals

Note: Journals include refereed journals, newsletter and periodicals (e.g. Farmers Weekly, Water Wheel)

[Surname], [Initials]. [Year]. [Title of article]. [*Title of journal*]  
[Volume]([Issue]):[pages].

##### Examples:

Slaughter, DC and Harrell, RC. 1989. Discriminating fruit for robotic harvest using colour in natural outdoor scenes. *Transactions of the ASAE* 32(2):757-763.

Burner, AD. 1989. Driveline design considerations. *Agricultural Engineering* 70(July/August):16-19.

Jacobson, LD. 1989. Reluctance to drink, stray voltage symptom. *International Pigletter* 8(12):47-48.

#### 4.4.13 Handbooks

[Surname], [Initials]. [Year]. [Title of article]. In: [*Title of handbook*]. [Name and number of handbook], [Name of publisher], [City of publisher], [Country of publisher].

##### Example:

Griffin Jr., AC. 1977. Cotton moisture control. In: *Cotton Ginners Handbook*. Agricultural Handbook No. 503, USDA, Washington, USA.

#### 4.4.14 Reports

[Surname], [Initials]. [Year]. [*Title of Report*]. Report No. [Report number].  
[Institution], [City of institution], [Country of institution].

##### Example:

Smithers, JC and Schulze, RE. 2003. *Design Rainfall and Flood Estimation in South Africa*. Report No. 1060/1/03. Water Research Commission, Pretoria, RSA.

#### 4.4.15 Referencing articles off the WWW

Note: Refer to Section 4.2 for discussion on what is acceptable as a source of information. Due to the transient nature of web links, enough information should be provided for the reader to obtain the article when they are not able to follow the link

provided. Where the author's name is not apparent, either use Anon as the author's name or use the institution's name (*e.g.* FAO, USDA, or IWMI) as a substitute.

[Surname]. [Initials]. [Year]. [Title of article/ paper/ report]. [Internet]. [Name of publishing institution / organisation / department], [City of publisher], [Country of publisher]. Available from: [URL]. [Accessed: [Date]].

Example:

Rogers, DH, Lamm, FR, Alam, M, Trooien, TP, Clark, GA, Barnes, PL and Mankin, K. 1997. Efficiencies and Water Losses of Irrigation Systems. [Internet]. Kansas State University, Research and Extension Engineers, Manhattan, USA. Available from: <http://www.oznet.ksu.edu/library/ageng2/mf2243.pdf>. [Accessed 17 March 2000].

#### **4.4.16 Referencing images and tables off the WWW**

Note: All images, figures, photographs, or tables that are taken off the WWW should be referenced. If the name of the author/owner is available, then reference it to them. Otherwise, use the name of the website to reference the image/figure/table.

[Surname or name of website], [Initials]. [Year]. [Description of image, figure or table]. [Internet]. [Publishing institution, company, or website], [City of publisher], [Country of publisher]. Available from: [URL]. [Accessed: [Date]].

Example:

Arkal Filtration Systems. 2003. Spin Klin ® disk filter spine. [Internet]. Arkal Filtration Systems, Kibbutz Bet Zera, Israel. Available from: [http://www.arkal-filters.com/agriculture/tm\\_spin.gif](http://www.arkal-filters.com/agriculture/tm_spin.gif). [Accessed: 14 October 2003]

An example of how this figure would be referenced in the text is shown in the caption for Figure 4.1.



Figure 4.1 Internal spine for Spin Klin ® disk filters (Arkal Filtration Systems, 2003)

Bibliographic software tools (*e.g.* EndNote, RefWorks) are available for managing references and for automatically generating a list of references in a specified format. It is highly recommended that one of these tools is adopted and used. For further information refer to the following web site:

<http://library.ukzn.ac.za/reference779.aspx#bibliographictools>

This section has dealt with most eventualities for having to cite work done by others. One should strive to find a reference type that best suits the document that needs to be referenced. The next step is to acquire all the relevant information needed to adequately list the reference.

The following chapter deals with formatting details for figures, tables, equations and other style conventions.

## 5. ADDITIONAL STYLE CONVENTIONS

This chapter will address specific style and formatting conventions for figures, tables, equations, and general conventions.

### 5.1 Style Conventions for Figures

A figure is any drawing, photograph, plate, flow chart, or graph. Figures can be used to great effect in documents. "A picture is worth 1000 words". They can be used to present information in an easy and understandable manner. They also allow for breaks in large sections of text. However, figures that are used should add value to the document and not just be present to occupy space. They are most effective when used to complement an explanation in the text. For this reason, figures should be placed in the document as soon as possible after they have been referred to in the text. No figure should be placed in the document if it is not referred to and discussed in the text. Each figure should be placed shortly **after** the first point at which it is mentioned. Do not "anthropomorphise" a figure by writing "The figure shows that...". Figures are not alive, and they cannot show, demonstrate, or indicate anything by themselves.

The caption of a figure appears **below** the figure and should be numbered using the chapter number and the number in the sequence of figures in that chapter. The caption should not be terminated with a full stop. When figures are referred to in the text, the "F" is capitalised (*e.g.* ... as can be seen in Figure 4.3). Figures should be centre aligned and have a box placed around them. The caption therefore, should also be centre aligned. The figure should be able to be understood from its description in the caption. A hanging indent should be used for captions that are longer than one line.

In general figures should be in black and white or greyscale to enable the document to be photocopied. However, detailed GIS maps that do not lend themselves to being produced in black and white or greyscale can be inserted in colour. These maps should be kept to an absolute minimum to reduce reproduction costs.

## 5.2 Style Conventions for Tables

Information that is presented in a figure should not also be presented in a table. The caption for a table appears **above** the table. The same numbering convention as for figures should be used (*e.g.* Table 4.2). Table captions do not end with a full stop. The table should be able to be understood from its description in the caption. As with figures, a hanging indent should be used for captions that exceed one line. An example of table layout is shown in Table 5.1. Note that the number of decimal places used in a column must be consistent and be aligned.

Table 5.1 Example table of results

Run Number	Volume [m <sup>3</sup> ]	Peak Discharge [m <sup>3</sup> .s <sup>-1</sup> ]
1	1000.6	1.2
2	3000.9	3.3
3	5000.6	5.4

## 5.3 Style Conventions for Equations

The formatting conventions as mentioned in Section 3.2.7 should be followed when inserting equations. All equations that were obtained from other sources should be referenced. All variables listed in the equations should be explained in the text preceding the equation or in a list directly below the equation. The following is an example of the two approaches:

$$F = ma \tag{5.1}$$

where  $F$  = force [N],

$m$  = mass [kg], and

$a$  = acceleration [m.s<sup>-2</sup>].

Or,

The force,  $F$  [N], acting on a body is determined from the mass of the body,  $m$  [kg], and the acceleration of the body,  $a$  [m.s<sup>-2</sup>], according to the following equation (Jones, 2000):

$$F = ma \tag{5.1}$$

In the first example it is preferable to have all the variables and descriptions line up vertically. This can be achieved by using tab stops. Units must be specified for all variables, unless they are dimensionless.

### **5.3.1 Proper Use of Tense**

Tense is expected to be used properly throughout the document. Typically, scientists have difficulty deciding between past and present tense. Proper usage of tense in scientific writing is as follows:

Past tense – Use past tense to refer to things that have already happened. For example: “The experiment was conducted in the summer of 1947” or “The sensors were installed at a depth of 1.4 meters”.

Present tense – Use present tense to refer to results of an experiment, because they are (hopefully) valid for all time. For example: “The results indicate that rainfall intensity varies with the inverse cube of soil depth”. Also, use present tense to refer to published work of others (for the same reason).

### **5.3.2 Active vs. Passive Voice**

The use of active and passive voice is somewhat controversial in scientific writing, and a consensus has not been reached on this issue. Passive voice is more “impartial” and “scientific” because the focus of the writing is the action, rather than the person performing the action. However, passive tense can be very boring to read, and active tense is sometimes necessary to indicate human involvement. In general, use passive voice for the following three situations<sup>1</sup>:

- (a) Descriptions of processes that do not involve direct human control: “The streambed is eroded most intensely during periods of spring runoff.”
- (b) Descriptions of procedures. “The sample is placed in the beaker and mixed for 3 minutes.”

---

<sup>1</sup> Note that this list only has three points (whereas the style guide suggests a minimum of 4). If your list is somewhat verbose, lists of three items may be placed in bulleted form.

- (c) Explanations of existing knowledge: “The mechanisms of thermal exchange are not well understood.”

## 5.4 General Conventions

This section will list some common errors that regularly appear in seminars that should be avoided. These common style discrepancies often detract from the quality of the document.

- (a) **Proof reading** - Have a colleague read through the document to find errors that are easily overlooked by the author. Sometimes spellchecker does not pick up words that are used incorrectly, because they are correctly spelt, *e.g.* fro instead of for.
- (b) **Long sentences** - A common stylistic trend when writing is to use long sentences. These sentences often exceed 5 lines. They become cumbersome and the meaning of what is being presented is often difficult to fathom. It is more desirable to break these long winded sentences up into shorter ones.
- (c) **Having a sub-heading directly follow another heading** - This can be avoided by providing a sentence or two that describes the sub-sections that follow.
- (d) **Inconsistent use of bullets** - The same bullet style should be used throughout the document. If the sentences in one list are separated with commas/ periods, the same should be done in other lists.
- (e) **Not linking sections in a document** - The document should flow from start to finish. This can be achieved by presenting the information in a logical sequence that shows how the topic is being developed. Linking sentences between sections can be used to demonstrate how each section fits into the overall document plan.
- (f) **Inconsistencies in the document** – While it is expected that the entire document should consistently follow the required style, inconsistency in style within the document detracts from the quality of the document. It is preferable to be consistent, even if you have deviated from the required style, than for the document to be inconsistent in style!
- (g) **Use of italics** – Italics is reserved for printing variables, such as  $E_T$ ,  $\alpha$  and  $n$ . Italics is also used when words and acronyms from another languages are used (including latin), such as *e.g.*, *i.e.*, *cf.*, *viz.* and *El Niño*. Names of places, *e.g.* Bloemfontein

and Potchini, are not printed in italics even though they may be derived from another language.

## 6. REFERENCES

ASAE. 2003. Journal Manuscript Format. [Internet]. American Society of Agricultural Engineers, St. Joseph, USA. Available from:

<http://www.asae.org/pubs/style/format.html>. [Accessed 15 October 2003].

Faculty of Science and Agriculture. 2003. Style Manual for Dissertations and Theses. [Internet]. University of Natal, Pietermaritzburg, RSA. Available from:

[http://www.sciag.unp.ac.za/downloads/style\\_1.pdf](http://www.sciag.unp.ac.za/downloads/style_1.pdf). [Accessed 10 October 2003].

WRC. 2003. Water SA Authors Guide. [Internet]. Water Research Commission, Pretoria, RSA. Available from: <http://www.wrc.org.za/publications/watersa/authors.asp>.

[Accessed 14 October 2003].

## **7. APPENDIX A: AN EXAMPLE OF THE SEMINAR TITLE PAGE**

The example is illustrated on the next page.

**TITLE OF SEMINAR**

**AN Other**

SEMINAR

Submitted in partial fulfilment of the requirements  
for the degree of BSc/BSc(Hons)/BScEng/MSc/MScEng/PhD

Bioresources Engineering  
School of Engineering  
University of KwaZulu-Natal  
Pietermaritzburg  
Month YYYY