*Project Mandate:*

*Introduction:*

This is the specific document to cover the initial formatting of the overall project. It will contain key sections required to allow members of the team to understand what is being completed and why. Specifically doing this now also allows for reduced work later and reduced confusion because of that the fact that the core information is easily accessible.

*Project Scope:*

The current project is about the SIR model and producing a functional application/software to allow an end user to simulate an infection in a specific location and to see how the infection would function in the specific virtual environment.

*Project Objectives:*

This section will be updated as required because project objectives may change based on changes in external markets, clients or internal stipulations. As of current, the required objectives that the application need to complete are as followed:

* The project needs to have a completed documentation regardless of the state of the project whether in quality, quantity, or completion.
* The project needs to, if possible, be able to complete basic required tasks in processing data and producing the desired output.
* The project should be able to be cost effective and not be resource intensive.

*Roles and Responsibilities:*

There will not by any direct roles and responsibilities. The reason being is that the overall team list as of current is too small (overall team members is currently 2), meaning that having specific roles will not be beneficial, it will more so be a hindrance.

*Reasons:*

The specific reason that this project is being completed is the fact that it is required. Without this specific completion, a failing grade will be passed lowering the overall ranking of each member’s personal graded record.

This specific application was made because this specific formula is used a lot, especially in the current times because a lot of viral transmissions occur and viral related issues. Using this current issue, an application could be developed to teach people about specific viral transmission and how specific attributes of viruses can make them deadlier.

*Key Constraints:*

The key constraints regarding the project are mainly time and knowledge. Obviously, the project has a deadline meaning that it needs to be completed by then otherwise the grade might be capped. This becomes difficult though because of active exams, concurrent assignments and active work being set in college hours.

Knowledge is also reduced and becomes an issue as well. None of the team have created an application/software like this, in fact they have not created an application like this before. A key premise in terms of the development of the project is that knowledge of programming and developing an application to fill this specific format must be increased.