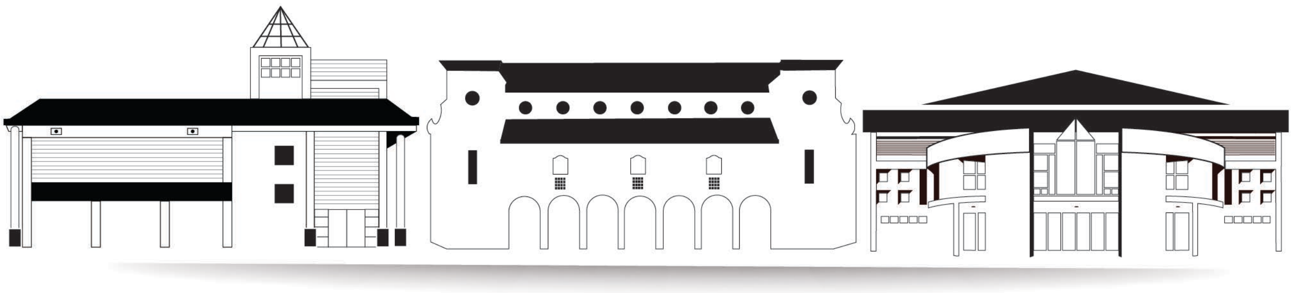

MBAB 823 PEC

MANAGERIAL ACCOUNTING

Faculty of Economic and Management Sciences

Study guide compiled by: Prof Anet Smit

North-West University

MODULE CONTENTS

Module information

Module code	MBAB 823 PEC
Module credits	12 credits NQF level - 9
Module name	Managerial accounting
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Consulting hours	Monday –Friday 8h00 -13h00

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

Study material

Prescribed book

SEAL, ROHDE, GARRISON, & NOREEN, 2019. Managerial Accounting. 6 th. Edition. McGraw-Hill.(***The Connect code should be part of the textbook***)

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 2019)

SESSION	THEME	READING
Study School 22 Jul to 26 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) 03 Aug (V) 05 Aug	**Theme 3**: Systems design: Job costing and the application of overhead costs. **Theme 4:** Process costing.	Chapter 4 Chapter 5
2 (P) 17 Aug (V) 19 Aug	**Theme 5:** Cost behaviour: analysis and use. **Theme 6:** Cost-volume-profit relationships.	Chapter 3 Chapter 6
3 (P) 24 Aug (V) 26 Aug	**Theme 7:** Profit reporting under variable and absorption costing **Theme 8:** Introduction: Activity-based Costing	Chapter 7 Chapter 9
4 (P) 07 Sept (V) 09 Sept	**Theme 8 cont.** Activity based costing**.** **Theme 9:** Profit planning and Budgeting	Chapter 9 Chapter 11
5 (P) 21 Sept (V) 23 Sept	**Theme 10:** Standard costs for control: Direct Material and direct labour. **Theme 11:** Performance measurements and reporting on segments.	Chapters 12 Chapter 8
6 (P) 05 Oct (V) 07 Oct	**Theme 12:** Relevant costs for tactical decisions. **Submit Group assignment**	Chapter 10
7 (P) 19 Oct (V) 21 Oct	**Theme 13:**Strategic management accounting and the balanced scorecard Environmental Management Accounting (EMA)	Chapter 16 Information available in class
8 (P) 26 Oct (V) 28 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!

Theme 1

INTRODUCTION TO COST TERMS AND CONCEPTS. FIXED AND VARIABLE COST. PERIOD VS PRODUCT COST

Study outcomes

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

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

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

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

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

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

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: 50

Submittance Date 05 October 2019 (Potchefstroom)
07 October 2019 (Vanderbijlpark)
18 October 2019 (Mmabatho)

Question 1: (Activity-based costing) (40)

Bermuda Air Industries (BAI) manufactures parts for small aircraft. Over the past decade, BAI's management has met its goal of reducing its reliance on government contract work to 50 per cent of total sales. BAI is now equally reliant on commercial sales and government contracts.

Traditionally the costs of the Material Handling Department have been allocated to direct material as a percentage of direct material dollar value. This was adequate when the majority of the manufacturing was homogeneous and related to government contracts. Recently, however, government auditors have rejected some proposals, stating that "the amount of Material Handling Department costs allocated to these proposals is disproportionate to the total effort involved".

Kara Lindley the newly hired cost accounting manager, was asked by the manager of BAI's Government Contracts Unit, Paul Anderson, to find a more equitable method of allocating the Material Handling Department costs to the user departments. Her review has revealed the following information:

- The majority of the direct material purchases for government contracts are high-dollar, low-volume purchases, while commercial material represent low-dollar, high-volume purchases.
- Administrative departments such as Marketing, Finance and Administration, Human Resources and Maintenance also use the services of the Material Handling Department on a limited basis but have never been charged in the past for material handling costs.
- One purchasing manager with a direct phone line is assigned exclusively to purchasing high-dollar, low-volume material for government contracts on an annual salary of $54 000. Employee on-costs (fringe benefits) are estimated to be 20 per cent of the annual salary. The annual costs of the dedicated phone line are $4 200.
- The components of the Material Handling Department's budget for 2020, as proposed by Lindley's predecessor, are as follows:

Payroll (salaries)	$ 270 000
Employee on-costs (fringe benefits)	54 000
Telephone	57 000
Other utilities	33 000
Materials and supplies	9 000
Depreciation	9 000
Direct material budget:	
Government contracts	3 009 000
Commercial products	1 311 000

Lindley has estimated the number of purchase orders to be processed in 2020 as follows:

Government contracts*	$ 120 000
Commercial products	234 000
Marketing	2 700
Finance and Administration	4 050
Human Resources	750
Maintenance	1 500
Total	**$ 363 000**

*Exclusive of high-dollar, low-volume materials.

Lindley has recommended to Anderson that material handling costs should be allocated on a per purchase order basis. Anderson realises that the company has been allocating to government contracts, more material handling cost, than can be justified. However, the implication of Lindley's analysis could be a decrease in his unit's earnings and, consequently, a cut in his annual bonus. Anderson told Lindley to "adjust" her numbers and modify her recommendation so that the results will be more favourable to the Government Contracts Unit:

Being new in her position, Lindley is not sure how to proceed. She feels ambivalent about Anderson's instructions and suspects his motivation may not be in the best interest of BAI. To complicate matters for Lindley, the company's new managing director has asked her to prepare a three-year forecast of the Government Contracts Unit's results, and she believes that the newly recommended allocation method would provide the most accurate data. However, this would put her in direct opposition to Anderson's directives.

Lindley has assembled the following data to project the material handling costs over the next three years:

- The number of purchase orders increases 5 per cent per year.
- The ratio of government purchase orders to total purchase orders remains at 33 per cent.
- Total direct material costs increase 2,5 per cent per year.
- Material handling costs remain the same percentage of direct material costs.
- Direct government costs (payroll, employee on-costs, and direct phone line) remain constant.
- In addition, she has assumed that the cost of government material in the future will be 70 per cent of total material.

Required:

1. Calculate the material handling rate that would have been used by Kara Lindley's predecessor at Bermuda Air Industries. (3)

2(a) Calculate the revised material handling costs to be allocated on a per purchase order basis. (4)

2(b) Discuss why purchase orders might be a more reliable cost driver than the dollar amount of direct material. (2)

3. Calculate the difference due to the change to the new method of allocating material handling costs to government contracts. (6)

4. Prepare a forecast of the cumulative dollar impact over a three-year period from 2020 through 2022 of Kara Lindley's recommended change for allocating Material Handling Department costs to the Government Contracts Unit. Round all calculations to the nearest whole number. (18)

5. Referring to the standards of ethical conduct and behaviour of King IV:

(a) Discuss why Kara Lindley has an ethical conflict. (4)

(b) Identify several steps that Lindley could take to resolve the ethical conflict. (3)

Question 2: (Tactical decisions) (10)

NuDesigns sell paint and paint supplies, carpet and wallpaper at a single-store location in a small town. Although the company has been very profitable over the years, management has seen a significant decline in wallpaper sales and earnings. Much of this decline is attributable to the customers increasingly purchasing products on the Internet and to companies that advertise deeply discounted prices in magazines and offer customers free shipping and toll-free telephone numbers. Recent figures follow:

	Paint and Supplies	Carpeting	Wallpaper
Sales	R190 000	R230 000	R 70 000
Variable costs	114 000	161 000	56 000
Fixed costs	28 000	37 500	22 500
Total costs	R142 000	R198 500	R 78 500
Operating profit (loss)	R 48 000	R 31 500	R (8 500)

Management are studying whether to drop wallpaper because of the changing market and accompanying loss. If the line is dropped, the following changes are expected to occur:

- The vacated space will be remodelled at a cost of R6 200 and will be devoted to an expanded line of high-end carpet. Sales of carpet are expected to increase by R60 000, and the line's overall contribution margin ratio will rise by 5 percentage points.

- NuDesigns can cut wallpaper fixed costs by 40 per cent. Remaining fixed costs will continue to be incurred.

- Customers who purchased wallpaper often bought paint and paint supplies. Sales of paint and paint supplies are expected to fall by 20 per cent.

- The firm will increase advertising expenditures by R12 500 to promote the expanded carpet line.

Required:

1. Should NuDesigns close its wallpaper operation? Show your calculations. (7)

2. Assume that NuDesigns' wallpaper inventory at the time of the closure decision amounted to R11 850. How would you have treated this additional information in making the decision?(1)

3. What advantages might the internet- and magazine-based firms have over NuDesigns that would allow these organisations to offer deeply discounted prices – prices far below those that NuDesigns can offer? (2)

EXAMINATION:

1 st opportunity 04/11/2019 (09:00 - 13:00)

2 nd opportunity 27/11/2019 (09:00 - 13:00)