

Kathmandu University School of Management
Bachelor of Business Administration
Course Syllabus

Course Title	MATHEMATICS-I						
Course Code Number	MAS 101						
Credit Hours	3						
Course Objective							
Main Objective	The objective of the course is to provide a sound mathematical foundation especially in non-calculus area to the participants.						
Learning Unit							
Learning Unit One Net Contact Hours -7 hrs	1. Application of Equations and Inequalities Algebra Refresher (Including Elementary Set Theory), Linear, Quadratic Equations, Application of Equation, Linear Inequalities, Application of Inequalities, Absolute Value.						
Learning Unit Two Net Contact Hours - 7 hrs	2. Functions and Graphs Functions, Special Functions, Combinations of Functions, Inverse Functions, Graphs in Rectangle Coordinates, Symmetry, Translations and Reflections.						
Learning Unit Three Net Contact Hours - 8 hrs	3. Lines, Parabolas, and Systems Lines, Applications and Linear Functions, Quadratic Function, System of Linear Equations, Nonlinear Systems, Application of System of Equations.						
Learning Unit Four Net Contact Hours - 5 hrs	4. Exponential and Logarithmic Function Exponential Functions, Logarithmic Functions, Properties of Logarithms, Logarithmic and Exponential Equations.						
Learning Unit Five Net Contact Hours - 6 hrs	5. Mathematics of Finance Compound Interest, Present Value, Annuities, Amortization of Loans.						
Learning Unit Six Net Contact Hours -10 hrs	6. Matrix Algebra Matrices, Matrix Addition and Scalar Multiplication, Matrix Multiplication, Solving Systems by Reducing Matrices, Inverses, Leontief's Input-Output Analysis.						
Learning Unit Seven Net Contact Hours - 5 hrs	7. Linear Programming Linear Inequalities in Two Variables, Linear Programming for problems with two variables (graphical method).						
Total Contact Hours	48 hrs (excluding assessment and final examination)						
Basic Text	Ernest F. Haeussler, Jr., Richard S. Paul, and Richard Wood (2005), <i>Introductory Mathematical Analysis</i> , USA: Pearson Prentice Hall						
Evaluation Scheme	<table> <tr> <td>In-Semester evaluation</td><td>50%</td></tr> <tr> <td>End-Semester evaluation</td><td>50%</td></tr> <tr> <td>Total</td><td>100%</td></tr> </table>	In-Semester evaluation	50%	End-Semester evaluation	50%	Total	100%
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Updated February 2017