Final Project:

The final project (40% of the final grade) will consist of a major piece of numerical code that solves a specific problem that either

1. Adapts and/or extends one of the methods covered in this subject to create a new algorithm which does something better or in a different way, or
2. Applies methods from this subject to solve a problem from another subject, or topic of interest.

A list of project possible projects will be offered, however if a student chooses one of these projects they will lose marks for innovation (see below). Students are encouraged to suggest problems for approval by the Subject Coordinator. The project must be chosen by the student by the end of the mid-semester break, otherwise each student will be allocated to a project and they will receive a mark of zero for innovation.

The project will consist of two parts:

1. The code itself, which will be graded on ambition, effectiveness, accuracy, elegance and appropriateness of methods chosen (70% of this assessment task). The code should be accompanied by at least two test files.
2. A short report (no more than 5 pages) on what the code does and how it works, and analyses the effectiveness and efficiency of the code (30% of this assessment task).

The specific grading is as follows:

Code:	
Innovation in choosing the project:	20%
Difficulty of the project:	20%
Effectiveness (i.e. how well the code runs):	20%
Accompanying Test functions (appropriateness of these):	10%
Total:	**70%**
Report:	
Explanation of the algorithm used:	10%
Explanation of how the code works:	10%
Efficiency/convergence analysis	10%
Total:	**30%**

The final project is an individual assignment, however students are permitted to share parts of code with each other if they give appropriate attribution.

Submission (IMPORTANT): You should put all the scripts necessary to run your code, as well as your report, into a single ".zip" file and upload this to canvas.