Undergraduate Mathematics Seminar Topic Guide

Non-Duplicative

The topic must not be covered in an Ohio University undergraduate Mathematics course.

Appropriate Level for the Audience

The target audience for the presentations is Junior and Senior Mathematics majors.

- Assume all of the audience has taken Calculus (2301, 2302, 3300) and Linear Algebra (3200 or 3210) and that many in the audience have taken Probability (3500), Differential Equations (3400), and Discrete Mathematics (3050 or CS 3000).

- If the topic is accessible without mathematical sophistication equivalent to a Junior Mathematics major, then the level is too low.

- If the majority of time in the presentation would be spent filling in background material so that a Junior Mathematics major could comprehend the topic itself, then the topic is too advanced.

Appropriate Level for the Presenter

(This section is for undergraduate students taking the seminar course.)

- Student presenters are not expected to conduct original mathematical research on the topic. (If they are conducting research for another purpose then they may present it.)

- Student presenters are expected to do background research on the topic and to synthesize material from two or more sources. Topics that do not require such research or that are taken directly from a single source are too simple.

Appropriate Size

The seminar is targeted at 45 minutes.

- An introduction to a new area can be rather broad. However, if the presentation would mainly be listing many things then the topic is too broad. For example, 'Calculus' is too broad.

- A more focused topic can go into details and give proofs. However, (well) less than half the presentation should be about details.

- A topic can include a balance, with a broad view of an area or problem and the details about a few parts of it.

Other Considerations

- The topic should be very interesting to the presenter and also interesting to the audience.

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