MAT1613 : Tutorial Matter.

The prescribed textbook is

James Stewart

CALCULUS Early Transcendentals (International Metric version)

Cengage Learning

8th Edition

ISBN 978-1-305-27237-8

Please see the material for this module and the outcomes stated on p.vi-viii. of your study guide and also in 2.2 of TL101.

The prescribed book must be studied in conjunction with the study guide.

Here follows a list of the material to be studied in you prescribed textbook:

- Chapter 1: Functions and models: 1.4 and 1.5 need to be studied.
- Chapter 3: Paragraph 3.9 has problems on related rates.
- Chapter 4: Applications of Differentiation: (4.1-4.7 and 4.9 (excluding 4.8 Newton's Method)).
- Chapter 5: Integrals: 5.1-5.2 (Read through this up till p, 384 for background; Limits and Riemann sums are not part of this syllabus);

  5.2 You need to study the properties of the Definite integral from p.385 -392.

  5.3-5.5 need to be studied.
- Chapter 6: Application of integration: 6.1 and 6.2 need to be studied.
- Chapter 7: Techniques of Integration: 7.1-7.5 and 7.8 need to be studied (excluding 7.6 and 7.7).
- Chapter 11: Infinite sequences and series: (11.1-11.8 are done in 2nd year real analysis.)

You need to study 11.9 and 11.10. (You need not be able to calculate the remainder of the Taylor and Maclaurin series).

You may need to revise some concepts which were done in other first level modules, (using this textbook or other study material) when you come across them in this module. (For example: functions, limits, differentiation techniques etc.)

Please send me an email to lindel@unisa.ac.za if you have any queries.

Kind regards

Dr L Lindeboom