

## Assessment Guidelines & Marking Criteria of your Mathematics Presentation

The aim of this assignment is to practise the skill of presenting a mathematical topic which you have encountered in your third year of undergraduate study (outside of this module) and which you see as a pivotal concept important to understanding. The presentation is to be prepared for an audience of 3<sup>rd</sup>-year BSc students who know Calculus, Linear Algebra and Differential Equations, but not necessarily other maths modules; consequently, *it should not be a "straight teaching" of the concept, and should also address importance of the concept and/or explain its key relevance to the subject.*

The wider applicability of this assignment for the workplace would be to show effectiveness in discussing the importance of a (possibly technical) task, with which you are engaged, to a senior management team who do not have detailed knowledge of your project.

**Your presentation should fall within a 4-5 minute time-limit.**

Your video submissions will be broadly assessed on the following criteria:

- Clear identification of the topic to be promoted
- Organisation and coherence of presentation
- Oral clarity and composure (e.g., accurate verbal descriptions, clear, confident communication, etc.)
- Awareness of the topic for its central importance and relevance
- The pay-off/benefit of engaging with the topic
- Appropriateness and impact of the visual support slides/tools used for the presentation
- Presentational impact for a non-specialist (i.e. for a fellow student who has taken different modules)
- Range of knowledge; quality of mathematical discussion
- Relevance and overall engagement with the assignment brief
- Appropriate resources and referencing of sources

Note that to earn a particular mark on your presentation, it does not have to fulfil that mark individually for each of the above categories; this guideline is to help to show you what we are looking for, and our judgements will be formed on the predominant character of your submission. Evidence of strength in some areas may compensate for weaknesses in others.

Checklist of essential elements required for all presentations:

- ✓ Introducing yourself and giving a title to your presentation
- ✓ Appropriate referencing and bibliography (e.g., lecture notes, books, web resources, etc.)
- ✓ Use of own words, except when quoting a source directly
- ✓ Language: avoidance of inappropriate slang, racist or sexist language

You are free to decide how best to deliver this presentation and will not be judged on the mode of your presentation: more points are not awarded for "using better tech" in your recording and there are no limits to what you might try! You can, for instance:

- do a voiceover of a powerpoint/slide presentation
- record yourself doing a presentation (so that we see both you and your slides)
- just record yourself facing the camera while explaining a topic with some props or a whiteboard
- put your phone facing a blank page and record yourself speaking and writing/showing pictures, etc.

### Assessment Breakdown for Mathematics Presentation:

5 Points	Delivery Ends on time Organised Clear speaking Clear slides/handwriting/props (if used) Appropriate use of resources, bibliography
5 Points	Content Context provided (sets topic against a wider background) Demonstrates understanding Mathematical correctness Key points presented clearly Defines essential or problematic terms
+/-3 Points	Discretionary marks Overall quality of presentation and topic chosen

### Examples of high-quality videos

- ✓ For an excellent voiceover example, see the 3blue1brown Friday Movie on vectors
- ✓ The TED talks and some of the teaching videos model effective lecturing while facing an audience
- ✓ You may have lecturers who write and explain whose techniques you can emulate