

2023 ENGSCI 344 Final Report Rubric

Summary of Main Findings for Non-Expert Client (2-3 pages) (5 Marks)

This should be a non-technical summary of your main findings, and a critical analysis of them (without going into solver details or mesh specifics). This section should summarise:

- Brief outline of the project objectives and the resources\data used (1 Mark)
- High level outline of your simulation approach (again, avoid details like Hybrid Initialisation or the number of inflation layers in the mesh) (1 Marks)
- What are your main findings around aerodynamic\structural performance (1 Mark)
- What are the qualifiers for your findings, e.g. assumptions you have made, possible artefacts (again, in a non-technical manner), circumstances where the findings should be taken with some caution (e.g. no consideration of extreme weather conditions) (2 Marks)

We are not so much concerned here about the legitimacy\accuracy of what you have found, but that you are able to communicate it clearly without using overly technical language.

You should also include some discussion of areas where follow-up computational work might be needed.

Summary for Technical Expert (3-5 pages) (5 Marks)

This should be a summary that would allow someone with the necessary technical expertise to reproduce your work, and so should include details of your model setup, geometries, meshes, boundary conditions, choice of solver. (2 marks)

Verifications that you performed or would recommend being performed in the future. (1 Mark)

Also provide details of any suspected numerical artefacts or problems that you have identified with your solutions, e.g. reflections, localised mesh issues, poor solver convergence. (2 Marks)

Personal Reflections (1-2 pages) (5 Marks)

This part of the report is more aimed towards 'future you' as a reader (and us as course designers)

- What parts of the process did you find initially difficult, but are now comfortable that you could manage quite easily given the need to do so (2 Marks)
- What parts of the process did you find difficult, and still remain uncertain about. (2 Marks)
- What strategies did you develop (or think about afterwards) that might be useful in future computational work (1 Marks)

Overall Presentation (1 Marks)

Try to write these reflections in as detached a manner as possible. And remember, you do not have to fill the 10 pages. We will be marking quality, not quantity.

Total (16 Marks)