Introduction Meeting
Erik Boss

EMSEC Seminar 18 October, 2017
What?
Learning to read, write and present science.
What?
Learning to read, write and present science.

Why?
For future profit!
Deadlines

1. Wednesday 15.11.2017 – Exposé
3. Wednesday 17.01.2018 – Final version
4. Tuesday 23.01.2018 – Presentations (tentative)

Note

- The seminar paper, the exposé and the presentation are all in English.
- All deadlines are 23:59 CEST.
- Deadline submission is done by e-mail.
- Attending the presentations is mandatory.
Beware!

- Failing to meet the first (exposé) deadline simply drops you out of the course; failure to meet the subsequent deadlines results in a failing grade.

- The preliminary final version is not a draft. It should require only minor editing after receiving supervisor feedback. Insufficient quality can result in a failing grade.
What are these things you speak of?
Goal
Giving a cursory overview of the topic, the relevant literature and the overall document structure.
Goal
Giving a cursory overview of the topic, the relevant literature and the overall document structure.

Requirements

- 1-page topic summary.
- Preliminary document outline.
- Literature listing.

Again! Failure to hand in an exposé leads to dropping out the course, whereas failing to meet the above requirements leads to a failing grade.
Exposé

Goal
Giving a cursory overview of the topic, the relevant literature and the overall document structure.

Requirements

▶ 1-page topic summary.
▶ Preliminary document outline.
▶ Literature listing.

Again!
Failure to hand in an exposé leads to dropping out the course, whereas failing to meet the above requirements leads to a failing grade.
Requirements

- ~ 15 pages. Contact your supervisor if you have significantly more or significantly less pages.
- Your supervisor may have specific wishes regarding the content.
- If at all possible, have your paper proofread before submission.
Requirements

▶ ~ 15 pages. Contact your supervisor if you have significantly more or significantly less pages.
▶ Your supervisor may have specific wishes regarding the content.
▶ If at all possible, have your paper proofread before submission.

Again!

The preliminary version must be complete with respect to content. Only minor edits should be required afterwards. No todo's, drafts or placeholders.
Simply put...
Process your supervisor's feedback and fix any mistakes you find.
**Goal**
Introduce your fellow students to your topic by means of an awesome presentation!

**Requirements**
- For 1-student topics: 15 minutes + 5 minutes questions.
- For 2-student topics: 20 minutes + 5 minutes questions.
- We expect a well-prepared, well-made, easy-to-understand scientific presentation (no pressure!).

Protip
Schedule a test-run of your presentation with your supervisor.
Goal
Introduce your fellow students to your topic by means of an awesome presentation!

Requirements
- For 1-student topics: 15 minutes + 5 minutes questions.
- For 2-student topics: 20 minutes + 5 minutes questions.
- We expect a well-prepared, well-made, easy-to-understand scientific presentation (no pressure!).

Protip
Schedule a test-run of your presentation with your supervisor.
Tips & Tricks

The write-y bits...
Use \LaTeX\textsuperscript{1}.
  ▶ And BibTex for references.
▶ Use a decent editor (shameless vim/emacs plug).
▶ Use some form of version control (\texttt{git}, svn, etc).
▶ Structure your seminar paper as a scientific paper\textsuperscript{2}.

\textsuperscript{1}Templates: http://emsec.rub.de/teaching/seminars/seminar_ss17/
\textsuperscript{2}Google is your friend!
Literature sources

- Google Scholar³.
  - Often a reliable PDF source.
- dblp computer science library⁴.
  - Get your bibtex entries here!
  - Use cryptobib⁵ for even easier access to references.
- Cryptology ePrint Archive⁶.
  - Lots of researchers publish papers here as well, try citing the original conference/journal publication though.

³https://scholar.google.com
⁴http://dblp.uni-trier.de
⁵https://cryptobib.di.ens.fr
⁶https://eprint.iacr.org
Local Resources

RUB

- Schreibzentrum;
- Zentrum für Fremdsprachenausbildung;
- Psychologische Beratung.

In addition,

- EMSEC's collection of tips/tricks\(^7\).

\(^7\)https://www.emsec.rub.de/teaching/seminars/seminarhowto
A Tale of Two Approaches

Top-down

➤ Structural outline first.
➤ Outline the paragraphs, denoting the core idea and concept of the paragraph.
➤ Fill out the paragraphs.
➤ ...
➤ Profit.

Bottom-up

1. Start writing somewhere, paying little attention to quality.
2. When you are done, improve this section until it makes sense. Iterate early and often.
3. Go back to (1).
It is really annoying!

(seriously, it really is)
Writer’s Block

My tips:

- Warm up! Just write whatever unrelated nonsense is in your head for a few minutes.
- Don't commit yourself to writing more than a few sentences.
- Don't care about the quality. You can improve later.
Tips & Tricks

*The talky bits...*
Scientific Presentations

Common Structure

1. Introduction.
3. Results.

See also...

- http://mesa.ac.nz/2011/02/presentations/
- http://www.cgd.ucar.edu/cms/agu/scientific_talk.html
General Advice: Your Message

- Define your central message.
- Your presentation has only two goals: get this message across and explain why it is important.
- You are successful if the audience is able to remember this message.
Know your audience.

Your primary message may change depending on the audience.

For a mixed expert/non-expert audience, focus on the non-experts.

Maybe have 1-2 slides for the experts so you appear smart.
Someone told me that each equation I included in the book would halve the sales. I therefore resolved not to have any equations at all. In the end, however, I did put in one equation, Einstein’s famous equation, \( E = mc^2 \). I hope that this will not scare off half of my potential readers — Stephen Hawking.
Someone told me that each equation I included in the book would halve the sales. I therefore resolved not to have any equations at all. In the end, however, I did put in one equation, Einstein’s famous equation, $E = mc^2$. I hope that this will not scare off half of my potential readers — Stephen Hawking.

- Equations/algorithms/proofs are tricky. Fine for expert audiences, not so much for non-experts.
  - If you have them, introduce like you would on a blackboard: bit by bit, not all at once.
  - Good visualizations help here.
Good slides make good presentations better, but cannot make a bad presentation good.
Good slides make good presentations better, but cannot make a bad presentation good.

So...

Focus on your presentation, not your slides. Make your slides support your presentation.
Good slides make good presentations better, but cannot make a bad presentation good.

So...
Focus on your presentation, not your slides. Make your slides support your presentation.

Example
Look at some of djb’s presentations... Bad slides, great presentations.
Agenda slides... often serve no purpose and should be removed from most presentations.
My Pet Peeve (Part II)

The Problem

▶ Redundant (most people use the same structure anyway).
▶ Boring.

If you really must...
Use them after you have introduced the topic and motivated your audience.
Good Slides

No hard and fast rules, but good slides...

- utilize images where possible;
- have little text;
- are easily digested;
- have purpose;
- are visually appealing, and
- do not contain everything you are going to say.
Your slides should support what you are saying, not vice-versa.
Your slides should support what you are saying, not vice-versa.

So don't copy-paste your paper to your slides...
Tip #1
Practice. Practice. Practice.

Tip #2
Commit! Be enthusiastic! Be dynamic!

Tip #3
Speak louder and more slowly than you think necessary.
Minor Tips

- Cite your figures and references directly, on the same slide (maybe shortened somewhat).
- Avoid laser pointers.
- Speak to your audience not the screen.
- Avoid your uuhhs, aahhs and so on.
- Record yourself while practicing.
Questions?

Contact me at erik.boss@rub.de.