



Course No.	Course Title	No. of Units			Pre-requisites
		Th.	Pr.	Credit	
MATH 333	Financial Mathematics	3	-	3	MATH 102

Course Objectives:

- To know a brief introduction on the origin of Mathematics of Finance.
- To know how to think mathematically.
- To gain the knowledge of writing solutions.
- To formulate mathematical problems using different laws of solutions and compare between different forms.

Course Description:

Simple interest, Exact and approximate time, Bank Summary of simple interest and bank discount formulas, Compound interest, Assumption and notation, Put-call parity, Binomial trees, Wiener processes and Ito's lemma, The Black-Scholes-Merton model, Volatility smiles.

Main Text Book:

- Options, Futures, and Other Prentice Derivatives, by John C. Hull, 7th edition, Prentice Hall, USA, 2009.

Subsidiary Books:

- Financial Mathematics: A Comprehensive Treatment, by G. Campolieti and R. N. Makarov, Chapman & Hall/CRC 1st edition 2014.