

English Technical Writing

Gerry Rau
Fall 2023 (112-1)
Class 9

1

Feedback

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Helpful

- Seeing differences
 - Between IMRD/IPTC (new partner)
 - Locations of graphics in IMRD/IPTC
 - Between journals/fields (scheme)
- Seeing various problems with Tables

3

My First Oral Presentation

5th Grade

4





Abraham Lincoln

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Be prepared!

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Preparing to Present

Audience,
Attention,
Aim,
Argument

Presentation
Specifics

Work time
and
Evaluation

Assignment
and
Looking
Ahead

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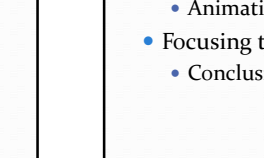
Audience, Attention, Aim, Argument



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Audience (what will they get?)

- Why should they listen to you?
 - What is their motivation for being there?
- What do they already know?
 - What do you know that they do not?

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Attention (get it and keep it!)

- Getting their attention
 - Importance, Interest
- Keeping their attention
 - Graphics
 - Timing
 - Animations
- Focusing their attention
 - Conclusion




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Aim (what will you get?)

- What do you want to convey?
 - Not just topic – what is your main point?
- What do you want to accomplish?
 - Longer term goal



Venison

Extra-lean, nutrient-rich meat from deer and similar wild game, cooks very quickly





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Argument (just like writing!)


- What is your main claim?

If you aim,
you may not hit the target.
If you do not aim, ...
- What is your support for the claim?

What do you know? → How do you know that?

Claim + Evidence + Reasoning = Explanation

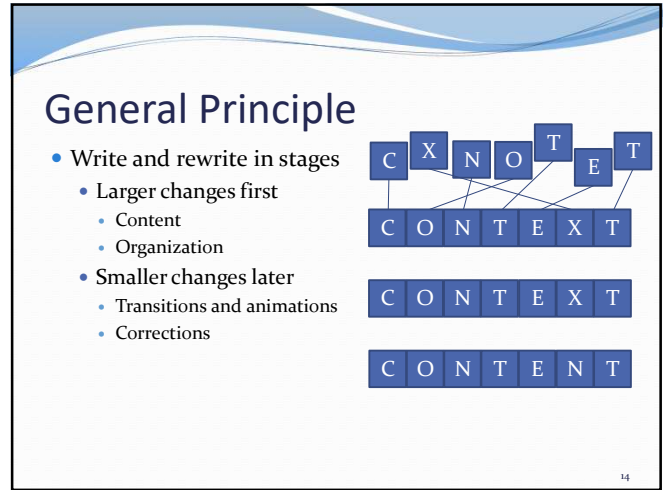
Why does your evidence support your claim?



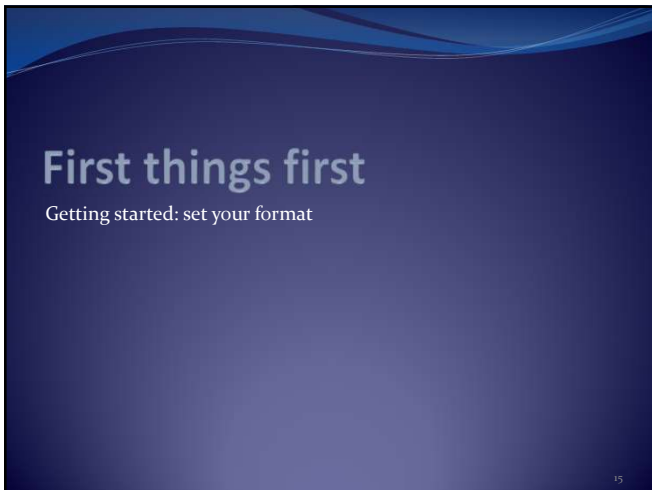
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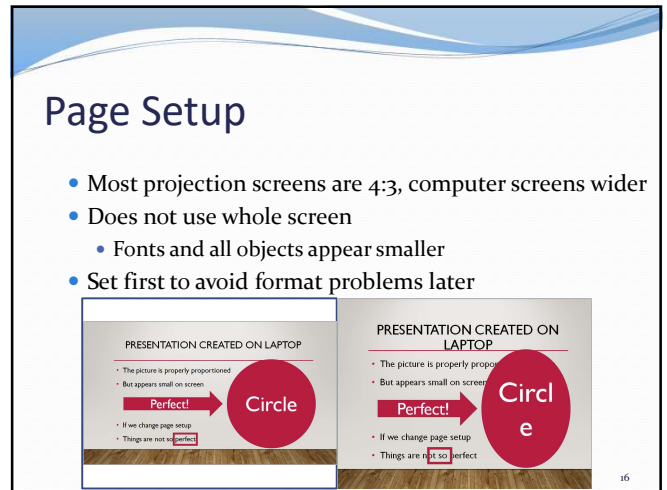
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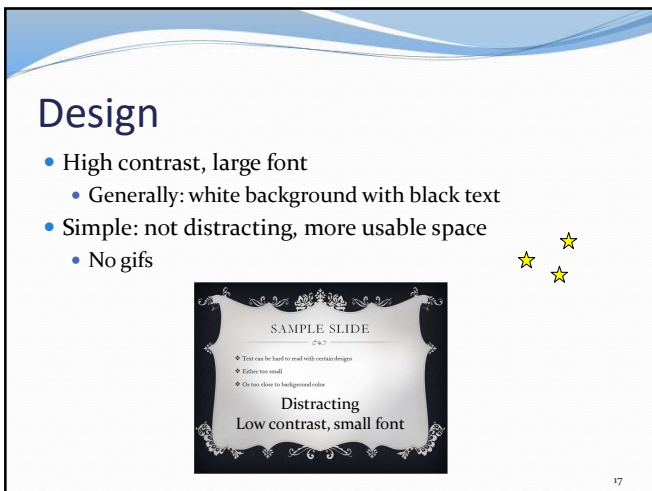
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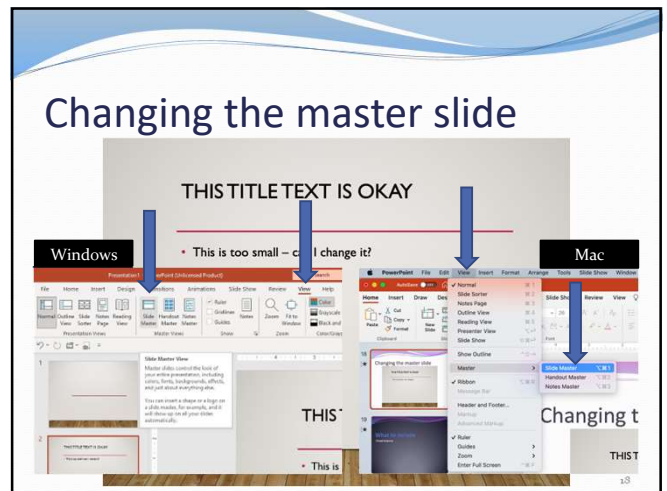
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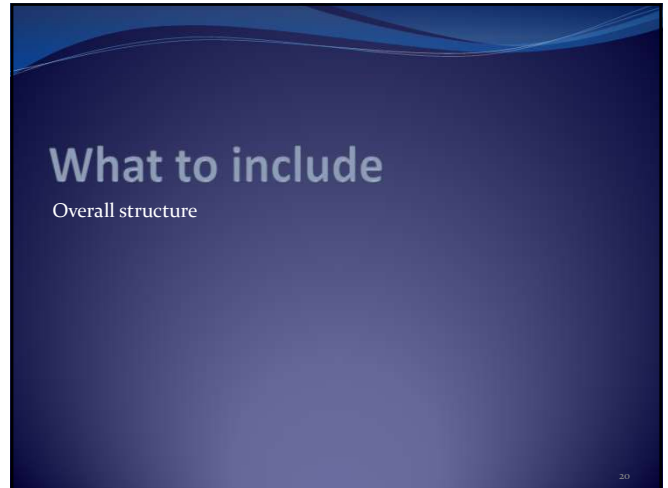
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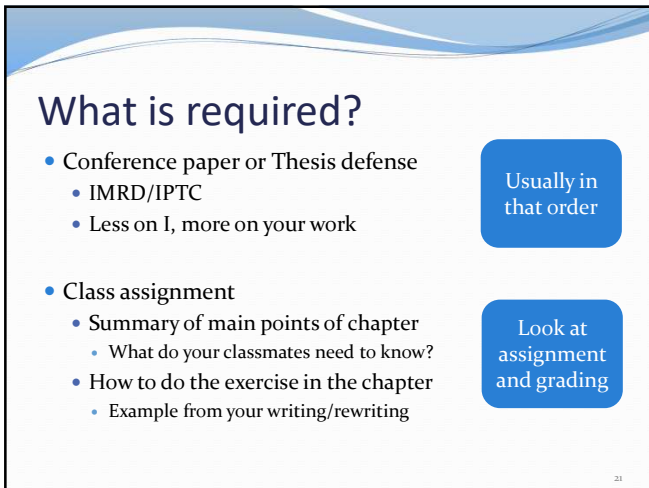
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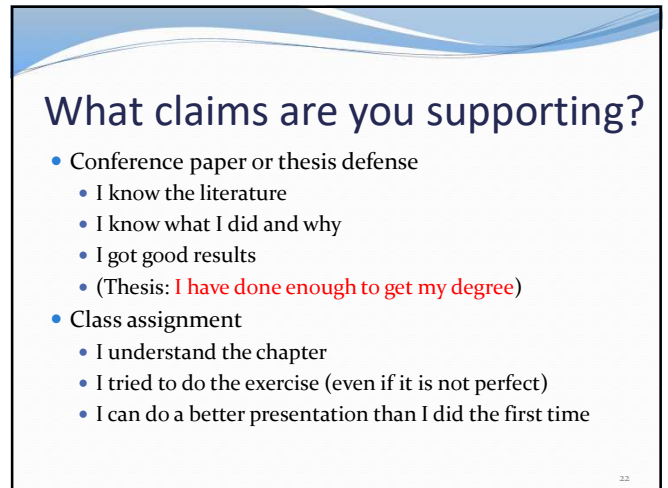
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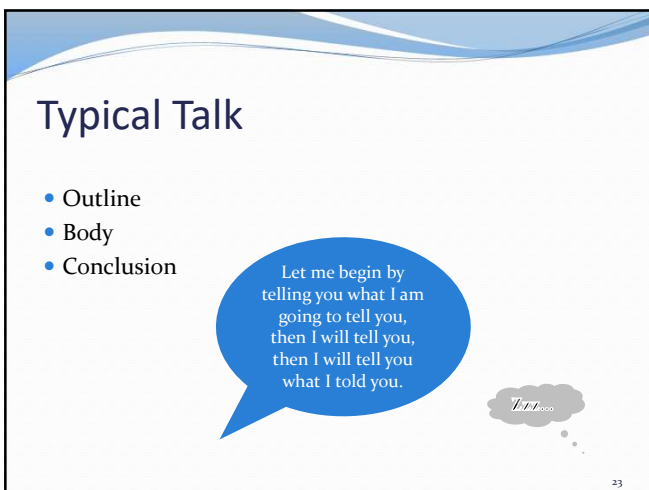
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Even Better Talk

- Attention grabber
- Overview
- ➔ • Tell a story
- Conclusion

"Once upon a time –"
No not that kind of story! ...
"We did it!"

Make it interesting!

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25

Make it Interesting

- Unexpected events/findings
- Breakthroughs
- Feelings



We just added
another piece
to the puzzle

We were excited
when we solved
the puzzle!

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Make it look good

Format and Layout

27

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Text

- Writing one main point per line makes it easier for your readers, because if you write a sentence they will be reading it instead of listening to you.
- Use bullet points, not paragraphs
 - Reading slide = not listening to you
- One main point per line – easy to scan
 - Longer text – consider alignment

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Alignment

- Which is easier to read? Why?

I am going to show 10
abbreviations for 30
seconds, and hope you
remember them 15
minutes later.

I am going to show
10 abbreviations
for 30 seconds,
and hope you remember them
15 minutes later.

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Abbreviations

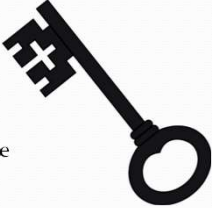
- Show when you use them
 - Not single list when you begin
 - Names shown out of context not remembered
- When speaking about Integrated Circuits (ICs)
 - First time say "Integrated Circuits," let audience read ICs
 - Next time say "ICs," let audience read Integrated Circuits

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Graphics

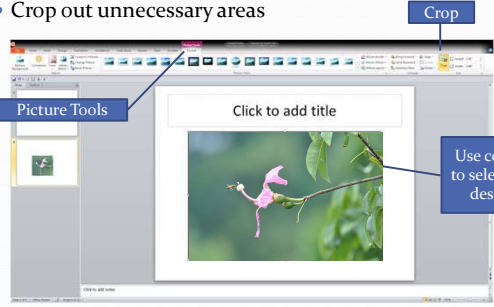
- “A picture is worth 1000 words”
- Graphics:
 - Pictures
 - Diagrams
 - Graphs
 - Tables
- Same principles as graphics in article



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Graphics – Pictures


- Crop
 - Crop out unnecessary areas



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Graphics – Pictures

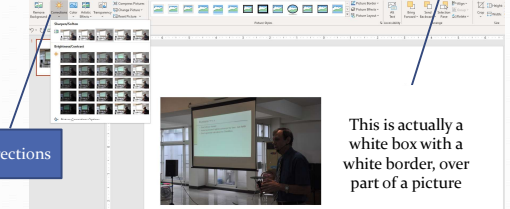
- Keep aspect ratio constant
 - Always adjust size from corner, not side



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Graphics – Pictures

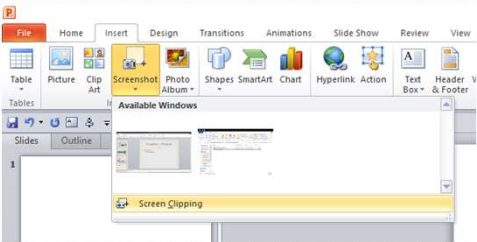
- Corrections
 - Adjust brightness, contrast, other
 - Projector is not as bright as computer



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Graphics – Pictures

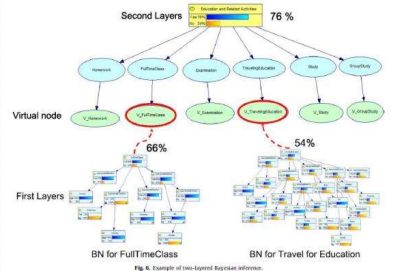
- Insert Screenshots
- Insert Screen clipping – select part of window



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Graphics - Diagrams

- Simplify, readable



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Graphics - Graphs

- Only show what is necessary

Fig. 9 Simulation of RBMC at the RF front-end. The radar transmitted I/Q signals at the output of the mixer (a), and the baseband amplifier (b). The circled areas in (b) indicate where saturation happens. Q/N: quantization noise of a 10-bit data acquisition system.

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Graphics – Tables

- If alignment crucial, import as picture
- Many ways to highlight certain cells

Title Effects				
So	Much	Merge cells		Info
Borders	What	Should	Your	Color
Audience	Look	Pen color	At	First

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Graphics – Tables

- If alignment crucial, import as picture
- Many ways to highlight certain cells

Title Effects				
So	Much	Merge cells		Info
Borders	What	Should	Your	Color
Audience	Look	Pen color	At	First

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Graphics – Tables

- Cannot easily add rows to a table on one slide

1				
2				
3				

- But if I copy this slide, I can add rows on the next slide

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Graphics – Tables

- Cannot easily add rows to a table on one slide

1				
2				
3				
4				
5				

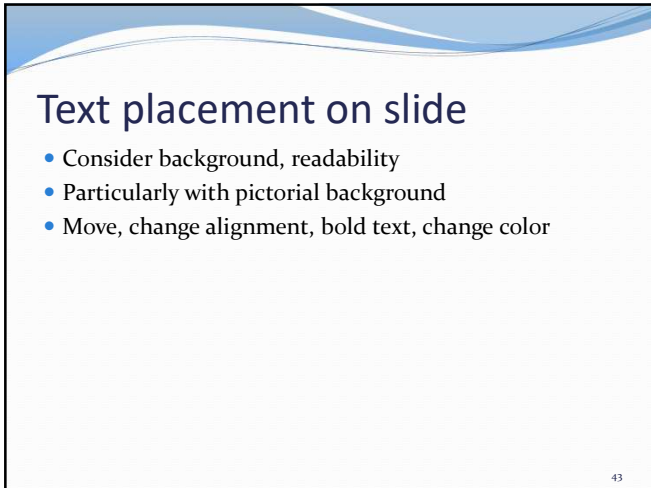
- It looks like I added rows, but it is actually two slides

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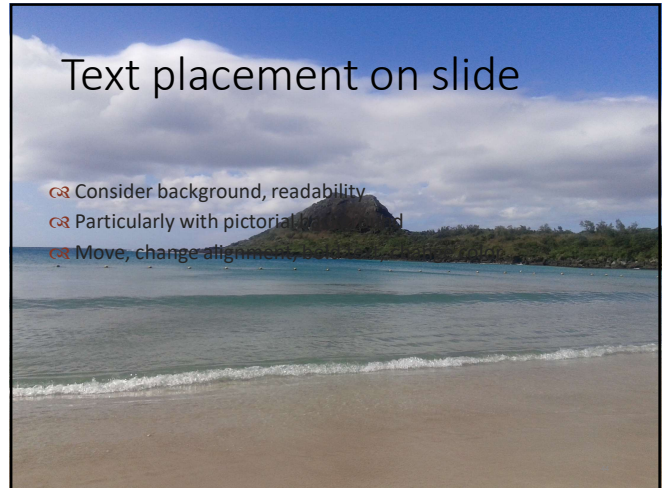
Font Size

- Large enough to read from back of room
- At least 16
- Preferably 24
- Main points can be larger 28

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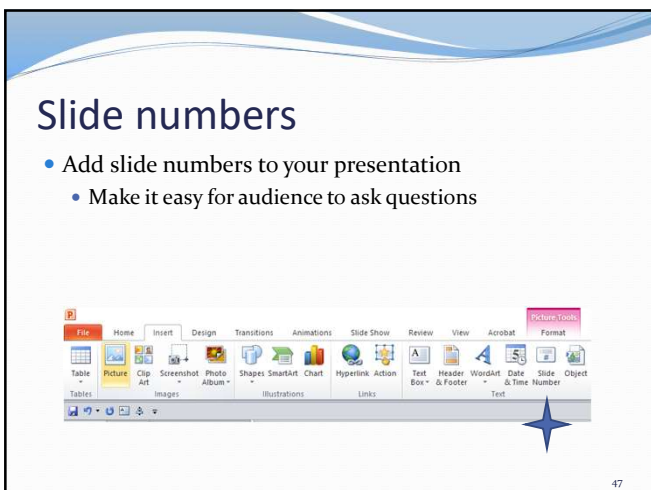
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Animations

- Circle a word or part of graphic with a donut
- Highlight a line with a frame
- Point something out with a shape or text box

Look at this!

- Start “with previous” or “after previous”
Reduces mouse clicks and increases speed

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Animations

- Use to direct attention, not distract
- Not too many types in one slide/presentation
- Consider direction and timing
- Semiotic – which conveys “moving down”?

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Animations

- Motion paths can be useful to show sequence

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Accident Animation

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Motion Paths

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Transitions

- Also semiotic – convey meaning
- Use fade or cut for most slides
- Mark transition points with new transition
- Turn attention to something new

- Do when presentation is complete
- Slides added later have no transition


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You are the expert

- Be confident
- No one knows your topic better than you



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Speaking

- Speaking is a different style than reading
- Speak through slides, not about slides
- Visuals on slide should supplement, not substitute

Speaking is a different style than reading
Speak through slides, not about slides

I mean, just think about the way you talk.
Do you write like that?
Of course not.

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Timing

- Presentation usually takes longer than practice
- Generally 1-2 slides/minute
- Know what you can cut
- If possible "Use presenter view" (slide show tab)
- Allows you to see notes, time, next slide

20 minute talk,
100 slides,
12 seconds/slide

• On your mark, get set, ...

20 minute talk,
10 slides,
2 minutes/slide

• When will this end?

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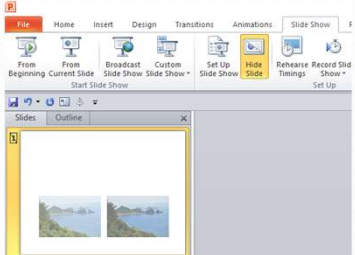
Ending

OKAY	NOT OKAY
• Thanks for listening	• Thanks for your listening
• Thank you for listening	• Thanks you for your listening
• Thanks for your attention	• Thanks for attention
• Thank you	• Thank U
	• Thanks for listen

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Hide slide

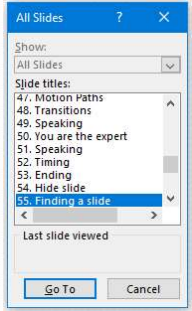
- Unsure whether to delete slide?
- Or want to have it there in case of questions
- Use Hide slide
- Still in order
- Not in show



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Finding a slide

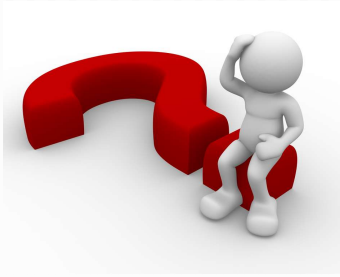
- To move to a slide by number
 - Number, Enter
- To move to a slide by title
 - Control S (Show)



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If you like it, Ask

- Ask how someone did something



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Work time




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Work time

- Final changes, Questions on Description
 - Check that all changes have been made
 - Check that citations and graphics match rubric

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Evaluation



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Half-way through the course

- I told you it would be hard work!
- Was it worth it?
 - Do you understand the structure of articles in your field?
 - Do you understand what makes some better than others?
 - (Easier to read and understand)

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How did you learn?

- What did you use?
 - Read: Textbook
 - Listened: Audio PPTs
 - Watched: MOOC Videos
- Which was most effective, which did you like best?
- Why?
- How could the materials be improved?

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Looking Ahead



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Looking ahead

- How's my grade?
 - 30 points so far (current scores 25.25-29.5, mean = 27.25)
 - +15 points for final description (End of Part 1)
- 55 points in Part 2
- New "Part" on ECourse
 - Oral presentations after written assignments (as Part 1)



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Second half of course

- Introduction of your research article
 - Motivation
 - Necessity
 - Research goal
 - (Foundation)
- At least 8 references
- Plus Title and Abstract

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General goal from now on

- Each week
 - Read 1 new research article and summarize
 - What advantages, what limitations
 - How does it relate to your research or other research
 - Add to your reference list
 - Write at least 100-200 words and revise previous

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Assignment



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1 Turn in

- Final Exemplar Description
 - Last assignment in Part 1
- Do not be late!
 - If something happens, let me know as soon as possible
- Example posted on Ecourse
 - Earned 90% (not perfect, but good)

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Deadlines – a story

- Teaching a community biology course
 - Needed a microscope
- Bid on EBay
 - Bidding deadline was during class
- Last minute works well for Ebay
- Last minute does not work well for academics

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2 Write and Bring

- Initial Title: what is the topic of your research?
- Initial Research goal: what do you hope to contribute?
- If you are not sure, at least bring a description of the general area you plan to work in, keywords

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3 Read

- Chapters 10.1,4; 19.1-2
 - (Next week in class: Exercise 19.1, Argument outline)
- One more article related to your research
 - Read, write a brief summary
 - How is it related to your work? Which component(s)?

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Next Oral Presentation

- Sign up to present your progress
 - Status of your research
 - Status of your writing (whatever stage it is at)
- + Comments/questions about that week's topic
 - (Read the chapter, summarize main points)
- Apply the principles of good presentations
- 8-10 minutes

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Presentations

- 11/14 Planning your writing (Ch 10, 19.1-2)
Exercise 19.1 Argument structure outline
- 11/21 Brainstorming and linearizing (Ch 18, 19.3-4)
Exercise 19.3 Topic sentence outline
- 11/28 Writing and organizing (Ch 20, 21)
Exercise 21.1, 2 Coherence and conciseness
- 12/5 Clarifying your argument (Ch 22)
Exercises 21.1, 2, 3 Connection and connotation
- 12/12 Final revision and final parts (Ch 23, 26.1-3)
Exercises 26.1, 3 Abstract and title

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