## COX 1209 INTRODUCTION TO BUSINESS MATHEMATICS (3 CU)

**Description**

The course is designed to provide students with the ability to understand basic concepts of quantitative methods applicable to different business settings. Students will also be taught on how to use simple mathematical models such as linear programming to solve business problems.

**Objectives or Aims**

The course will help the students to achieve the following objectives:

* Describe mathematical relations and functions
* explain the relevance and use of different quantitative models and functions in solving business problems.

**Learning Outcomes**

Students should be able to

* Apply different quantitative models in solving business problems
* Describe mathematical relations and functions used in business settings.

**Intellectual, practical and transferable skills**

* Problem solving skills
* Analytical skills
* Team work
* Communication

**Teaching and Learning Patterns**

* Use of Practical examples
* class discussions
* Group presentations

**Indicative Content**

Mathematical relations and functions, Non- linear functions and how they are applied to business, application of straight lines to business, exponential and logarithmic functions, set theory, matrix algebra, basic calculus and linear programming.

**Assessment Method**

The assessment method is structured to include coursework and final examination. Coursework consists of assignments, presentations and tests.

Each course in the programme shall be assessed on the basis course work and final examination represented as follows:

Course work assessment 30%

 Final Examination 70%

 100%

The minimum cumulative mark required to pass is 50%, is required to pass this unit. This includes course work and final examination. Each course in the programme is allowed a maximum of three hours for final examination.

**Core reading textbooks**

1. Edward T Dowling (1993): Mathematical methods for business and economics
2. Paul Newbold: Statistics for business and economics. 3rd edition prentice hall
3. Francis (1998) Business mathematics and statistics. 5th edition
4. Ssejaaka Samuel (2002): Quantitative methods for business and social sciences. (2nd edition
5. [Quantitative Methods for Business: The A to Z of QM](http://www.amazon.com/Quantitative-Methods-Business-Z-QM/dp/0750658983/ref%3Dpd_bbs_sr_1?ie=UTF8&s=books&qid=1208782711&sr=1-1) by John Buglear(Paperback - Dec 13, 2004)
6. [Quantitative Methods for Business (with Crystal Ball Pro 2000 v7.1, CD-ROM, and InfoTrac )](http://www.amazon.com/Quantitative-Methods-Business-Crystal-InfoTrac/dp/0324312652/ref%3Dpd_bbs_sr_2?ie=UTF8&s=books&qid=1208782711&sr=1-2) by David R. Anderson, Dennis J. Sweeney, and Thomas A. Williams (Hardcover - Oct 17, 2005).
7. [Essential Quantitative Methods for Business, Management and Finance, Third Edition](http://www.amazon.com/Essential-Quantitative-Methods-Business-Management/dp/1403949913/ref%3Dsr_1_7?ie=UTF8&s=books&qid=1208782711&sr=1-7) by Les Oakshott(Paperback - Dec 29, 2005)
8. [Quantitative Methods for Business Decisions](http://www.amazon.com/Quantitative-Methods-Business-Decisions-Curwin/dp/1861525311/ref%3Dsr_1_9?ie=UTF8&s=books&qid=1208782711&sr=1-9)by Jon Curwin and Roger Slater (Paperback - Aug 16, 2001)
9. [Quantitative Methods in Practice: Readings from PS](http://www.amazon.com/Quantitative-Methods-Practice-Readings-PS/dp/1933116536/ref%3Dsr_1_11?ie=UTF8&s=books&qid=1208782711&sr=1-11) by David A. Rochefort(Paperback - Nov 2, 2005)