Preface

0.1 Notes about these notes and the course

This Lecture notes are originated from my class notes for MAT501E Differential Equations at Istanbul Technical University in Fall 2019. These are not original lecture notes written by me, but mainly based on the course book

1. Perko, L. (2001). Differential Equations and Dynamical Systems, Springer.

and the reference book;

2. Strogatz, S.H. (2000). Nonlinear Dynamics And Chaos: With Applications To Physics, Biology, Chemistry, And Engineering, CRC Press.

These are the first version of the lecture notes. There are for sure many typos and mistakes. I kindly ask you to warn me about these. And please do not hesitate telling me your idea about the notes and your recommendations which are very important to me. We can do it better together.

Moreover, I do not guarantee that these notes cover all of the course material and subject. Whatever we talk/consider in class is exactly what you are responsible to pass the course. Reading these notes and not attending the class is not recommended and I should warn you not to do it!.

Saadet S. Özer Istanbul, 2019