

## MA 304: Ordinary Differential Equations

Upon successfully completing this course, the students should be able to:

- solve the following types of differential equations/initial value problems by analytic means: 1<sup>st</sup> order separable, 1<sup>st</sup> order linear, exact, 2<sup>nd</sup> order homogeneous with constant coefficients, 2<sup>nd</sup> order non-homogeneous constant coefficients
- model certain simple physical phenomena with 1<sup>st</sup> and 2<sup>nd</sup> order differential equations.
- solve certain differential equations graphically and numerically.