

**VESALIUS COLLEGE**  
**SYLLABUS for MTH140E**  
**Summer 2010**

**Mathematics for Business and Economics**

Date	Syllabus	Tests
Wednesday May 26th	Introduction Linear Equations (Chapter 1)	
Monday, May 31st	Linear Equations (Chapter 1)	Linear Equations
Wednesday, June 2nd	Non-Linear Equations (Chapter 2)	
Monday, June 7th	Non-Linear Equations (Chapter 2)	Non-Linear Equations
Wednesday, June 9th	Mathematics of Finance (Chapter 3)	
Monday, June 14th	Mathematics of Finance (Chapter 3)	Mathematics of Finance
Wednesday, June 16th	Differentiation (Chapter 4)	
Monday, June 21st	Partial Differentiation (Chapter 5)	Differentiation
Wednesday, June 23th	Integration (Chapter 6)	Partial Differentiation
Monday, June 28th	Linear Programming (Chapter 8)	Integration
Wednesday, June 30th	Conclusion	Linear Programming
Mon, July 5th	Written exam	Exam
Wednesday, July 7th	Oral Exam	Exam

**Instructor:** Koen Lefever, koen.lefever@gmail.com

**Course objectives:**

Many problems encountered in business, economics and management can be best described and analysed using the language of mathematics. In this course you will learn to find and use mathematical models applied to business and economics. You will develop your problem solving and equation solving skills. You will learn techniques from calculus and how they can be used in problem solving and decision making in the business world. The course aims to equip you with the mathematical techniques that you will need in your 200 and 300 level courses in business, economics and management, in post-graduate studies and in your career.

**Essential equipment:**

- **Course book:** "Mathematics for Economics and Business" by Ian Jacques, published by Prentice Hall.
- Graphing Calculator or laptop with Microsoft Excel or OpenOffice.
- For tests you should bring:  
**Pencils or erasable ink pens, erasers, a 30cm ruler and your own calculator or laptop.**

**Office hours:** Wednesday, 13:30-15:30, Vesalius meeting room (room 049).

If you are in any difficulty, the most important thing is to **get help early**. The longer you leave it the worse it will get.

**Assignments:**

- **Prepare before a lecture:** Check the syllabus and read the chapter of the book to be covered in the following lecture
- **After the lecture:** Read the chapter again, especially the worked examples, and attempt every exercise. This work will not be graded, but an opportunity to ask questions will be given the following class session. You should plan to spend 3 hours reading, studying the notes and working the problems for every lecture you attend. Use them intelligently and work together

with a friend if you find it helpful, but ensure you understand concepts thoroughly and ask for help if you need it.

- ***If you miss a class:*** check the schedule and read the material, get help and do the exercises. See that you do not get behind! You are responsible to find out what you have missed and make up the work.

### **Use of Pointcare**

Make sure you know how to access pointcare and do so regularly.

**Tests** will be given in class time following the schedule given. Calculators or laptops, notes and books may be used, but may NOT BE SHARED. You should work in pencil or erasable ink and erase your mistakes.

**Absence from tests:** Please warn if you will miss a test & make an appointment to do the test at the earliest occasion.

**Exams:** There will be a written exam on Monday, July 5<sup>th</sup>. On Wednesday, July 7<sup>th</sup>, there will be an oral exam. You will be interrogated about the complete course, including the course book.

**Academic honesty:** Absolute honesty is expected during tests and exams. Any student caught communicating with another student or cheating in any other way will receive a zero in the test or exam being taken at the time, and will be referred to the Student Conduct Committee. Details of its procedure can be found in the College Catalogue.

**Lateness, absence and conduct in class:** You are expected to arrive on time and equipped, stay until the end, and not walk in and out of the room during class. Mobile phones should be put away and be switched off at all times.

**Calculation of final grade:** The weighting is as follows: Test average: 40%; written exam: 40%; oral exam: 20%.

**Grade Boundaries:** In accordance with college policy the grade boundaries are as follows:

A	85 – 100%
A-	81 – 84%
B+	77 – 80%
B	73 – 76%
B-	69 – 72%
C+	66 – 68%
C	62 – 65%
C-	58 – 61%
D+	54 – 57%
D	50 – 53%
F	< 50%

### **How to do well in this course**

- Keep up with the class. In mathematics, new techniques and concepts build on the ones already acquired. It is therefore essential that you *master* each new concept or method studied in one lecture before the lecture following. You will not fully benefit from class if you have not done the assignment from the previous one. You are advised NOT to wait until there is a test to prepare for.
- Ask for help! At the start of each class you will be invited to ask questions on the homework assigned in the previous class. If you need further explanation, you can see me in my office. If you need longer and more regular individual help, sign up with a tutor in the writing centre.
- Do not miss classes! Students who attend class regularly and keep up with the assignments generally do well in this course, but those who miss classes or get behind on assignments typically find that their grades get progressively lower and they then fail the final exam.
- Do ALL the assignments. The course book contains many exercises with solutions.
- Plan your work for other courses so that you do not need to take 'time off' from maths when you have big assignments due for other subjects.