Project 2: Teaching Differential Equations with PSEs

1. Develop an introductory course for the Numerical Solution of Ordinary Differential Equations (ODEs) based on the material in chapter 13 of Houstis ebook and reference “ Introductory Differential Equations using Sage”
2. Identify special toolboxes and libraries in MatLab, Python, Sage for solving ODEs
3. Compare the above PSEs for supporting this course
4. Presentation of the course design and evaluation PSEs studies
5. Identify two important applications modeled by ODEs and demonstrate the use of PSEs for solving them.