Computational Assignment 3

Criteria	Ratings					Pts
Sufficient git commits at least 3 git comm ts with comments to bitbucket	1 pts Full Marks		0 pts No Marks			1 pts
All files in repository .m, .html, .py, .ipynb, .tex, .pdf	1 pts Full Marks		0 pts No Marks			1 pts
Solve ODEs CA3 file runs file named solve_ODEs_CA3.m that runs	1 pts Full Marks		0 pts No Marks			1 pts
Function name Function name correct ODEs_CA3	1 pts Full Marks		0 pts No Marks			1 pts
Parameters not hard coded All parameters are named, k's are functions of T, and not hard coded.	5 pts Full Marks		0 pts No Marks			5 pts
Correct functions dFa/dV, dFB/dV, dFC/dV, dT/dV	16 pts Full Marks	12 pts 3 of the differential equations	8 pts Only 2 of the differential equations	4 pts Only 1 differential equation	0 pts No Marks	16 pts
Ca l odesolver odesolver with ode45, V increments and initial conditions.	7 pts Full Marks		0 pts No Marks			7 pts
Correct figure 1 Figure 1 with T vs V, labeled units and axis	4 pts Full Marks		0 pts No Marks			4 pts
Figure 2 correct Contains each of Fi vs V, axis labels, legend, line styles and distinguishable colors	6 pts Full Marks		0 pts No Marks			6 pts
.html file File is created and accessible	1 pts Full Marks		0 pts No Marks			1 pts
Comments visible in .html file File has prol fic comments sufficient to understand the code.	1 pts Full Marks		0 pts No Marks			1 pts
.html Purpose .html file shows purpose of code statement	1 pts Full Marks		0 pts No Marks			1 pts
.html Author .html file has author listed at the top.	1 pts Full Marks		0 pts No Marks			1 pts
Input and output parameters clearly noted .html file has comments that clearly delineate input and output parameters	2 pts Full Marks	1 pts Only input or output, not both		0 pts No Marks		2 pts
Descriptive variable names	1 pts Full Marks		0 pts No Marks			1 pts
Adequate use of white space and semicolons	1 pts Full Marks		0 pts No Marks			1 pts
Units are commented within the code	1 pts Full Marks		0 pts No Marks			1 pts
Python file which runs solve_ODEs_CA3.py file which runs	1 pts Full Marks		0 pts No Marks			1 pts
Python file begins as desired function ODEs_CA3	1 pts Full Marks		0 pts No Marks			1 pts
Python- did not hard code parameters no hard-coding of parameters, all must have a name, k's must be functions of T	5 pts Full Marks		0 pts No Marks			5 pts
Python- correct differential equations dFA/dV, dFB/dV, dFC/dV, dT/dV all correctly coded in	16 pts Full Marks	12 pts 3 differential equations	8 pts Only 2 differential equations	4 pts Only 1 differential equation	0 pts No Marks	16 pts

Computational Assignment 3

Criteria	Ratings						Pts
Python- call odesolver scipy.integrate.odeint, V range, V increments, initial conditions	**7 pts** Full Marks			**0 pts** No Marks			7 pts
Figure 1 T vs V, axis labels, and un ts	**4 pts** Full Marks			**0 pts** No Marks			4 pts
Python figure 2 Fi vs V, axis labels, units, legend, line styles and distinct colors	**6 pts** Full Marks			**0 pts** No Marks			6 pts
ipynb heading and text for comment block	**0.5 pts** Full Marks			**0 pts** No Marks			0.5 pts
ipynb 4 eqns	**2 pts** Full Marks	**1.5 pts** 3 equations	**1 pts** Only 2 equations	**0.5 pts** Only 1 equation	**0 pts** No Marks		2 pts
ipynb 2 figures and captions	**2 pts** Full Marks	**1 pts** Only 1 figure with caption			**0 pts** No Marks		2 pts
.tex equations section 4 equations, numbered and titled	**2 pts** Full Marks	**1.5 pts** 3 equations	**1.5 pts** Equations not numbered or section untitled	**1 pts** Only 2 equations	**0.5 pts** Only 1 equation	**0 pts** No Marks	2 pts
.tex Resu ts section 2 figures with captions	**2 pts** Full Marks	**1.5 pts** Section not titled	**1 pts** Missing one figure	**0 pts** No Marks			2 pts
.tex file creates proper .pdf Also containing proper naming scheme	**0.5 pts** Full Marks			**0 pts** No Marks			0.5 pts

Total Points: 100