

Scientific Skills Series

REPORT WRITING

2006

Potchefstroom

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North-West University

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Preface

The Scientific Skills Series

The Scientific Skills Series was developed to fulfill the need of students for guidelines to assist them in their scientific endeavours. The series is designed to be used voluntarily or as a course (or part of a course). A computer disc ("stiffy") with exercises will be available on some of the modules.

The Scientific Skills Series consists of the following modules:

Module 1: Quoting sources

This module consists of guidelines for quoting sources in the text of a scientific report and compiling a source list. A computer disc and lecturer's manual are additional.

Module 2: Internet

The format of this module is the same as for the previous module (guide, disc). A lecturer's manual is additional.

Summary of contents:

- What is the Internet?
- How to find information on the Internet (e.g. using search engines, etc.)
- How to evaluate information on the Internet
- How to quote information found on the Internet in a scientific report
- Search methods including Boolean operators.

Module 3: Finding information in thesciences (e.g. economic sciences)

The format of these modules is the same as for the previous modules (guide, disc, lecturer's manual).

Summary of contents

- Identifying and classifying information needs (where do you look for your specific information need, e.g. in books, journals, newspapers, Internet)
- Information finding tools (e.g. using a library and reference sources like encyclopaedias, computer databases, the Internet)
- Evaluating information and information sources.

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SCIENTIFIC REPORT WRITING

1 AIM AND LEARNING OUTCOMES

STUDY UNIT AIM

Following completion of this booklet you should have a good idea of the value and procedures of a systematic literature study and be able to apply it in assignments in all your subjects.

LEARNING OUTCOMES

After completing this unit you should be able to

- 1. describe the processing of information and illustrate this with your own examples.
- 2. write an assignment with an introduction and conclusion once the information processing has been done meaningfully.





An assignment can only be as good as the sources which you used to write it. You can start once you have ensured that you have collected the best and most recent sources via a systematic literature study. If you then know how to integrate this source material into a logical unit and to present your paper neatly, you can give your semester mark a good boost. This skill will have to be exercised right through your academic career.



2 INTRODUCTION

In spite of all kinds of electronic developments in the field of science and especially in the field of tertiary education, the written word still remains the single most important form for the obtaining, processing and transfer of knowledge.

Without the ability to write clearly, logically and effectively, you can not claim to have mastered the art of scientific writing fully. For that reason it is important for you to develop this skill to the best of your ability.

During the undergraduate years, as well as during honours and sometimes also during master's study, this skill is developed through the use of assignments. Three aims are striven for in this case. In the first place, your knowledge about a subject is extended through the writing of an assignment about it. In the second place you gain practice in the process of research, and in the third place your ability to formulate and write is refined.

The ability to write a good assignment is not something that happens automatically. This is a skill that is inculcated through regular practice and a deliberate effort to keep testing your work against the stated criteria and to improve what is wrong. It is in support of this *process* that the manual has been developed.

2.1 Planning

The planning of the assignment is very important - give enough time and attention to this phase.

In the first place, one has to **think carefully about the topic**. Very often this is where the battle is lost or won. Questions which should be considered include: What is the main aim of the assignment? What is the core issue? What are the limits of the assignment?

In this phase, you have to look at a number of issues. Carefully read the lecturer's instructions since they might include a suggested essay plan. See where the topic fits in with the material already discussed in class. Read the relevant sections in the textbook or the "diktaat" to orientate yourself. Check the study guide again to make sure of the envisaged aims with the assignment, make sure that you know what the core issue is, and then go on to the next step.

2.2 Outline or framework

Formulate a framework or scheme. ALWAYS KEEP IN MIND THE CENTRAL THEME. Take care not to go off at a tangent. Keep a balance between sections. If one section tends to become too long, consider dividing it up into more than one section. Divide the information into subsections.

In the subsections the different components of the topic should be dealt with separately, but as part of the logical whole. The method which should be used for the organisation of the material will differ from case to case. It can be done chronologically, thematicchronologically or in any other way. Regardless of what method is used, the presentation always has to be logical. It should be clear what the thread of the argument is, and the one point must lead logically into the next one.

Take care that there is balance between the different sections. Do not concentrate only on the sections which you find interesting. The image of a river with sidestreams or tributaries is applicable here. The tributaries serve to feed into the mainstream, and this is also the way it should be with the assignment. Stated differently, the final product should be more than simply a stringing together of bits of information - the "trees" have to constitute a balanced "forest".

When you are writing a long assignment, it is better to use connecting sentences at the ends of concluding paragraphs. A useful hint is that one word in the final sentence of a section should be linkable to the following heading.

Examples of logical frameworks:

Subject: Healthy foods	Subject: Student problems
1 INTRODUCTION 2 FRUIT 2.1 Apples 2.2 Oranges 2.3 Bananas 3 VEGETABLES 3.1 Beans 3.2 Peas 3.3 Tomatoes 4 DAIRY PRODUCTS 4.1 Milk 4.2 Cheese 5 CONCLUSION	1 INTRODUCTION 2 ACADEMIC PROBLEMS 2.1 Subject choices 2.2 Study habits 3 FINANCIAL PROBLEMS 3.1 Registration 3.2 Class fees 3.3 Lodging 3.3.1 Housing 3.3.2 Meals 4 TRANSPORT 5 SOCIAL ADJUSTMENT 6 CONCLUSION
6 SOURCE LIST	7 SOURCE LIST

PLEASE NOTE: Do not put two different aspects in one heading, for example in the second example above: it would be wrong to put together 4 and 5 (transport and social adjustment).

2.3 Headings

Keep headings as brief as possible and keep consistently to the style that you have chosen. Do not do the following:

4 Journals as information sources

4.1 What are the advantages of journals as sources of information

4.2 Disadvantages

The first subsection (4.1) is a sentence with a verb, while 4.2 is simply one word.

4

Rather:

4 Journals as information sources

4.1 Advantages

4.2 Disadvantages

3 COLLECTION OF THE DATA/INFORMATION

3.1 General

Read, read, read. One should never be afraid of getting to know more than one is going to use in a specific assignment. It is only by reading extensively that one begins to achieve the insight needed and to glimpse the limits of the topic. It is generally a good idea to move from the general to the more particular, and therefore to start with articles in encyclopaedias and entries in subject-specific dictionaries.



While you are reading, you can begin to note details from the sources and to begin grouping this material in accordance with the assignment scheme or plan that you have already outlined. Use cards or separate sheets of paper to note down details about different topics or subsections of topics.

The most important matter here is not the material on which the information is noted, but the fact that a logical system is used for the grouping of the facts around the main topic. It is crucial at this stage to remember TO KEEP ACCURATE NOTES OF THE BIBLIOGRAPHICAL DETAILS OF THE SOURCES THAT YOU ARE USING. (Please do not make such notes in the books and journals you are using because this will become an impediment to later users - this is selfish and vandalistic, to say the least.)

3.2 Locating information sources

3.2.1 The library

The student who has to write an assignment has to know where to find the material for the essay. The University Library is, of course, the first logical place to go and look for material to use in the assignment, once one has made a list of the issues to be explored. Trained personnel are always available in the library to help the

student look for suitable material. It is of crucial importance to know how to access and retrieve material, and for that reason the student has to make sure that he/she knows what resources there are in the library for this purpose.



The electronic media available nowadays for the finding of material have made life considerably easier. It is in your own interest to learn how to use these - once again, ask the library personnel. Some lecturers also arrange trips to the library for the purpose of familiarising students with the facilities.

The material found through the catalogue and other sources in the library will lead to further material - bibliographies in books and journals found in the first round of information retrieval through the catalogue will be a further resource to be used.

3.2.2 Types of information sources

What kind of information do you need?

You now have to start your search for unknown sources - and your journey of discovery becomes more and more interesting. If you go about in a planned manner, it is useful to keep the following in mind: a certain type of information is to be found in a specific kind of source. For example, do not expect to find a theoretical outline in a newspaper!

Here is an outline of information needs and types of information sources:

- definitions, descriptions (SUBJECT-specific dictionaries)
- introductions, frameworks and brief surveys (SUBJECT-specific encyclopaedias)
- more complete, but still basic information (books)
- the latest research data (SUBJECT-specific journals)
- recent news reports (newspapers on the Internet). The Internet can be accessed for various types of information, but this information should be approached with caution. Try to determine the validity of the information before using it.

3.2.3 Databases



To locate information sources you can make use of different computer databases.

The following division of databases can give you an indication of the different types of databases:

- To know which **books** on a specific subject are in the library, you can use the library catalogue. For example if you want to locate books on the subject of EUTHANASIA, go to the "catalogue computers (books)" in the library and type in the word EUTHANASIA. You will find records with the shelf number of the books clearly indicated on the computer screen.
- For South African journal articles, make use of SAePublications or the Index to South African Periodicals ISAP
- International journals: Make your choice from databases like ScienceDirect, EbscoHost's Academic Search Premier or Business Source Premier and many more. Consult the library web page www.puk.ac.za/library for the listings of relevant databases.
- **Newspapers**: Use the **SA Media** database for South African newspapers. The full text of international and national databases are available on the **Internet**.
- Interesting full text multimedia databases are also available. Some examples are: Shakespeare on disc, Cinemania, Voyage through the Bible, different texts and translations of the Bible. Consult the information librarians for more information.
- The **Internet** could also be used for up to date information on different subjects. But please take care that the information is scientific, can be trusted and make sure of the authority of the source.

3.2.4 Keywords

For a search on a database you have to express your subject in keywords. You are going to type these keywords into the computer in different combinations.

For example: you have an assignment on the influence of violence in television programmes on children.

Your keywords will be: violence television children

But you will get better results if you also use synonyms, for example a synonym for **violence** could be **aggression**.

Keywords can be used in either AND or OR combinations. It can be presented like this:

(violence OR aggression) AND (television OR video) AND (children OR adolescents)

The commands and search methods differ from database to database. Ask the library staff to show you how to use the various databases.

3.3 Evaluation of sources

It is important to try and find the best sources for your purposes. Do not simply use the first three (or however many the lecturer had indicated).

The quality of the sources used is very important. Normally the lecturer will give guidance in this regard, and it is not expected of an undergraduate student to master the art of source criticism. It is, however, part of the general training in the skill of academic writing to develop one's own judgement, even though to a limited extent at this stage.

Criteria for the evaluation of information sources

3.3.1 Authority

Is the author(s) qualified to write on this subject? Is the source written by experts? Clues to look for are the author's credentials, the publisher, connection to an organisation/institution. What sources are quoted? Did the author consult the most important sources in the field?



3.3.2 Recentness

Note the age of the source. Is the source recent enough for the subject? For example, if you are looking for information on a computer application, the source has to be very recent. If you are studying a historical subject, e.g. on Napoleon, recentness is not so important. Remember that the most recent material will be found in journals. Learn to exploit this valuable resource fully. The Internet is also becoming a valuable source of recent information.



3.3.3 Relevance

Is the information in the source applicable to the subject or subject field for which it is required?

Does the source contain too little or too much information? How many pages does it consist of? Does it meet my needs?

3.3.4 Popular/scientific?

Is the source scientific or is it popular? This is particularly relevant in the case of journal articles - you can usually recognise a popular magazine by the number of advertisements that it contains. Headings of articles in popular magazines are also often more sensational. In scientific circles only scientific journals are regarded as being acceptable.

3.3.5 Availability

Is the source available in the library? Can it be borrowed or do you have to use it in the library? Is the source in the main library or is it in a branch library? If it is in a branch library, you have to find out in what way you obtain it.

3.3.6 Primary or secondary sources

Use primary sources and as few secondary sources as possible. In scientific literature study there is a clear distinction between <u>primary</u> and <u>secondary</u> sources. Primary sources are sources which provide original information about a topic, while secondary sources provide second hand information.

4 ORGANISATION OF THE INFORMATION

A frequently asked question is: How do I go about organising my information? Look at the following practical hint. Read every selected information source through once. Use the headings in your framework and write down a short note of relevant sources after the appropriate heading *as indicated in italics in the following example.*

1 Introduction	3 Electronic journals
1.1 Actuality	Costens, p.24 - what is an e-journal
Johnson, p.34	3.1 Advantages
 1.2 Problem statement 2 The value of printed scientific journals 2.1 Peer evaluation Malan, p.14 - complete description Johnson, p.57 - historic overview 	 3.1.1 Cost Plank, p.56 - no paper, printing costs 3.1.2 Speed Jones, p.2 Internet, availability Wilson, p.57 - use in office, laboratory 3.2 Acceptability
Steyn, p.25 - importance for research	3.2.1 Accession
2.2 Editorial control	Malan, p.34 -
Steyn, p.23 - short summary	Wilson, p.58 - use by researchers
2.3 Quality	3.2.2 Acknowledgement
Jones, p.19 - compare with Internet	Coles, p.12 - in scientific community
2.4 Ways of communication Wilson, p.56 - vs e-journals2.5 Prestige value	4 Conclusion

Having done this, you can work though the different subheadings easily and systematically. In this way you are also able to see which subdivisions require more information.

In the above mentioned example only short notes regarding the sources are made - make sure that you write down the complete bibliographic reference for your source list.

5 READING AND UNDERSTANDING SOURCES

Read the relevant sections of the source (for example, a journal article) a few times. Often the concept is not clear at the first glance. Try to understand the logic of the section: first read through the headings and then concentrate on each of the subsections.

If it is a photocopy or your own book, underline the core or key sentences or even better: write down the main idea in your own words. It is always wise, in reading, to move from the general to the particular. It is therefore a good idea to start with articles in encyclopaedias and entries in subject-specific dictionaries.

Take care not to repeat statements - this occurs mostly when you use arguments from different authors, for example *Journals contain recent information / The information in journals is not old.*

When you are using information from different sources, "talk" to your sources - you are **in conversation with the authors!** Do not just quote a source and let it hang there - what do you want to say with this argument or statement? What is the contribution of this quotation? What is your interpretation? Quotations are like examples: discuss them and indicate how they complement your argumentation. In other words, explain and digest your quotations. But how do you do this? A few explanatory examples:

While writing your assignment, indicate clearly if you agree with, or differ from, the quoted author, and whether the authors agree or disagree. Use phrases like:

Smith (1990:6) differs from Jones (1997:5) when he states that . . .

Jones (1997:6) adds the following fact . . .

Sometimes students have difficulty in expressing their own interpretation since the personal form (I, me, my) should be avoided in scientific writing. You can overcome the problem by using phrases like:

This argument clearly indicates that . . .

It is clear that . . .

It can be concluded that . . .

The gathering of information was the first step. Now the processing or collation of the material follows. This is where one has to exercise very careful judgement, because once again the assignment can stand or fall in this section.

The first important step is to eliminate material that you might have gathered that is not specifically pertinent to the assigned topic. Remember that the art of selection of the proper material is a crucial part of the skill that you are learning, and using irrelevant material is a certain indication that you have not mastered this part of the skill properly.

The necessary and RELEVANT data should be retained, and should be studied and interpreted again so that you really develop insight into the topic. In this way the assignment, apart from being a training *process*, also becomes a result of study and not a mere compilation of details gathered from books.

An essential part of the processing the material is to evaluate and interpret the data critically. One therefore has to look at the underlying principles and to look for links and significance. This involves, amongst others things

- determining the value of the facts/details, etc.;
- interpreting the facts, that is, an analysis of issues and the making of deductions, so that meaning can be uncovered;
- the evaluation and comparison of details. Look for confirmation of statements/postulations and for supplementation of facts. If there is a controversy, look for information until you are able to find the solution or the supposed solution;
- emphasis on certain facts or aspects, through restatement and recapitulation;
- deductions and the determination of principles, laws, trends/tendencies, directions, etc. and also the ways in which the material under consideration might deviate from the rules.

The ideal should be that the student is not only enriched through knowledge, but also through insight, and that the assignment should ideally be

- part of a training process;
- part of a result in terms of knowledge acquired;
- part of a demonstration of the development of insight.

An assignment by a student who was not careful about following these steps is characterised by uneven patches of the student's own work and material copied haphazardly from sources, often blatant plagiarism - it becomes a "cut and paste" job which does the student no good, and misses the essential aim and purpose of writing an assignment. This is clearly to be avoided.



6 LOGICAL DISCUSSION, ARGUMENTATION, FORMULATION

6.1 General

The presentation of an assignment is a step following logically from the planning and the processing of information. This should lead to the final product being a systematic, logical and balanced whole. If the planning steps are done carefully and thoroughly, this part is not nearly as traumatic as it might seem if one jumps in without careful thought.

The really good assignment is a coherent piece of writing, developing logically from one point to the next, and presenting a lucid and sustained argumentation backed up with properly selected material from the various sources (in strict accordance with the rules and conventions of the different scientific disciplines - an assignment in languages would adhere to different conventions from one in history or physics).

6.2 The introduction

The *introduction* is one of the most crucial parts of the assignment. In this section the student has to formulate the intention with the assignment, which can be done by way of a problem statement, a thesis statement, a hypothesis, etc.

It is important that the reader should move on from reading the introduction with a clear idea as to what the central issue is which is going to be explored, and how the student intends dealing with the issue. A well-formulated introduction is the student's best guarantee to a successful further development of his theme or argument, and it is worthwhile spending a considerable amount of the time spent on the assignment as a whole making sure that the introduction is good.

A proper introductory section to an assignment is as important as a proper foundation for a house, for without it the whole structure would collapse.

An introduction worthy of the name is like a master of ceremonies who tells you what to expect in the coming pages.

The introduction can also be compared to an anchor which anchors all the subsequent paragraphs and to which they refer back.



6.3 Problem statement/central theoretical statement



Write a provisional problem statement or central theoretical statement. State the problem and why it is important that a solution should be found.

For a long assignment a survey of the literature is important. Here one indicates where arguments come from, who has said what about the topic, and briefly what they have said about it in this regard.

6.4 Sub-sections

The introduction should lead organically and logically to a number of *sub-sections*. The way in which the material in the body of the assignment is organised will of course vary in terms of the nature of the assignment, for it can be thematically done, or chronologically, or in any of a number of ways dictated by the topic. The most important point to remember is that there should be a logical structure and that the student must move from one point to the other, maintaining a tight and logical *line of argumentation*.

This is one of the most important skills to be learnt in assignment writing - remember in the process of writing that you are presenting a case to the reader (the lecturer) and that you have to build up your case as carefully as you can, using material from the sources as evidence (in a certain sense, like a lawyer presenting a case to a judge - you must make sure that there are no gaps in the argument which can weaken your case). Do not go off at a tangent (digress unnecessarily) or use irrelevant information – always keep in mind that the selection of appropriate material is also part of the set of skills that you are developing and refining.

6.5 Conclusion

In the *conclusion* of the essay/assignment you have to go back to the introduction, check what was undertaken there, once again go through the body of the assignment to make sure that all the points were in fact dealt with and then provide a résumé. This means that you have to evaluate the extent to which your problem statement has been resolved, the extent to which a hypothesis has been proved or disproved, or the extent to which a thesis has been constructed.

The conclusion is a very important part of the assignment, and should not be only a quick "So we see that ..." before the pen is thrown down, the computer switched off, and the pages jammed together to be handed in. The conclusion is the logical final step in the argumentation, and should reflect a very real insight and understanding on the part of the student of what has been achieved in the course of the assignment.



7 LANGUAGE AND STYLE

7.1 Introduction

This part of assignment writing cannot be over-estimated. One of the most important skills that one attempts to inculcate in students at university level is the ability to write clearly and cogently, to argue well and to communicate properly. These skills cannot be acquired in any other way than through rigorous practice, and it is the duty of both student and lecturer to pay special attention to this section.

Some important pointers are provided in this section. Other problems may be solved by checking the relevant sections in STRUNK, W. & WHITE, E.B. 1979. The elements of style. 3rd ed. New York: MacMillan.

The attitude is often assumed that the assignment deals mostly with the content and that no real attention needs to be given to the language and style of the assignment. This is simply not true. The assignment is also a prose document, and it is accordingly measured by the same criteria as other good prose. The importance of good style, careful and correct language usage and logically coherent constructions cannot be stressed enough.

"Golden apples have to be served on silver trays" - through the use of correct and elegant language you reveal that you as a writer have pride in what you are saying, and you inspire an interest in what you have to say.

THINK before you ink...

Make sure that sentence constructions are clear and logical.



In order to attain the maximum level of effectiveness in writing, you have to write clearly, naturally and in a businesslike manner. With regard to style there is one basic principle which always applies: make sure that you have something to say, and say it as clearly and unambiguously as possible. Reread each sentence and ask yourself whether each one will be clear - also for the uninitiated.

Remember that precise formulation reflects accurate thought. Do not give words from a source in an undigested form. Do not simply translate from, for example, English. Render the material understandably in your own words.

7.3 Translations

Be careful of uncritical assumptions that names of persons, places, and organisations, as they occur in English sources, are correct. Nine out of ten times there are Afrikaans equivalents, for example. Cologne becomes Keulen, Estonia become Estland, Brussels becomes Brussel and NATO becomes NAVO. Check your Afrikaans in Afrikaans books, atlases, newspapers and encyclopedias for the correct spelling or acceptable spelling of names.

Words which are not used originally in English, should not be rendered in English in an Afrikaans assignment, but in Afrikaans, with an indication added that it is the Afrikaans translation. If it is readily understandable, it should be given in the original language.

7.4 Spelling, mode of writing

It is important to keep checking spelling to make sure that one is not making stupid errors which detract from the final impression.

If you are using a computer (word processor), utilise the spell checker. Be careful however, and determine if it is using the British or American spelling mode.

Rather use the British form, except in the source list where the information has to be taken literally from the title page of the source.

BRITISH	AMERICAN	
organization	organisation	
labour	labor	
centre	center	
fibre	fiber	
catalogue	catalog	
programme	program	

7.5 Punctuation

A full-stop is mostly placed outside the quotation marks, except where a sentence begins outside the quotation marks.

- He insisted that "it was premature to start anything just now".
- He said: "The whole matter is sub judice."

Exclamation marks (and question marks) are placed inside quotation marks:

"What a mess!" she exclaimed.

7.6 Abbreviations and titles

Use only standardised abbreviations and only where they are acceptable. Personal creations are not permissible because it might have the effect that the reader has to guess what you mean. DO not, for example, use **info** for **information**. It is acceptable if the lecturer gives permission for the use of abbreviations such as WWW for the World Wide Web, for example.

• Titles

Titles are **always** spelled with a capital.

Thus: Miss, Ms., Mrs., Mr., Prof., Dr., Your Highness, Excellency, etc.

(Ms. is a neutral title used for a woman which combines Miss and Mrs. It is pronounced **Miz** and is now generally preferred by women.)

7.7 Numbers

Use the full mode of writing out numbers from one to ten (one, six, ten) and then use figures: 11, 19, 31, except if the figure is followed by an accepted abbreviation (3 km, 7 kg, 20%)

- Write out a number if it starts a sentence
- Use numbers if you are giving a date, time, measurement or age.



7.8 Hints

• Write in the active voice: Dr Vosloo will lead the investigation.

- Avoid the passive voice where possible: The investigation will be led by Dr. Vosloo. Rather: Dr. Vosloo will lead the investigation.
- Do not use the personal form in a formal scientific paper. The direct form of address (you) has been used in this Study Guide, but the purpose of the Study Guide is that the lecturer should be "talking" to you personally and somewhat informally. It is not a formal scientific document. In order to avoid using the personal form of address, phrases like the following can be used.

It is therefore clear that the main cause for the war ...

The foregoing arguments can be summarised as follows ...

Various possibilities emerge ...

A possible solution could be to ...

- Do not use exclamation marks (!) in a scientific document. They should be reserved for writings such as letters and in prose and drama.
- Naive phrases should not be used in a scientific document: "Let us have a look at the advantages of journals ..."
- Each sentence should have a verb.
- Write in brief, businesslike sentences: Somebody who cannot write short sentences should not be allowed to write long sentences. Avoid things like: "Although it is now clear that research about the topic has been incomplete and controversial, more recent research has brought to light the fact that ..."
- Be careful about the use of "fashionable" expressions, such as "At the end of the day ..."
- Commas: Use a comma between two verbs which refer to different parts of the sentence, e.g. "When we arrived, they had already gone."

7.9 Division of words

When breaking off a word at the end of a line, the requirements of clarity and ease of reading should be borne in mind. The Oxford University Press recommends the following rules for the division of words:

- As a rule, divide a word after a vowel, turning over the consonant. In present participles, take over -ing: carry-ing, divid-ing, crown-ing; but: trick-ling, chuck-ling.
- Generally, whenever two consonants come together, put the hyphen between the consonants: splen-dour, forget-ting, haemor-rhage.
- Some recommended divisions:
- abs-cess, abs-truse, appli-cable, botan-ist, Catholi-cism, criti-cism, fanati-cism, depen-dent, dimin-ish, illus-trate, inexpli-cable, inter-est, minis-ter, origin-ally, prob-ably, prop-erly, pun-ish, atmo-sphere, mytho-logy, philo-sophy, tele-phone, zoolo-gist.
- Note: **Re-adjust** is preferable to **read-just**, to avoid confusion.
 - 20

7.10 Hyphens

• Where a compound adjective is formed by combining

a noun and an adjective or a participle,

or

an adjective and a noun, then the parts of the compound adjective are joined by hyphens: a poverty-stricken family, a blood-red hand, a nineteenthcentury invention.

- So, too, adjectival combinations of colours: a bluish-grey haze.
- In general, the joining of words by means of hyphens to form a new noun is much less frequent in English than in Afrikaans.
- Hyphens are generally used when prefixes of classical origin are used with English words: sub-heading, anti-nuclear demonstration, macro-level, etc.

7.11 Quotation marks

- Usually double quotation marks are used for the first quotation, then single for a quotation within a quotation. When a number of paragraphs are quoted in succession, the opening quotation marks are repeated at the beginning of each paragraph, but the closing mark is used only at the end of the whole quotation.
- Punctuation marks used in quotations present many difficulties.
- The full-stop is almost always outside the quotation marks:
- He maintained that "it would be premature to say anything now".
- She is the "prima donna of the tennis courts" (Newsweek, 9 February 1984).
- "It is felt that people pay too much attention to politics" (Time, 3 March 1980).
- Punctuation marks which contribute to the meaning of the statement are placed inside the quotation marks:
- "What a complete mess!" she exclaimed.
- "Would you want me to be different?" she asked incredulously.
- She was furious, telling him that "You have no sensitivity!" (Smith, 1978: 220).

8 REWRITING - THE SECRET OF A GOOD ASSIGNMENT

Do not hesitate to rewrite an assignment a few times. If you are using a word processor, it is so much easier. Good advice is to write down all the information which you have found in sources, and once you have finished compiling this, to read through it again - and then to determine whether it reads smoothly AND WHETHER YOU CAN UNDERSTAND WHAT IT IS ALL ABOUT. It often happens that you have simply done poor translation or copying from the sources in question.

9 DOCUMENTATION

Documentation in an assignment can be described as the justification of the student's dealing with material gathered from a variety of sources. Research results, arguments and viewpoints of other individuals as reflected in a wide variety of sources constitute an important component of any assignment. These are accepted as the basis or foundation on which one has to build. The way in which a student deals with source material, then, is of crucial importance as it is a barometer of his thoroughness, academic honesty and integrity.

9.1 What should be documented?



What should indeed be documented? In this case it is not possible to provide the final answer for all cases, and the student should, in conjunction with the lecturer, arrive at a RESPONSIBLE decision about this very important issue.

The guiding rule should be: document what is essential. The following should be useful as guidelines.

- As soon as one refers to a specific person's viewpoint.
- As soon as there is some doubt or controversy about an issue.

- As soon as information, for example statistics, is used without the correctness having been verified.
- All sources used in the course of the reading for the assignment should be acknowledged, whether in the bibliography or by way of footnotes.
- The student should clearly indicate how he is using the material that he derived from the sources, in the sense that he should indicate whether he agrees with it, whether he supports it or whether he simply wants to indicate the range of opinions about an issue.
- References to two or more authors dealing with the same topic are not really necessary at this level, unless a particular aim is envisaged with it. One also has to judge carefully what the framework is within which an author operates, otherwise he cannot be quoted as "evidence in support" of one's case.
- The most recent edition of a book should be used where at all possible.
- Quotations from translated works are generally undesirable, unless one has a specific aim in mind, such as the comparison of a large number of different views.



9.2 Style of documentation

Different styles are used in different academic disciplines. The following guidelines are valid for studies in the field of the Humanities generally. In problem cases, it is useful to remember that the Bibliography should enable the reader of the study to locate any of the sources quoted - therefore provide sufficient bibliographical detail to make this possible. The style used here is the Harvard style, which implies a system of references in the text rather than footnotes. This means that the source and the relevant pages are provided in the text.

The reference can be given in the text:

Boulton (1987:23) maintains that ...

The reference can also be at the end of the sentence, thus:

It has "always been the principle ... " (Boulton, 1982:23).

If two authors wrote the book one would use the plural verb:

Gardner and Shelton (1967:45) say that ...

In the case of a reference by a number of authors, one would use Meyer *et al.* (1973: 34) Note, however, that this reference has grammatical implications (it is a plural concept): e.g.

Meyer et al. (1973:39) suggest that ...

For more detailed guidelines use the booklet "**Quoting Sources**" which is available at the Ferdinand Postma Library: tel 018 299 2000.

9.3 Source list or bibliography

What should be included in the source list?

In the source list or bibliography the full bibliographical information about the sources should be given.

An important question which arises is: What sources should I include in the bibliography? Only the works to which I referred in the text, or other sources which I consulted but did not refer to in the text?

A serious warning should be sounded against the trend among students to try to impress the lecturer with an extended bibliography. In most cases it is quite easy for the lecturer to discover that the student is using tricks, and this will reflect very negatively on the student.



The rule is that your bibliography should consist of the materials that you used, PLUS other sources which really contributed to your insight. In undergraduate work this is adequate.

If for some good reason you want to include more than these two categories (if, for example, it is part of your aim to establish a full **bibliography** about the topic) then you have to motivate this clearly, and call it a bibliography.

It would be easy to distinguish these three categories in separate sections of the bibliography. It would, however, on the other hand, make a quick follow-up of sources more difficult. For that reason it is perhaps best to retain an integrated bibliography, but to indicate, by means of asterisks, those sources that you really refer to.

The manual **Quoting Sources** is available at the library. It consists of guidelines for quoting sources in the text of a scientific report and compiling a source list.



9.4 What does the source list look like?

	Your textual references should be supported	AN EXAMPLE OF A SOURCE LIST
	by a bibliography or source list at the end of the assignment in which you provide full bibliographical details with regard to the works	ANON. 1978. Moet aptekers net pille tel? <u>Suid-Afrikaanse mediese tydskrif</u> , 53(1):3,Jan. 7.
	to which you refer. With regard to the Source list it can be stated in general that the reader of the study should be able to access the sources listed. Complete, correct and full bibliographical	BARTLETT, C. 2000. Corporate communication. <i>Journal of communication</i> , 13(1):22, 6 Aug. Available: Academic Search Premier. Date of access: 3 July. 2003.
	details should therefore be provided. A bibliography is a complete list of sources on a topic. A source list is only a list of	BURGER, W.D. 1995. Postmodernisme in resente Afrikaanse romans. Potchefstroom: PU vir CHO. (Proefskrif - D.Phil.) 287 p.
	sources used for an assignment. One alphabetical source list	GARDNER, E.K. & SHELTON, B. 1967. The intensive therapy unit and the nurse. London: Faber and Faber. 162 p.
	Your source list consists of one alphabetical source list (arranged alphabetically according to author name) of all the books, journals, newspaper reports and other material which you used.	JONES, S. 1989. Handbook for parents. New York: Wiley. 213 p. JONES, S. 1990. Adolescence. New York : Wiley. 305 p.
	One has to be able to move quickly and accurately from the reference in the text to the place in the source list when the fuller details	MALTIN, L., producer. 2005. Adolescent behaviour. New York: Legacy. [DVD].
SI	are given. It is therefore better to type the surnames of authors in capitals, as this makes it easier to find the reference.	SMITH, J.M. 2003. Hints for better results. http://index.opentext.net/main/tips.html Date of access: 2 Dec. 2003.
	Leave enough space (lines) between references so that references can "stand out".	VENTER, H. 1996a. Inleiding tot die Internet. Kaapstad: Tafelberg. 61 p.
	According to the Harvard style the source list is an alphabetical list and sources must not be numbered (there is a different style according to which sources are numbered).	VENTER, H. 1996b. Evaluering van inligting op die Internet. <i>Tydskrif vir</i> <i>rekenaarwetenskap,</i> 2(4):14-18, Apr.

10 TECHNICAL FINISH

It is of the utmost importance that an assignment should be presented in a neat and acceptable format. The outward appearance is never more important than the content, but remember that first impressions are lasting, and a student's care with the presentation of the assignment reflects both self-respect and the respect that he or she accords to the lecturer for whom the assignment is intended.

In the first place the assignment should be written or word-processed neatly, on one side of the paper only, and in the case of a typed/word processed assignment, all errors should have been corrected.

10.1 The title page

The assignment should be provided with a title page containing all the relevant information.

VAN DER MERWE, A.S. 8764768

A discussion of Macbeth and Othello as examples of Elizabethan tragic heroes

ENG 211

12 March 2005

The title page should always contain:

Your surname and initials (not nicknames!!); student number; title of the assignment; class or year group; any other information required by the lecturer. It is useful to get into the habit of doing this neatly and fully - it also helps the lecturer to guard against assignments going astray, etc.

10.2 The table of contents

The assignment should be provided with a proper table of contents. This should contain all the main points or headings of the assignment and should also indicate the page numbers of these headings.

The following example is from an assignment on: The use of Internet for scientific information.

CONTENTS	
1 INTRODUCTION1	
2 COMPONENTS OF INTERNET1 2.1 Electronic mail2	
2.2 World wide web	
2.3 Newsgroups4	
3 EVALUATION OF INFORMATION 6	
3.1 Authority6	
3.1.1 Author7	
3.1.1.1 Personal author7	
3.1.1.2 Web master7	
3.1.2 Institution8	
3.2 Recentness9	
4 QUOTING OF INFORMATION10	
5 SUMMARY11	
6 SOURCE LIST12	

10.3 Numbering system

It is advisable to use a proper numbering system for the assignment, and to use it consistently. The decimal system (with points between figures) is generally used at university level, thus (suggested format):

1 CAPITAL LETTERS AND BOLD

- 1.1 Small letters (lower case), underlined in writing or bold in typing
- 1.1.1 Small letters (italics in typing)

It is generally advisable not to use so many headings that more than four figures are required (1.1.1.1), as that tends to fragment the essay and impede the line of argumentation.

Do not mix a numbering and lettering system - for example, NOT 1.1(a).

Once again, however, this depends on the subject and the conventions governing the subject - in a literature essay headings should ideally be limited to the minimum, while in an essay dealing with more factual material headings are useful markers to organise the material.

10.4 The summary

If a lecturer requires a summary, it should be put at the beginning of the assignment, and should be a concise and accurate reflection of the content of the essay. The summary differs from the introduction and the conclusion in the sense that the introduction promises certain things, the conclusion assesses the extent to which these promises have been fulfilled, and the summary is just that: a summing up of the material in the assignment. As a quick rule, one could say that each paragraph/section in the assignment should be represented by a sentence in the summary.

11 TYPING INSTRUCTIONS

11.1 General



It is most important to have a reliable typist to type your paper (OR DO IT YOURSELF ON COMPUTER). It should be neat and professional in appearance.

Typing should be done in one and a half spacing on A4 paper. Fair margins (about 2,5 cm at the top and bottom and 3 cm on the left and right sides of the paper) should be left - enough for the lecturer to write remarks. A safe font size is 11.

It is not only said of a good assignment that the content is excellent, but also that the appearance is impeccable. Naturally the physical appearance of an assignment is never more important than the content, but it should not be allowed to detract from the assignment as a whole.

11.2 Headings

Place headings and subsections against the lefthand margin. **Do not put full-stops after headings.** Leave two spaces open between the number and the headings. The system used in this booklet is strenuously advised.

	8.3 * *	Headings	(* =space)
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11.3 Paragraphs

Paragraphs should start against the lefthand margin, blocked - it is not necessary for a paragraph to "jump in".

Paragraphs should be clearly separated from each other: leave at least double the normal line space between paragraphs.

11.4 Orphans and widows

A new section should not be started in the last five lines of a page. In the case of a long assignment, each chapter has to start on a new page.

A heading should never be left at the bottom of a page. The same is true of the first line of a paragraph. Such lonely headings and first lines are known as orphans. The last short line of a paragraph or short section of a sentence also should not run over to the next page (widows).

11.5 Page numbers

Number the pages. According to the International Standards Organization the preface is not numbered with small Roman numerals (i, ii) any longer. The title page is counted but not numbered, and numbering then starts on page 2.

Recommendation: place page numbers in the centre at the foot of the page. This prevents problems where printing is done on both sides of the paper.

11.6 Emphasising of words

When writing, <u>underline</u> words which you would like to stress, or use **bold** for the words if you are using a computer. You can also use *italics* - especially for words in other languages which might be used for the sake of clarity.

11.7 Proofreading

The student is personally responsible for the careful proofreading of the assignment. When errors occur in an assignment, the lecturer will see them as spelling errors and not as typing errors and penalise the student accordingly. Ask somebody to help - one easily misses errors in one's own work. Let one person read out the assignment, and let the other note the errors. An excellent, though time-consuming method, is to read the assignment from back to front, because you then read words and not context. Smaller typing errors can be corrected with a thin black pen, but larger errors will need a reprint.

12 EVALUATION AND FEEDBACK FROM THE LECTURER

Although this might differ from one lecturer to another, assignments are usually not only evaluated on the basis of content. Aspects such as logical reasoning, correct language usage, physical layout, editing and correct textual references and source list normally count marks.

When you receive your assignment after the lecturer has marked it, it is in your own interest to check the comments carefully. The lecturer spent a lot of time on indicating the weaknesses and errors (or the good points). Use the comments to improve your work.

Usually a substantial number of examination questions are based on assignments given as class work, and it is thus important to give proper attention to this.

Good luck - keep up the hard work! It is surely worth the time and effort!