



Sept 21: Creating Effective Professional Presentations

Quiz #1:

- **Feedback** from Students for Improvement
- Rubrics for your presentation
- Tips for Making an Effective Presentation

Reading

Naegle, K.M., 2021. Ten simple rules for effective presentation slides. *PLoS Computational Biology*, 17(12), p.e1009554.

Reference

Alley, M., 2003. *The craft of scientific presentations: Critical steps to succeed and critical errors to avoid*. New York, NY: Springer New York.



Your presentation

Recommended slides

- 1) Topic, name, introduction, and objectives
- 2) Finding 1
- 3) Finding 2
- 4) Finding 3
- 5) Conclusion
- 6) List of references

One slide per minute:

The common **rule of thumb** is approximately one slide per minute;

- **More is not better!**
- **5-7 min presentation**
- **2 min for Q&A**



Rubrics for your presentation

A peer review process

- To assess and evaluate each other's work
- To critique each other's work and provide constructive feedback
- To improve your presentation and communication skills

Rubrics for presentation

Modified from: https://www.eiu.edu/hpl/docs/presentation_rubric.pdf

- Each student will be evaluated by their fellow students and the instructor.
- Each category will be assigned a numerical score for assessment.

1 - Unacceptable

2 - Fair

3 - Good

4 – Very good

5- Excellent
- Use the same standard you apply to your own work.
- The scores will be rescaled to a total of 40 pts toward your final grade.

Presenter: _____ Evaluator: _____ Date: _____ Score: _____

C	Scoring Criteria	Comments
Organization	The type of presentation is appropriate for the topic and audience.	
	Information is presented in a logical sequence.	
	Presentation appropriately cites requisite number of references.	
Content	Introduction is attention-getting, lays out the problem well, and establishes a framework for the rest of the presentation.	
	Technical terms are well-defined in language appropriate for the target audience.	
	Presentation contains accurate information.	
	Material included is relevant to the overall message/purpose.	
	Appropriate amount of material is prepared, and points made reflect well their relative importance.	
	There is an obvious conclusion summarizing the presentation.	
	Speaker maintains good eye contact with the audience and is appropriately animated (e.g., gestures, movement, etc.).	
Presentation	Speaker maintains good eye contact with the audience and is appropriately animated (e.g., gestures, movement, etc.).	
	Delivery is poised, controlled, and smooth.	
	Good language skills and pronunciation are used.	
	Visual aids are well prepared, informative, effective, and not distracting.	
	Length of presentation is within the assigned time limits.	
	Questions and Answers	
Suggestions:		



Naegle (2021). Ten simple rules for effective presentation slides.

PLoS Computational Biology, 17(12), p.e1009554.

- 1) Include only one idea per slide
- 2) Spend only 1 minute per slide
- 3) Make use of your heading
- 4) Include only essential points
- 5) Give credit, where credit is due
- 6) Use graphics effectively
- 7) Design to avoid cognitive overload
- 8) Design the slide so that a distracted person gets the main takeaway
- 9) Iteratively improve slide design through practice
- 10) Design to mitigate the impact of technical disasters



A few more tips

A good presentation

(Trent Univ: <https://www.trentu.ca/academicskills/how-guides/how-write-university/how-approach-any-assignment/preparing-and-delivering-oral>)

- Has a focused and relevant message
- Is clearly organized and supported by evidence
- Demonstrates understanding and analysis of ideas
- Is delivered calmly and confidently



A few more tips

Keep It Simple and Clear (**KISS model**)!

(Trent Univ: <https://www.trentu.ca/academicskills/how-guides/how-write-university/how-approach-any-assignment/preparing-and-delivering-oral>)

Text

- Where possible, include a heading for each slide
- Use bulleted points and avoid long sentences (<6 lines per slide)
- Proofread carefully for spelling and grammar

Figures and Images

- Ensure images are clear and relevant
- Label all figures and tables
- Put units beside numbers on graphs and charts



Use a Template

<https://www.mcgill.ca/skillsets/files/skillsets/powerpointguidelines.pdf>

- Use a set font and color scheme.
- *Different* **styles** are **DISCONCERTING** to the audience.
- You want the audience to focus on what you present, not the way you present.

Colors

- Reds and oranges are high-energy but can be difficult to stay focused on.
- Greens, blues, and browns are mellower, but not as attention grabbing.
- Reds and Greens can be difficult to see for those who are color blind.



Avoid These Combinations

- Examples:

–Green on Blue

–Dark Yellow on Green

–Purple on Blue

–Orange on Green

–Red on Green



Don't !



Colors

- Large Hall Events 
 - Avoid **White** Backgrounds
 - The white screen can be **blinding** in a dark room
 - **Dark Slides** with **Light Colored Text** Work Best



A few more tips

Delivery

(Trent Univ: <https://www.trentu.ca/academicskills/how-guides/how-write-university/how-approach-any-assignment/preparing-and-delivering-oral>)

- **Practice:** Rehearse
- **Stay Calm:** speaking to a smaller group
- **Pace and Volume:** Take it slow, loudly and clearly
- **Body Language and Eye Contact:** eye contact with your audience
- **Answering Questions:** Leave time to answer questions
- **Share your Personality:** Try to have some fun (yourself)



Term Paper Guidelines

Submit your **independent** term paper in Microsoft Word or PDF format by **4:00 p.m. on Dec. 17**.

The term paper is limited to a **maximum of 4 pages** (12-point font, single-spaced, with standard 1-inch margins), excluding tables, figures, and references.

Use of generative AI tools is permitted for:

- Brainstorming topics and research questions

- Identifying potential literature and search keywords, with all sources independently verified

- Checking and improving grammar, clarity, and language

Generative AI tools may NOT be used to:

- Generate substantial portions of the paper or original sentences and paragraphs

- Generate figures or other illustrations for the paper

All tables and figures must be of **high quality** and include **detailed, self-explanatory captions**. If a table or figure was not created by you, its original source must be properly acknowledged.

In-text **citations** should correspond to the reference list, with consistent formatting throughout.

All references must be **formatted consistently**, following the citation and reference style of a scientific journal.



Term Paper Guidelines

The following structure is recommended for your term paper:

- **Introduction:** Background, key challenges, knowledge gaps, objectives, etc.
- **Methods:** Data sources, analytical methods, and other relevant approaches.
- **Results:** Key findings, lessons learned, research needs, tables, figures, etc.
- **Conclusion:** A concise, synthetic summary of the major findings and implications, without unnecessary repetition.
- **References:** Use a consistent citation and reference format throughout.

Global Connections: Dairy production in Kazakhstan

PM Mamin holds extended meeting on livestock development

25 December 2019 19:05

Share in: [VK](#) [f](#) [g](#) [t](#) [in](#) [p](#) [w](#) [a](#)



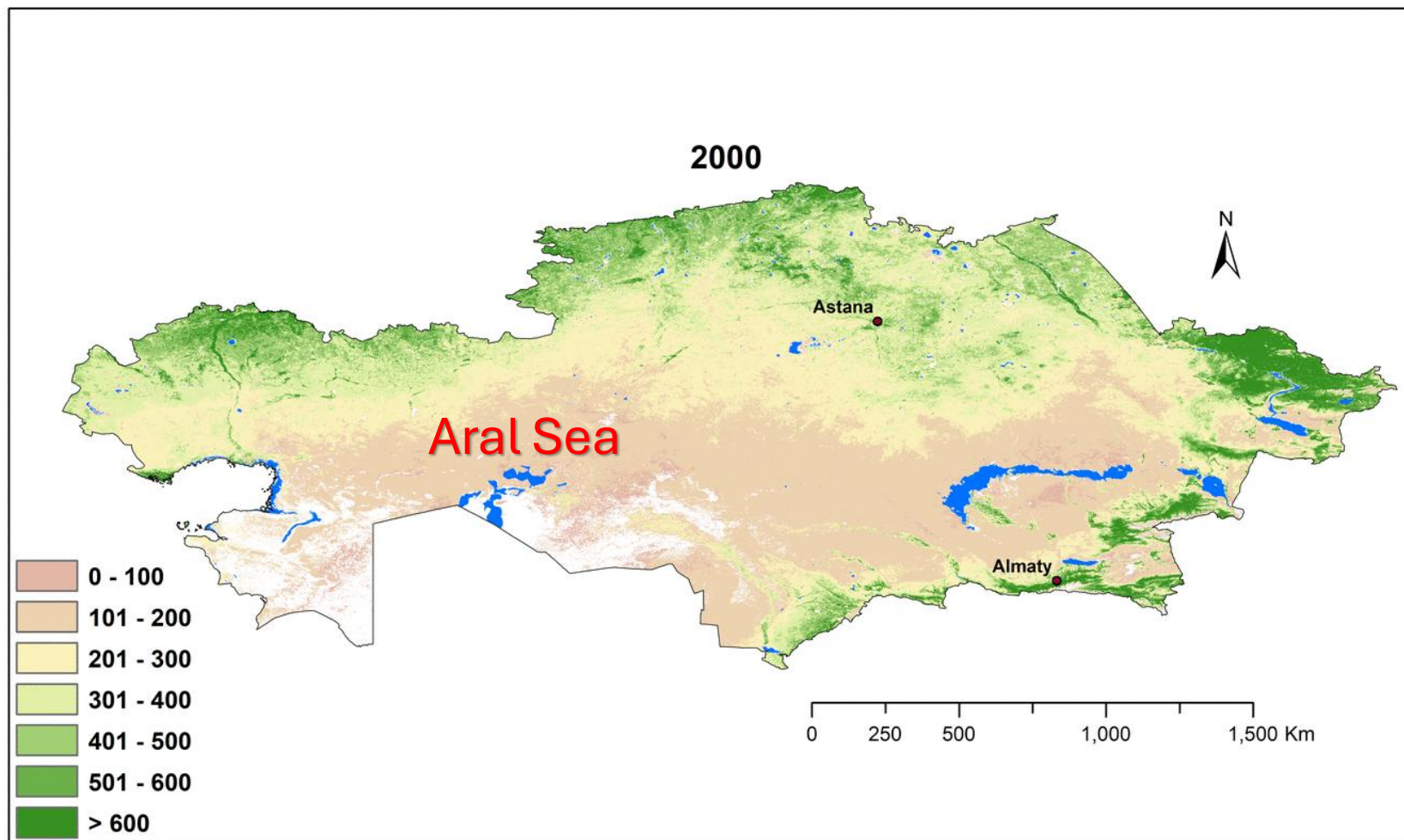
NUR-SULTAN. KAZINFORM - Prime Minister Askar Mamin chaired a meeting on the development of beef cattle breeding.

- A sectorial program for the development of livestock farming is being implemented in the framework of the State Agro-Industrial Complex Development Program for 2017-2021.
- Kazakhstan is planning to increase the volumes of its meat exports by 2.5 times.
- The main importers of the meat products are Russia, Azerbaijan and Iran.
- Residents of Turkey, the United Arab Emirates, China, Russia and Iran are interested in the meat products from Aral Sea.



Are there enough NPP to support this large livestock?

Dynamics of net primary production (NPP) of the ecosystems in Kazakhstan from 2000 through 2014



Field Trip to Kostanay – a boarding region with Russian



Modern
facility and
equipment
from Italy,
Germany,
Japan, others





The Tale: Russian Food Table

1) So the reason for more crop/livestock is to satisfy Russians' food table

2) Italy, Japan, China and others all help

3) Russia needs import dairy products regardless of its large lands

4) Economic depression in Russia



5) USA & NATO Countries imposed sanctions on Russia

In 2014 & 2022, Russia interfered Ukraine

Are USA & NATO countries responsible for the shrinking pace of Aral Sea, at least partially?

Or Shall we blame Russians – an easy target

Putin was never a fully-fledged climate change
Addressing a climate conference in 2003, Put
warmer weather so people spend less on fur

Technology & Ideas

Even Putin Is Now Worried About Climate Change

Russia has dropped its doubts about joining the Paris accords.

<https://www.bloomberg.com/opinion/articles/2019-09-24/putin-is-finally-worried-about-climate-change>

By Leonid Bershidsky.

September 24, 2019, 12:00 AM EDT *Corrected September 24, 2019, 3:01 AM EDT*



Russian bears. Photographer: Alexey Nikolsky/AFP/Getty Images

Leonid Bershidsky is Bloomberg Opinion's Europe columnist. He was the founding editor of the

After years of procrastination, Russia, the world's fourth-biggest greenhouse gas emitter, has officially joined the Paris climate agreement, which it signed in 2016. It shows that President Vladimir Putin's views of climate change are

LIVE ON BLOOMBERG
Watch Live TV >
Listen to Live Radio >

IBM IT Infrastructure
You need to talk
about intelligent
architecture.
Learn more



Sept 23: Major Consequences of Climate Change

Update (quiz 1); Student feedback

Foci of the Day

Climate changes occur across both time and space, producing:

- **Direct impacts**
- **Indirect impacts**
- **Positive feedback loops** driven by human behavior and climate interactions

Well known consequences

All of these must be considered from a **global perspective**.

Reading

Levin, K., Boehm, S., & Carter, R. 2022. 6 Big Findings from the IPCC 2022 Report on Climate Impacts. *Adaptation and Vulnerability*.

https://www.wri.org/insights/ipcc-report-2022-climate-impacts-adaptation-vulnerability?utm_source=chatgpt.com