

7.2 Annexure 1B: Course information sheet

Math 105 - Augmented Quantitative Methods 1

Information for students: 2019

Welcome to the Math 105 course. In this course we aim to equip students with mathematical techniques for business mathematics and to develop problem solving skills. The module covers the syllabus of Math 134 and, in addition, gives supplementary material to bridge the gap between high school mathematics and university mathematics. We hope that you will enjoy this course, and make a success of it.

1. Syllabus

Matrices and matrix models. Solution of systems of linear equations and simple linear programming problems. Elements of the mathematics of finance. Differential calculus in one and several variables, applications, partial differentiation, maxima and minima. Exponential and logarithmic functions. Integral calculus with applications. Elementary differential equations.

2. Lectures

You are expected to attend lectures regularly. Announcements may be made, from time to time, to give you fresh information about the course, tests or final exam. Ignorance of such announcements will not be accepted as an excuse.

- Mondays 14:10 - 15:50. Venue → L09;
- Fridays 07:45 - 08:30. Venue → L09; and
- Fridays 11:25 - 12:10. Venue → L09.

3. Tutorials

Tutorials are compulsory. You will be in one of the following tutorial groups, according to the first letter of your surname, **Group A**, **Group B**, **Group C** or **Group D**.

Tutorial Times:

- Mondays 16:00 - 17:30 and Thursdays 08:40 - 10:20 (for all four groups).

Tutorial Venues:

| Group | Surname from | Monday Venue | Thursday Venue |
|---------|--------------|--------------|----------------|
| Group A | A - L | L14 | L06 |
| Group B | M | L12 | L12 |
| Group C | N - R | L11 | L208 |
| Group D | S - Z | L15 | L05 |

4. Tests and Course Mark

There will be three tests, **Test 1**, **Test 2** and **Test 3**. Their dates are

Test 1 Monday 4 March (15:00) **Test 2** Monday 15 April (15:00)
Test 3 Monday 6 May (15:00)

Venue → To be announced.

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In addition, there will be tutorial tests written at the end of *some* tutorials. The average mark of the tutorial tests counts as **Test 4**.

Your Course Mark will be the average of your best three test marks (the worst mark will not be considered). **Failure to write a test will result in a zero mark for that test**; there will be no make up test for anybody.

5. Duly Performed Certificates

Your DP Mark is the average of your Course Mark for this course and your Course Mark for Math 134, i.e.,

$$\text{DP Mark} = \frac{(\text{Course Mark for Math 105} + \text{Course Mark for Math 134})}{2}$$

In order to obtain the DP certificate (i.e., being granted permission to write the final examination), the following requirements should be met:

- (i) your DP Mark must be at least 35%;
- (ii) you must attend at least 80 % of your lectures and tutorials.

6. Exam and Assessment

At the end of the semester, and if granted DP, you will write a 3-hour Math 134/105 examination. (There is no separate Math 105 exam: all Math 105 students write the Math 134/105 exam only). Your mark from this 3-hour paper will count 67% of your Final Mark, while your DP Mark will count 33%, i.e.,

$$\text{Final Mark} = (\text{DP Mark}) \times 0.33 + (\text{Math 134/105 Exam Mark}) \times 0.67.$$

You will be credited for this course if your Final Mark is at least 50%.

7. Lecturer

Dr S. Mukwembi; Office number: 458 H1-Block; tel. 031 260 8167; mukwembi@ukzn.ac.za
 Consultation times: Tuesdays, and Fridays.

8. Textbook

S. T. Tan, *College Mathematics for Managerial, Life, and Social Sciences* (7th edition) Brooks/Cole. (Same as for Math 134)

9. Website

To reach the *Math 105* website, log on to <http://learning.ukzn.ac.za> and follow the instructions.

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