## Tips for students:

## How to prepare lectures for the seminar.

Joseph Bernstein March 7, 2007

1. The lecture should be prepared in advance.

This means that you should write the content of the lecture. As a minimum this should be a detailed plan of the lecture containing necessary definitions and statements of results.

It is better if you write down the lecture in some detail. The level of detail may vary - it depends on your personality.

I advise to write down the lecture in such a form that after the lecture you could give me your notes so that I can copy them and distribute to other students.

2. During the lecture the only source you should use is your notes (and of course your head).

It is very bad and counterproductive to use books or papers during the lecture.

The reason is that if you copy some formula or statement from a book to your notes you usually check that it is applicable in the situation you are discussing, you check that you already explained all the notations and notions used in the formula and so on.

Also major statements or formulas in the book usually are followed by some commentaries and explanations and you can think which of them you would like to discuss in your lecture.

If you copy the formula from the book to the blackboard in time of the lecture you physically do not have possibility to take all this into account.

I have seen many times that one usually wastes a lot of time when he tries to copy a formula from the book to the blackboard and explain it (usually it takes several minutes just to find a correct place in the book).

3. About using transparencies.

You can use them if you want, but generally I do not like them.

In principle they are OK to use, but the problem is that most of the people using them put on them too much information.

My problem is that in real time I can not absorb this information and as a result some part of it is lost (usually this is the most interesting part - and definitely the lecturer does not have control over this).

There is some ad hoc rule which I do not quite remember.

Something like this:

- (i) No more than 10 lines on every transparency.
- (ii) No more than 15 transparencies for a one hour lecture.