

COURSE OUTLINE

Year: **2006/2007**

LEVEL : I, TERM 1

NAME OF THE SUBJECT: Calculus for Business and Quantitative Methods for Analysis

NO. CREDITS: 4

NAME OF THE TEACHER : Brian McGarry

SHORT CV OF THE TEACHER:

Brian McGarry has a bachelor's degree in Mathematical Sciences and a master's degree in Economics, Finance and Management. He has worked in strategic consultancy, economic and political analysis, and journalism. He has been Spanish correspondent of the Economist Intelligence Unit since 1992.

SEMESTER 1

COURSE DESCRIPTION: Study of the main mathematical concepts and tools required by students and practitioners of business.

COURSE OBJECTIVE: To provide students with a solid understanding of, and an ability to use, fundamental mathematical analysis. The course seeks to avoid unnecessary complexity and maintain a focus on real world applications.

COURSE STRUCTURE: see syllabus below

SYLLABUS

SEMESTER 1			
			CLASS SUBJECT
12 Sept -15 Sept	Enrolment / Orientation / Registration Week	Wk 1	Introduction. Review of the rules of arithmetic and algebra
18 Sept -22 Sept	Teaching Week 1	Wk 2	Linear equations I: graphs and simultaneous equations
25 Oct -29 Oct	Teaching Week 2	Wk 3	Linear equations II: supply and demand analysis
02 Oct -06 Oct	Teaching Week 3	Wk 4	Non-linear equations I: revenue, cost and profit
09 Oct - 11 Oct	Teaching Week 4 12 Oct, 13 Oct Bank Holiday	Wk 5	Non-linear equations II: indices, logs and exponential
16 Oct -20 Oct	Teaching Week 5	Wk 6	Mathematics of finance I: percentages, compound interest
23 Oct -27 Oct	Teaching Week 6	Wk 7	Mathematics of finance II: geometric series, investment appraisal
30 Oct -03 Nov	Teaching Week 7 01 Nov Bank Holiday	Wk 8	Differentiation I: rules, marginal functions
06 Nov -10 Nov	Teaching Week 8	Wk 9	Differentiation II: elasticity, optimisation
13Nov -17 Nov	Teaching Week 9	Wk 10	Partial Differentiation I
20 Nov -24 Nov	Teaching Week 10	Wk 11	Partial Differentiation II
27 Nov -01 Dec	Teaching Week 11	Wk 12	Integration
04 Dec -08 Dec	Teaching Week 12 06 Dec – 08 Dec Bank Holiday	Wk 13	Matrices
11 Dec –15 Dec	EXAMS	Wk 14	
	TOTAL HOURS		

Course text Books Recommended SEMESTER 1

"Mathematics for Economics and Business"

Ian Jacques.

Prentice Hall, 5th edition, 2006.