

## University of Pretoria Yearbook 2017

## Differential equations 286 (WTW 286)

| Qualification          | Undergraduate                                |
|------------------------|--|
| Faculty                | Faculty of Natural and Agricultural Sciences |
| Module credits         | 12.00  |
| Programmes             | BCom   |
|                        | BSc Computer Science                         |
|                        | BSc Applied Mathematics                      |
|                        | BSc Chemistry                                |
|                        | BSc Geology                                  |
|                        | BSc Mathematical Statistics                  |
|                        | BSc Mathematics                              |
|                        | BSc Meteorology                              |
|                        | BSc Physics                                  |
| Service modules        | Faculty of Economic and Management Sciences  |
| Prerequisites          | WTW 114, WTW 124 and WTW 162                 |
| Contact time           | 1 tutorial per week, 2 lectures per week     |
| Language of tuition    | Module is presented in English               |
| Academic organisation  | Mathematics and Applied Maths                |
| Period of presentation | Semester 1                                   |

## Module content

\*Students will not be credited for more than one of the modules for their degree: WTW 264, WTW 286 Theory and solution methods for ordinary differential equations and initial value problems: separable and linear first-order equations, linear equations of higher order, systems of linear equations. Application to mathematical models. Numerical methods applied to nonlinear systems. Qualitative analysis of linear systems.

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