

Course outline for APM02A2 (old course code: APM2A10) Introduction to Differential Equations

Prerequisite modules: APM1B10 and MAT1B10.

1 Lectures

The attendance of lectures is compulsory!

Day	Time	Timetable Code	Group 1 Venue	Group 2 Venue
Tuesday	08:00-08:45	G1	B Les 100	B Les 103
Wednesday	08:00-08:45	G2	B Les 100	B Les 103
Thursday	17:10-17:55	G3	B Les 100	C Les 201

Lecturer: Dr MV Visaya (Course co-ordinator)
Office: B Ring 526
Telephone: +27-11-559-2332
Email: mvvisaya@uj.ac.za
Consultation: Wednesdays, 09:00-10:30

Lecturer: Mr JM Homann
Office: B Ring 534A
Telephone: +27-11-559-2790
Email: jmhomann@uj.ac.za
Consultation: Thursdays, 15:30-17:00

2 Tutorials

The attendance of tutorials is compulsory! One tutorial test will take place at the end of each month and the average of these tests will comprise a tutorial mark (*TM*).

Day and Time: Wednesdays, 15:30-17:05 (Timetable codes P19-P20)		
Tutorial Group	Venue	Tutors
1	C Les 202	TBA
2	C Les 203	TBA
3	C Les 102	TBA

A tutor is available outside of the tutorial periods at the Mathematics Learning Centre (MLC), located in Mathematics Passage 2 (C Ring 5).

3 Assessment

No consultation will take place on the day of a test or exam and no consultation will take place on the day before a test or exam!

Assessment	Date	Time	Venue
Semester Test 1 (ST_1)	15 March 2017	15:30-17:05	D1 Lab 308
Semester Test 2 (ST_2)	19 April 2017	15:30-17:05	D1 Lab 308
Sick Tests 1 and 2	26 April 2017	15:30-17:05	TBA
Final Exam	12 June 2017	08:30-11:30	TBA

A Final Period Mark (FPM) will be calculated at the end of the semester for each student and it will be determined by the student's performance in both the semester tests and the tutorial tests. The mark is calculated as:

$$FPM = 45\% \times (ST_1 + ST_2) + 10\% \times TM.$$

The student needs an FPM of 40% or greater in order to obtain entrance to the final examination. The student will obtain an exam mark (EM) upon attending and writing the final exam and the student requires an EM of 40% or greater in order to pass the final exam. The final mark (FM) for the student is calculated as:

$$FM = 50\% \times EM + 50\% \times FPM.$$

Pass Requirements: Credit for this module requires both a *minimum final mark of 50%* and a *minimum exam mark of 40%*. A student is admitted to the final exam by obtaining a *minimum final period mark of 40%*).

4 Module Resources

4.1 Online

This module can be found on Blackboard under "17APM2A10: 17APM02A2: INTRODUCTION TO DIFFERENTIAL EQUATIONS".

4.2 Notes

This module follows the following notes:

Trench, William F., "Elementary Differential Equations" (2013), *Faculty Authored Books*. Book 8. <http://digitalcommons.trinity.edu/mono/8>

These notes may be freely downloaded from the above URL or on Blackboard.

Recommended additional book (any edition will suffice - various editions have various authors, but the main author for each edition is Zill):
Zill, D.G., (2016), *Differential Equations with Boundary-Value Problems*, 9 ed., Boston: Cengage Learning.