

Guidelines for Preparing your Great Seminar Presentation

Reading

Read the paper(s) *critically* well ahead (i.e. at least a *Couple of Weeks ahead*) of your presentation. In particular, ask – and answer to yourself:

Motivation:

- What is the paper Really about? Identify the main problem(s) it claims to address.
Are these real, interesting, hard problems? Are you familiar with other solutions to a similar problem?
- What are the paper's main contributions?

Methodology:

- What are the methods used to address the problem?
- Are the methods appropriate for the problem and the type of data? Are there Better methods out there?
- Are there any trade-offs or down-sides in using the proposed method?

Outcomes:

- What are the results?
- Has the problem been solved?
- Is the solution validated, effective and/or correct?
- Was sufficient testing done? Does the test faithfully represent the real-world scenario?

Aftermath:

- What are the paper's main *strengths* and *weaknesses*?
- What is the “take-home” message from the paper?
- What are its implications, and what can be done next?
- ***If you were a reviewer would you accept or reject it? Why? This point is part of your presentation!!!***

Important: *If you don't understand fundamental terminology or are missing any other critical piece of information – find it.*

It may require looking at other books or papers beyond the course's reading list!

Do Not present formulae and terminology quoted from the paper without first understanding what it means!!! *(An exception: You can bring stumbling-blocks for discussion in class...)*

Presenting

When preparing a presentation:

- Remember: **You are presenting a TOPIC – NOT a sequence of PAPER(s) or of Paper Sections .**
- Organize your talk: At all times during your presentation, Know where you come from (*A*), where you want to go (*B*), and how to get from *A* to *B*. *Don't just populate slides with bullets from the paper.*
EACH slide and point you bring up should serve a purpose or answer some underlying question.
- **Note that the best organization for the talk may NOT necessarily follow the structure of the paper(s).**
- Identify the key ideas you want to address – from **all** the papers covered by your presentation.
- **Do Not cover each and every point the papers make.** Carefully choose the points you want to present; This is critical especially when there are two papers.
Remember – You are presenting a TOPIC – NOT a PAPER.
If the two papers you present form a historical continuum (e.g. Emanuelsson et al and Höglund et al), find the common theme, and show how the idea evolves from one paper to the next.
If the two papers provide two approaches to address a similar problem (e.g. Disease Clustering papers) it is a good idea to **focus most of your presentation on just one of them**, and then to compare and contrast it with the other approach, to “drive-home” the essential points/differences.
- Be creative: maximize the use of **simple examples, figures, diagrams, and other visual aids.**
- **Avoid as much as possible complicated formulae or obscure notation** on your slides.

Powerpoint Slides:

Slides are *visual* aids – not a teleprompter to read from. Which means:

Your slides contain the information you want to Show.

Your own notes (which are Not the slides) contain the information you want to Say

HS's Rule for slides and presentations: Show them what you want them to See;

Tell them what you want them to Hear.

Not the other way around....

- Pictures and Diagrams on slides work Much better than lists of bullet points (AND much better than wavy hand movements...) when trying to convey an idea, a process or an image...
- Bullets in a list should all be parallel in structure and organization.
(If Bullets are goals – each bullet should be phrased as a goal.
If they are steps in an algorithm – each bullet should denote an executable step.)
- Each Slide should convey One major point. Plan to spend on average about 1 minute per slide.
On average, a 1-hour talk should have no more than ~40 slides.
Heavily technical slides take longer (thus reducing the number of slides you may be able to cover.)
- Time is always too short: Practice your presentation ahead of class;
Plan for the discussion and the questions time when timing your presentation.

When giving a presentation:

- **Speak To the class;** Face the audience and try to look at them (Not at the slides) as you speak.
Know what you want to say about each slide – and try to avoid reading verbatim from the slides.
- Always use words to denote concepts: If you have notations and letter-variables on your slides, still use real words as you speak: Don't say: "E is..." but rather: "The expectation is" or "The entropy is..."
- Plan your time. If you don't have time – skip the less important points and make sure you cover the important ones. Never try to rush through the whole thing or insist on going through all your slides. Rushing blurs the material, and disengages your audience.
- See Prof. Selim Akl's list for additional excellent points:
<http://www.cis.udel.edu/~shatkay/Course/SelimAklPresentationsAdvice.pdf>

Leading the Discussion

Come prepared to lead a discussion at the beginning and at the end of your talk (and possibly during).

To focus your discussion, frame it as though you are a Reviewer deciding whether to ACCEPT or REJECT a Paper. What are the Pros and Cons of the paper? What is your decision (would you accept or reject)? Why?

***** When presenting in Pairs – One of you should be arguing for the Acceptance, and the other for Rejection. You both need to be prepared to defend your side of the argument – and to involve the class in this debate.**

- Almost all of the questions that you ask yourself while reading the paper (see above) form a good basis for discussion. Especially when the answers are not obvious!
- Any hard-to-understand item in a paper is a good starting point for discussion.
Write down the difficult points as you read, and bring them up for discussion.
- The strong/weak points that are submitted in the hand-in notes by other students are good discussion starters.
Ask about them.
- Other topics for discussion:
 - * How a particular learning technique may be applicable – or inapplicable – to other problems/domains in biomedicine (have some examples ready).
 - * What changes may be necessary to make the method work in this different domain?
 - * How is the presented method different from what we have seen so far?

REALLY IMPORTANT: Assigning Credits

- Use your own words in the presentation. Avoid cut-and-pasting or copying verbatim from the paper.
- If you are using someone else's words verbatim – make clear that this is a quotation.
In most cases – use your own words. Quotations should be reserved to “pearls of wisdom”.
- If using any sources (e.g. examples, figures or clarifications found in other papers, books, the web) – assign credit on the specific slides in which the material is used.

Always List All Your Sources!!!

Shatkay's rule for references and credits:

Your own ideas in your own words – no credit needs to be assigned.

Someone else's ideas rephrased in your own words – provide a citation to your source.

Someone else's ideas And words – show as a quotation AND provide a citation to your source.

Last, and hopefully needless to say, we do expect, encourage, and if we must - enforce, compliance with the University of Delaware's policy on honesty and integrity.

Please refer to <http://www.udel.edu/stuguide/14-15/code.html#honesty> for details.

Student Statement:

I have read and understood the Presentation Guidelines (HO2 above) as well as the Grading Policy (HO1).

Throughout the course, I will create my own slides and presentation materials, reading notes and project, reflecting my own understanding of the papers I read.

If I use Any Material (such as Images, Diagrams, Illustrations or Verbatim – or Almost-Verbatim – Text Passages) that I have not fully-created myself, on Any slide in my presentations or as part of any submitted material, I will provide a Clear and Complete Attribution to the Source directly next to this piece of material.

Student Name: _____ Student Signature: _____

Date: _____