NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

MBAB 823 PEC

MANAGERIAL ACCOUNTING

Faculty of Economic and Management Sciences

Study guide compiled by:

Prof Anet Smit

Printing arrangements and distribution by Department Logistics (Distribution Centre).
Printed by Ivyline Technologies 018 293 0715/6 or Nashua Digidoc Centre 018 299 2827.

MODULE CONTENTS

Module information

Module code	MBAB 823 PEC
Module Credits	12 credits NQF level - 9
Module name	MANAGERIAL ACCOUNTING
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Preface by the programme manager

Dear Student

A warm word of welcome to the NWU School of Business and Governance (Business School) of the North West University. May your studies here be both enriching and enjoyable? I hope that your association with the Business School will be to your advantage as well as to that of your company and that it will become a lasting and possibly even a permanent one.

The vision of the Business School is to be at the cutting edge of practical business solutions. A goal on which we are focused.

The mission of the Business School is the unlocking and realisation of the leadership potential of people.

We achieve this by adhering to the highest standards of:

- Quality
- Professionalism; and
- Creativity

In the compilation and presentation of the training courses, the Business School endeavours to achieve the highest quality. Overall this mission leads to the development of successful general managers and contribute to the development of management and the national economy in South Africa. The philosophy of management training at the Business School is the following:

- The fundamental basis of our training is that of educating the student in such a way that he realises the importance of ethical norms and morality in management. This philosophy is the basis of management in a free market economy and open community and forms an integral part of the Christian philosophy and world view which is upheld by the North West University.
- An integrated management approach is followed. Thus, the student is taught to think in an inter-disciplinary, analytically-scientific and holistic way. It is therefore

not the philosophy of the Business School to train specialists in the functional areas of a business organisation, but to prepare the student for his role in a mature integrated top management team.

- The training of the Business School is academically based and therefore comprises an established theoretical foundation. It is a high priority of the Business School that the student receives training in the science of management.
- The training is furthermore, practical and professional. The students are expected to apply the theory, ethics and principles of management in the actual business environment as management is always situation-bound. For this purpose case studies, technical reports and practical exercises are used.
- The training is structured in a manner, which ensures that students receive training in certain management skills. The Business School furnishes the students with instruments, which enable them to become managers. To become a good manager, however, the student must possess the relevant, inherent managerial qualities.
- Creativity and innovation are key concepts in the philosophy of training at the Business School. The development of entrepreneurs and intrapreneurs accordingly enjoy the highest priority during training.
- The Business School is client-oriented. Students are not merely numbers on a computer. Personal attention to the individual student is a high priority in the training philosophy of the Business School. The Business School is concerned about the future welfare of its clients.

In order to apply this philosophy in such a manner that the student reaps the greatest benefit from it, the Business School progressively makes use of a training structure, which is based on communication between lecturer and student on the one hand, and communication between student and student on the other hand. Obviously the part-time management-training programme calls, in great measure, for independent study and work. The growing importance of group decision-making in the modern approach to management, compels the simulated application of this technique in the process of management training. To achieve this, students are divided into syndicate groups.

The training will progressively be modelled around work within these groups. In conclusion the management training will be provided in the form of regular lectures on Saturdays (Potchefstroom) or Mondays (Vaal Triangle Campus). It will be supplemented with study schools, which are used as means of developing or rounding off of students.

The structure for management training was created by the Business School for the sole benefit of the student. However, it requires maximum effort and input from the student to achieve maximum returns there from.

The purpose of this study guide is to provide the student with a short synopsis of the entire MBA-programme. I would strongly urge you to study the attached pages of this study guide carefully, as it is extremely important that you are well informed as to what we expect from you and also what you may expect from us.

On behalf of myself, as well as the academic and administrative staff of the Business School, I wish to place our services at your disposal at all times. The completion of an MBA-degree at the Business School is your key to success. We wish to extend our best wishes to you during your period of study.

Best wishes

PROF RONALD LOTRIET

MBA PROGRAMME MANAGER

Introduction

The study guide's purpose is to furnish you with a short explanation of the MBA-degree. It provides the following information:

- Which courses you will follow.
- Goals of each course.
- Prescribed work for each course.
- Recommended reading material for each course.
- The work programme for the year.
- The lecture schedule and dates.

Please note that this study guide **does not replace the official brochure of the Business School.**

Correspondence

All correspondence must be directed to the Programme Manager at the following address:

The Programme Manager
Prof Ronald Lotriet
NWU Business School
North West University
Private Bag X6001
POTCHEFSTROOM
2520

If you should require further information in respect of a specific course, please contact the relevant lecturer in this regard.

Module outcomes

Upon the completion of this module the student should demonstrate the following:

- A comprehensive and systematic knowledge of Management Accounting with special reference to the information needed by managers as they carry out their planning, control and decision making responsibilities in a managerial context;
- An ability to identify, analyse and solve complex and real world problems related to Management Accounting and to select and apply workable solutions with evidence based on theoretical argumentation;
- Demonstrate an ethical and professional code of conduct and to critically contribute to make ethical decisions in complex organisational or professional issues.

Assessment criteria

The module outcomes will be mastered if you are able to:

- Demonstrate specialist Management Accounting knowledge through arguments and debates in written and/or oral format;
- Connect concepts and techniques in Management Accounting to the real world situations and use these cases and manager's comments on real company issues to solve problems in complex situations;
- Successfully complete written assignments in an academic acceptable manner and use IT to communicate research results individually or in groups.

Assessment methods

Assessment will be in both formal and summative format. Formal assessments will be in the form of class activities, class tests, individual and group assignments. Summative assessment will be in the form of a formal examination.

Assessment plan

Formal (Participation mark):

Assessment method	Number	Maximum marks	Weight
Individual assignment	1	100	40
Group assignment	1	100	50
Class activities	1	100	10

Cumulative (Examination mark):

Assessment method	Number	Maximum marks	Weight
Examination	1 (4 hours)	100	100

Module mark = Participation: Examination = 50:50

Prescribed book

SEAL, ROHDE, GARRISON, & NOREEN, 2015. Managerial Accounting. 5 th. Edition. McGraw-Hill.

Additional literature

CORRREIA, C., LANGFIELD-SMITH, K., THORNE, H, & HILTON, R.W. *Management Accounting,* Southern African Edition. McGraw-Hill.

DRURY, C. Cost and Management Accounting. Thomson Business Press.

HANSEN, D.R., MOWEN, M.M. Management Accounting. USA: South-Western Thomson Learning.

HONGREN, C. T., DATAR, S. M., FOSTER, G. et. al. Cost Accounting: A Managerial Emphasis. Prentice Hall.

MOWEN, MM, HANSEN, DR AND HEITGER, DL. Cornerstones of Managerial Accounting. 5th Edition. South-Western Cengage Learning. ISBN: 978-1-285-05995-2.

NEEDLES, B. E., CROSSON, M.S., Managerial Accounting principles. South Western Cengage Learning.

ROOS, S. Principles of Management Accounting- a South African perspective. Oxford University press.

Themes covered in this module

Managerial Accounting :An overview and Cost terms, concepts and classifications.

Systems Design – Job-order costing and Process costing.

Cost Behaviour and Cost-Volume-Profit relationships.

Variable costing and Segment Reporting

Overhead costs and ABC costing.

Master budgeting, Flexible budgets and Performance analysis

Standard costs and variances.

Performance measurement in decentralised organisations

Differential analysis for decision making.

Environmental management accounting.

Work programme (2 nd semester 2018)

SESSION	THEME	READING
Study School 23 Jul to 27 Jul	**Theme 1:** Introduction. Cost terms and concepts. Fixed and variable cost. Period vs. product cost. **Theme 2:** Cost flow in a manufacturing business.	Seal, Rohde, Garrison & Noreen. Chapters 1 & 2
1 (P) 04 Aug (V) 06 Aug	**Theme 3**: Systems design: Job costing and the application of overhead costs. **Theme 4:** Process costing.	Chapter 4 Chapter 5
2 (P) 18 Aug (V) 20 Aug	**Theme 5:** Cost behaviour: analysis and use. **Theme 6:** Cost-volume-profit relationships.	Chapter 3 Chapter 7
3 (P) 25 Aug (V) 27 Aug	**Theme 7:** Profit reporting under variable and absorption costing **Theme 8:** Introduction: Activity-based Costing	Chapter 6 Chapter 8
4 (P) 08 Sept (V) 10 Sept	**Theme 8 cont.** Activity based costing**.** **Theme 9:** Profit planning and Budgeting **Submit Individual assignment**	Chapter 8 Chapter 11
5 (P) 15 Sept (V) 17 Sept	**Theme 10:** Standard costs for control: Direct Material and direct labour. **Theme 11:** Performance measurements and reporting on segments.	Chapters 12 Chapter 14
6 (P) 29 Sept (V) 01 Oct	**Theme 12:** Relevant costs for tactical decisions.	Chapter 9
7 (P) 13 Oct (V) 15 Oct	**Theme 13:**Strategic management accounting and the balanced scorecard Environmental Management Accounting (EMA) **Submit Group assignment**	Chapter 16 Information available in class
8 (P) 27 Oct (V) 29 Oct	Revision	

Icons

Time allocation	Learning outcomes
Study material	Assessment / Assignments
Individual exercise	Group Activity
Example	Reflection

Warning against plagiarism

ASSIGNMENTS ARE INDIVIDUAL TASKS AND NOT GROUP ACTIVITIES. (UNLESS EXPLICITLY INDICATED AS GROUP ACTIVITIES)

Copying of text from other learners or from other sources (for instance the study guide, prescribed material or directly from the internet) is **not allowed** – only brief quotations are allowed and then only if indicated as such.

You should **reformulate** existing text and use your **own words** to explain what you have read. It is not acceptable to retype existing text and just acknowledge the source in a footnote – you should be able to relate the idea or concept, without repeating the original author to the letter.

The aim of the assignments is not the reproduction of existing material, but to ascertain whether you have the ability to integrate existing texts, add your own interpretation and/or critique of the texts and offer a creative solution to existing problems.

Be warned: students who submit copied text will obtain a mark of zero for the assignment and disciplinary steps may be taken by the Faculty and/or University. It is also unacceptable to do somebody else's work, to lend your work to them or to make your work available to them to copy – be careful and do not make your work available to anyone!

For the NWU link for plagiarism, go to http://www.nwu.ac.za/webfm_send/25355

Outcomes per theme

THEME 1: Introduction to cost terms and concepts. Fixed and variable cost. Period vs product cost

Study outcomes

Students should be able to:

1. Explain the major differences and similarities between financial and management accounting.
2. Analyse the role of management accounting and the need of the information in order to make decisions in the business.
3. Demonstrate that you can apply relevant management accounting constructs including Lean Production, The theory of Constraints(TOC) and Six Sigma, with discrimination when making decisions in different business case studies;
4. Analyse a decision made based on management accounting principles and evaluate whether it is ethical or not.
5. Distinguish between the various cost concepts and terms used and be able to use it in decision making situations.

THEME 2: Cost flow in a manufacturing business

Study outcomes

Students should be able to:

1. Prepare an income statement and a Schedule of cost of goods manufactured.
2. Distinguish between the different cost concepts of differential costs, opportunity costs and sunk costs in order to improve decision making in a business.

THEME 3: Systems design: Job costing and the application of overhead costs

Study outcomes

Outcomes

Students should be able to:

1. Distinguish between process costing and job-order costing and identify companies that would use each costing method.
2. Calculate predetermined overhead rates and explain critically why estimated overhead costs (rather than actual) are used in the costing process.
3. Understand the flow of costs in a job-order costing system and demonstrate the appropriate calculations to determine the cost of a job.
4. Calculate under applied or over applied overhead cost and be able to demonstrate the effect on yearend figures.

THEME 4: Process costing

Study outcomes

Outcomes

Students should be able to:

1. Assess the use of process costing in a business and be able to apply the concepts of process costing in a business.
2. Calculate equivalent units by using the weighted-average method.
3. Demonstrate how you would apply production cost in a process costing system by using the weighted-average method.

THEME 5: Cost behaviour: Analysis and use

Study outcomes

Outcomes

Students should be able to:

1. Predict cost in your business by using the concepts of cost behaviour.
2. Analyse a mixed cost by using the high-low method.
3. Apply the information in connection with fixed and variable cost in a business in order to improve effective decision making.

THEME 6: Cost-volume-profit relationships

Study outcomes

Outcomes

Students should be able to:

1. Analyse a complex business case study and apply the concepts of cost behaviour in a business in order to predict the changes of activity on contribution margin.
2. Apply and integrate the concept of contribution margin ratio in order to evaluate the changes in operating income and sales volume.
3. Integrate and implement the importance of break-even point calculations in their business.
4. Calculate and evaluate the impact of margin of safety and operating leverage and use those concepts to make sound business decisions.

THEME 7: Profit reporting under variable costing and absorption costing

Study outcomes

Outcomes

Students should be able to:

1. Participate in a class discussion about the difference and similarities of absorption and variable costing.
2. Prepare income statements using both variable and absorption costing methods.
3. Do a reconciliation between the two methods.
4. Investigate and evaluate the implications what both methods could have on decision making in a business.

THEME 8: Activity-based: A tool to aid decision making

Study outcomes

Outcomes

Students should be able to:

1. Understand and apply the concepts of ABC costing in a business.
2. Implement ABC costing in their own company by identifying cost pools, calculate activity rates and assign costs to cost objects.
3. Use the information out of the system to critically evaluate profit and customer margins.
4. Understand why activity-based costing is particularly suitable for service-providing companies.

THEME 9: Budgeting systems

Study outcomes

Students should be able to:

1. Investigate and analyse the importance of budgets and the processes used to create budgets.
2. Prepare and understand all the operating budgets.
3. Prepare a cash budget and evaluate the importance of managing cash in your business.
4. Critically discuss the use of budgets as a tool to assist with the control function in a business.

THEME 10: Standard costs for control: direct material and direct labour standards

Study outcomes

Students should be able to:

1. Illustrate how you would set up direct material and direct labour standards in your business.
2. Interpret and calculate the different variances in order to take corrective actions in business.

THEME 11: Performance measurement and reporting on segments

Study outcomes

Students should be able to:

1. Prepare segmented income statements using the contribution format and be able to apply the difference between traceable fixed costs and common fixed cost in decision making.
2. Calculate and critically discuss the different performance measures such as Return on Investment, residual income and return on assets in order to measure performance in their companies.

THEME 12: Relevant costs for decision making

Study outcomes

Students should be able to:

1. Identify relevant and irrelevant costs and benefits in a decision-making situation.
2. Prepare and analyse a report whether a product line or business segment should be dropped or retain.
3. Prepare, analyse and integrate a make or buy decision.
4. Prepare an analysis showing whether a special order should be accepted or not.
5. Analyse and integrate all the relevant aspects to determine the most profitable use of a constraint resource.
6. Prepare a report and analyse whether joint products should be sold at split-off point or processed further.

THEME 13: Strategic management accounting

Study outcomes

Students should be able to:

1. Critically discuss some criticisms of budgeting as a performance management system.
2. Analyse the “levers of control” approach to strategy implementation.
3. Reappraise the role of management accounting in corporate governance.
4. Appreciate the importance of the environment and the role of environmental management accounting.
5. Critically examine performance management and social responsiveness in the public sector.

Assignments: Individual assignments

Total Marks: 100

Submittance Date Individual assignments will be available on the "Connect"platform after each topic has been introduced in class. The date to submit each assignment will also be on Connect.

Assignments: Group assignment

Total Marks: 65

Submittance Date 29 September 2018 (Potchefstroom)

01 October 2018 (Vanderbijlpark)

Question 1: (22)

Conventional versus activity-based costing analyses; relevant costs: manufacturer

South Australian Can Company (SACC) produces metal cans and canisters for a range of food manufacturers. The plan manager, Rusty Sheen, was recently approached by the Chinese manufacturer, Xian Canister Company, with an offer to supply the canisters at a price of R0,75 each. SACC's conventional product costing system assigns the following costs to canister production:

Direct material	R244 000
Direct labour (9 000 hours @ R15 per hour)	135 000
Variable overhead R10 per direct labour hour)	90 000
Fixed overhead R45 per direct labour hour)	405 000
Total cost	R874 000

Unit costs R874 000 ÷ 760 000 canisters = R1,15 per canister

Sheen's conventional make-or-buy analysis indicated that Xian's offer should be rejected, since only R550 000 of costs would be avoided (including R60 000 of supervisory salaries and R21 000 of machinery depreciation). In contrast, the firm would spend R570 000 buying the canisters. The factory accountant, Susan Starr, came to the rescue with an activity-based costing analysis of the decision. Starr concluded that the activity costs and cost driver information associated with the production of 760 000 canisters are as shown in the following table:

Activities	Activity cost per unit of activity driver	Quantity of activity driver consumed
Product level:		
Product development	R75 per product specification	1
Engineering analysis	R30 per engineering hour	10
Batch level:		
Material handling	R15 per move	2 000
Inspection	R24 per inspection	2 000
Setting up metal press	R75 per setup	2 000
Unit level:		
Metal pressing	R0,10 per unit	760 000
Canister printing	R0,50 per unit	760 000

Required:

1.1 Show how Sheen arrived at the R550 000 of cost savings in his conventional make-or-buy analysis. (5)

1.2 Using Starr's activity cost data, determine the costs that will be saved by purchasing the canisters. (10)

1.3 Complete the relevant costing analysis of the make-or-buy decision using the activity data. Should the firm buy from Xian Canister Company? (5)

1.4 If the conventional and activity-based analyses yield different conclusions, briefly explain why. (2)

Question 2: (43)

Drop a product line: manufacturer

Levitt Corporation, a small manufacturing company in Darwin, produces three types of pumps R-pumps, F-pumps and S-pumps. For many years the company has been profitable and has operated at full capacity. However, for the last two years, prices on all pumps have been reduced and selling expenses increased to meet competition and to keep the plant operating at capacity. The results for the second quarter, which follow, typify recent experience:

Levit Corporation
Profit Report
Second quarter
(in R'000s)

	R-pump	F-pump	S-pump	Total
Sales	R4 800	R2 700	R2 700	R10 200
Cost of goods sold	3 144	2 310	2 850	8 304
Gross margin	R1 656	R390	R(150)	R1 896
Selling and administrative expenses	1 110	555	405	2 070
Profit before taxes	R546	R(165)	R(555)	R(174)

Maria Levitt, Levitt's managing director, is concerned about the results of the pricing, selling and production policies. After reviewing the third-Quarter results, she asked her management staff to consider her proposed course of action, comprising the following three changes to operations:

- Discontinue the S-pimp line immediately. S-pumps would not be returned to the product lines unless the problems with the pump could be identified and resolved.
- Increase quarterly sales promotion by R300 000 on the R-pump product line in order to increase sales volume by 15 per cent.
- Cut production on the F-pump line by 50 per cent, and cut the traceable advertising and promotion of this line to R60 000 each quarter.

Justin Sperry, the management accountant, suggested a more careful study of the financial relationships to determine the possible effects on the company's operating results of the managing director's proposed course of action. The managing director agreed and assigned Joanne Brower, the assistant accountant, to prepare an analysis. Brower has gathered the following information:

- The unit sales prices for the three pumps are as follows:

R-pump	R600
F-pump	R270
S-pump	R540

- The company is manufacturing at capacity and is selling all pumps it produces. All three pumps are manufactured with common equipment and facilities.

- The quarterly general selling and administrative expense is allocated to the three pump lines in proportion to their dollar sales volume.

- Special selling expenses (primarily advertising, promotion and shipping) are incurred for each pump as follows:

Quarterly advertising and promotion		**Shipping expense**
R-pump	R630 000	R30 per unit
F-pump	300 000	12 per unit
S-pump	12 000	30 per unit

The unit manufacturing costs for the three products are as follows:

	R-pump	**F-pump**	**S-pump**
Raw material	R93	R51	R150
Direct labour	120	60	180
Variable manufacturing overhead	135	90	180
Fixed manufacturing overhead	45	30	60
Total	R393	R131	R570

Required:

2.1 Joanne Brower says that Levitt Corporation's product line profit report for the second quarter is not suitable for analysing proposals and making decisions such as the ones suggested by Maria Levitt.

2.1. a Explain why the product line profit report, as presented, is not suitable for analysis and decision making. (3)

2.1.b Describe an alternative profit reporting format that would be more suitable for analysis and decision making, and explain why it is better than the original. (4)

2.2 Use the operating data presented for Levitt Corporation and assume that the managing director's proposed course of action was implemented at the beginning of the second quarter. Then evaluate the managing director's proposal by specifically responding to the following points:

2.2.a Is each of three proposed changes cost effective? Support your discussion with an analysis that shows the net impact on profit before taxes for each of the three proposed changes.(22)

2.2.b Was the managing director correct in proposing that the S-pump line be eliminated? Explain your answer. (3)

2.2.c Was the managing directing correct in promoting the R-pump line rather than the F-pump line? Explain your answer. (5)

2.2.d Does the proposed curse of action make effective use of Levitt's capacity? Explain your answer. (3)

2.3 Are there any qualitative factors that Levitt Corporation's management should consider before it drops the S-pump line? Explain your answer. (3)

EXAMINATION:

1 st opportunity 06/11/2018 (09:00 - 13:00)

2 nd opportunity 27/11/2018 (09:00 - 13:00)