

Syllabus

BUA 114 – Business Mathematics (Credit Units: 2)

Department of Business Administration

Faculty of Management & Social Sciences

University of Delta, Agbor, Nigeria

Lecturer: Dr. BELLO Adams

Instructor:

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Office Hours: Monday, Tuesday, Wednesday & Friday 10:00 am - 2:00 pm

Thursday 10:00 pm - 4:00 pm

You can contact me in a variety of ways. Direct interaction is incomparable to other forms. dialogue, which frequently results in more precise and focused queries you will understand more as a result. You should take, and I urge you to Utilize the time I'm available. During or right after class, questions welcome you at all times. Asking questions outside of class via email is simple. It is less successful than speaking to someone in person, though.

Meeting Time and Place: Thursday, 2:00 pm to 4:00 pm, FMSS LH 6

Attendance

Attend every class and make up for missed work. Notify the instructor in advance if absent. The syllabus covers class topics, and assignments are posted on the University of Delta LMS or given in class. Practicing and homework can help with borderline cases.

Overview

Numerous reasons exist for why mathematics is used in business. In general, business mathematics abilities can assist individuals and organizations in improving decision-making, deeply comprehending issues, and recognizing the long-term effects of actions. Accounting for monetary transactions is one specific application of business math. For businesses of all sizes, accurate financial record keeping and upkeep are crucial. Math is used by businesses to keep track of their revenue and expenses, create financial statements, and decide where to best allocate their resources. Making estimations and projections is another reason why math is utilized in business. Businesses make decisions about pricing, production, and investment using mathematical concepts like probability and statistics. Businesses can make better decisions that increase profits by comprehending and applying these ideas. Business also uses math to comprehend and analyze data. Businesses gather data for a variety of reasons, including identifying consumer trends, gauging the success of marketing initiatives, and forecasting future sales.

Businesses can make more informed choices about how to distribute their resources and how to enhance their goods and services by using data analysis. Math is used in business in a wide variety of ways. The kind of math employed depends on the particular requirements of the business. It is crucial for those who work in business math to have a solid foundation in a variety of math subjects and the ability to apply their understanding to actual business situations. Typical mathematical applications for business include:

Course Objectives

1. To understand the basic concepts of Mathematics.
2. To have a proper understanding of mathematical applications in Economics, Finance, Commerce and Management

Learning Outcomes

On completion of this course, the students will be able to: LO1. Explain the ideas and apply equations, formulas, mathematical expressions, and relationships in various situations.; LO2. Solve business problems using their knowledge of algebra, matrices, and calculus. LO3. Evaluate and show that they possess the mathematical abilities needed in business and economics fields that rely heavily on math.

LO4. Implement ideas from multinational companies with how business works on an international scale. LO5. have the ability to use decision-support instruments to assist with business decisions. LO6. to integrate the understanding of business theories and functions into practical applications. LO7. exhibit theoretical comprehension of the global trade system. LO8. They'll employ tools to help with decision-making in international trade. LO9. incorporate theoretical understanding of international trade. LO10. demonstrate suitable and transferable skills for appropriate management roles. LO11. show a thorough understanding of management's functional areas.

Course Contents

Arithmetic (Ratios and Proportions; Simple and Compound interest including Annuity; Discounting and Average Due Date).

2. Algebra (Set Theory and simple application of Venn Diagram ;Variation; Indices; Logarithms ;Basic concepts of permutation and combinations; Linear Simultaneous Equations; Quadratic Equations; Linear inequalities; Determinants and Matrices.

3. Calculus (Constant and variables; Functions, Limit & Continuity; Differentiability & Differentiation; Partial Differentiation; First order and Second order Derivatives; Maxima & Minima

Lecture Schedules

WEEK	CONTENT	LECTURE NOTE/SLIDE
1	Ratios and Proportions	
2	Simple and Compound interest	
3	Annuity; Discounting and Average Due Date	
4	Set Theory and simple application of Venn Diagram	
5	Variation; Indices; Logarithms	
6	Basic concepts of permutation and combinations	
7	Linear Simultaneous Equations	
8	Quadratic Equations	
9	Linear inequalities	
10	Determinants and Matrices.	
11	Constant and variables	
12	Functions, Limit & Continuity	
13	Differentiability & Differentiation	

14	Partial Differentiation; First order and Second order Derivatives	
15	Maxima & Minima	
17	TEST	
18	Revision	
19	Exams	

Examination schedule

- ☑ Attendance
- ☑ Homework
- ☑ Class Test
- ☑ Class participation
- ☑ End of Semester Exam

Practical Exercises

- 1: organizational case
- 2: Economics case

Grading

- Homework: 10% of grade
- Class participation: 10% of grade
- Class test: 10% of grade
- Final Exam: 70% of grade

Text & References

Khan, S.M. (2012). A textbook of Business Mathematics. Viva Books Private Limited.

Sancheti, D.C. and Kapoor, V.K. (2014). Business Mathematics. S. Chand & Sons.

Soper, J. (2004) Mathematics for Economics and business: An Interactive Introduction. Wiley-Blackwell.

Schultheis, R.A. and Kaczmariski, R.M. (2005) Business Math. Cengage South western

Student Conduct

The University requires all enrolled students to adhere to its code of conduct. acting in a way that fosters a good learning environment. The guidelines for student behavior are detailed in the university website or in the student handbook.

Academic Honesty

All university students must adhere to the principles of decency and acceptable behavior.

behavior that fosters a supportive learning environment is prohibited by university policy.

No form of misconduct or copying will be accepted. The intentional incorporation of another's ideas or words is known as plagiarism. Taking credit for someone else's work. This includes concepts as well as written or computer code, whether it's presented exactly as written (verbatim). Getting unapproved help on any task is considered cheating. There is never a time when incomplete or inaccurate citation of sources is acceptable. When you are caught You will receive a 0 and a warning on your final grade if you are found to have shared or used someone else's work in this class. The initial occurrence. If this happens again, you'll get a failing grade in the class and maybe even Discipline-related actions. Ask questions if you are unsure of what is considered intellectual dishonesty.