## Computational Assignment 4

| Criteria Ratings  |   |                             |                      |                   |                             |                   |       |  |
|---|---|-----------------------------|----------------------|-------------------|-----------------------------|-------------------|-------|--|
| At least 3 Commits At least 3 git commits to bitbucket with comments  | 1 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 1 pts |  |
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| All requisite files in the repository including both .m files, both .py files, both .html files, and both .ipynb files. | 1 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 1 pts |  |
| Both param estim f les labeled correctly both param estim 3 lump.m and param estim 4lump.m                              | 2 pts 1 pts Full Marks Only 1 labeled correctly |                             | 0 pts<br>No Marks    |                   |                             | 2 pts             |       |  |
| Correctly using data from table 1   | 2 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 2 pts |  |
| Correct usage of isqcurvefit  | 8 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 8 pts |  |
| Usage of resnorm output   | 2 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 2 pts |  |
| Correct usage of ode23s solver and system   | 6 pts<br>Full Marks                             | 4 pts<br>somewhat correct u | 3 pts incorrect usag | 9                 | 2 pts<br>Mildly correct use | 0 pts<br>No Marks | 6 pts |  |
| Printing parameter values Print to output screen labeled with names   | 4 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 4 pts |  |
| Figure 1 yi vs t figure, data, fitted curve, and legend   | 8 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 8 pts |  |
| Figure 2 yi vs conversion figure, data, fitted curve, legend  | 8 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 8 pts |  |
| Submission contains 2 .html files   | 7 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 7 pts |  |
| 3lump has no errors   | 1 pts<br>Full Marks                             |                             | 0 pts<br>No Marks    |                   |                             | 1 pts             |       |  |
| 4lump has no errors   | 1 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 1 pts |  |
| Correctly named python files param estim 3lump.py, param estim 4lump.py   | 2 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 2 pts |  |
| Correctly using data from table 1   | 2 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 2 pts |  |
| Correct usage of curve_fit  | 8 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 8 pts |  |
| Correct usage of pcov   | 2 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 2 pts |  |
| Correct usage of odeint Correct solver and ODE system   | 6 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 6 pts |  |
| Printing parameter values Print to output screen labeled with names   | 4 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 4 pts |  |
| Figure 1 yi vs t figure, data, fitted curve, and legend   | 8 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 8 pts |  |
| Figure 2 yi vs conversion figure, data, fitted curve, legend  | 8 pts<br>Full Marks                             |                             |                      | 0 pts<br>No Marks |                             |                   | 8 pts |  |

## Computational Assignment 4

| Criteria                           | Ratings             |                   |                   |
|------------------------------------|---------------------|-------------------|-------------------|
| Submission contains 2 .ipynb files | 7 pts<br>Full Marks | 0 pts<br>No Marks | 7 pts             |
| 3tump executed correctly           | 1 pts<br>Full Marks | 0 pts<br>No Marks | 1 pts             |
| 4lump correctly executed           | 1 pts<br>Full Marks | 0 pts<br>No Marks | 1 pts             |
|                                    |                     |                   | Total Points: 100 |