# College Writing Seminar (INTD100): Week 2 Notes

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Whittier College Department of Physics and Astronomy

## **Summary**

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**Week 2**: Concise writing II: In Week 2, we will focus on reading a piece of science writing, and creating your *own* writing that tailors the story to a particular audience.

- Exercises: work in teams to produce a piece of science writing intended for a broad audience that weaves together information from a variety of sources: (a) a TED talk (b) a scientific journal article (c) and resources like Wikipedia and Google Scholar
- Homework: writing a post designed for social media about a piece of science that grabs the attention of a wide audience, and attempts to convince that audience that the science is interesting
- Exploration topic: Black hole observations

# **Group Project**

**Instructions**: Systematically random groups (next slide)

- 1. Choose one of the following four topics on the following slides
- 2. Choose a *corresponding author* who will create a Google Document and share it with the others
- 3. Select a number of sources pertaining to the topic
  - TED talks
  - Scientific journals from arXiv.org and scholar.google.com
  - Sources located on Wikipedia
- 4. Create a map or outline with Coggle.it or other tool that summarizes recent discoveries
- 5. Write a 1 page, single-spaced, 12 point font summary ( $\approx 800-1000$  words)'
- Bonus points: including a separate bibliography, correctly formatted

- 1. Grace Cooper ... Group A
- 2. Zack Duhala ... Group B
- 3. Juan Estrada ... Group C
- 4. Jusraunaq Farmahan ... Group D
- 5. Mateo Gomez ... Group A
- 6. Elise Hansen ... Group B
- 7. Wyatt Killien ... Group C
- 8. Kyle Miller ... Group D

- 1. Eliot Moser ... Group A
- 2. Rudy Reyes ... Group B
- 3. Nick Reynolds ... Group C
- 4. Paulina Valdez ... Group D
- 5. Andrea Wainwright ... Group A
- 6. Natasha Waldorf ... Group B
- 7. Emma Walston ... Group C

#### Science Topics

- 1. Event Horizon Telescope and the First Picture of a Black Hole
  - What is long-baseline interferometry?
  - What are the properties of the black hole observed?
- 2. LIGO, Virgo and the First Neutron Star Black Hole Merger
  - What is a neutron star?
  - What is a black hole neutron stare merger?
- 3. IceCube Neutrino Observatory
  - What is a neutrino?
  - What is IceCube Neutrino Observatory and where is it located?
  - What major discoveries have they made so far?
- 4. Anything related to COVID-19 and the pandemic
  - How is the rate of spread quantified?
  - How fatal is the virus, and how does this vary for people?

#### Source classes

- 1. TED talks: surprisingly useful at the start: https://www.ted.com/talks/katie\_bouman\_how\_to\_take\_a\_ picture\_of\_a\_black\_hole?utm\_campaign=tedspread&utm\_ medium=referral&utm\_source=tedcomshare
- 2. Wikipedia has more sources: Event Horizon Telescope https://en.wikipedia.org/wiki/Event\_Horizon\_Telescope, references section leads you to arXiv.org with the exact set of references to journals
- arXiv.org and scholar.google.com, as previously discussed, leads to journals
- 4. NewScientist, Space.com, Scientific American, etc.

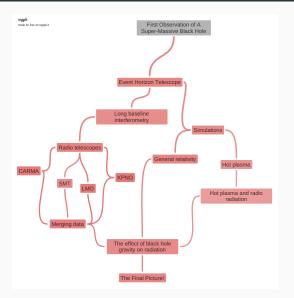


Figure 1: Black hole observations and Event Horizon Telescope.

#### Sources to Outline: Which details to cut?

- 1. Kill your darlings
- 2. Hierarchy of detail: which level of detail to cut?
- 3. Using analogies to replace finest details, equations
- 4. Cite or quote experts where appropriate

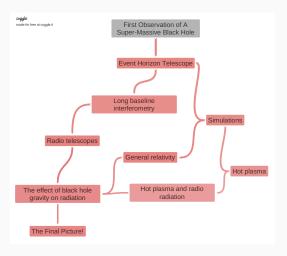


Figure 2: Black hole observations and Event Horizon Telescope, take 2.

# Audience

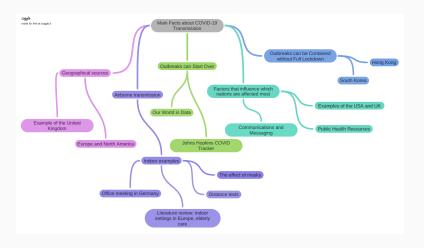
**Example: COVID-19 for a General** 

#### Review of general steps:

- Build a small list of sources
- Create a map or outline
- Write for each bubble or branch
- Edit and polish the finished tract

How do you ... start ... building a set of sources? The first one is a general article (written very well, sourced by a credible expert) for a general audience with links to technical work.

- "5 things scientists know about COVID-19 and 5 they're still figuring out." Karen Frances Eng for ideas.ted.com
- 2. "Tracking the Cornonavirus in California." LA Times
- 3. https://coronavirus.jhu.edu/map.html
- 4. https:
  //ourworldindata.org/coronavirus-data-explorer



**Figure 3:** This is an example of a mind map of the 5 things article.

This could be a basic strategy in this extended example:

- 1. Start with the 5 things article
- 2. Branch off to the technical work
  - What is research, and what is basic public health information
  - What is peer-reviewed versus non-peer-reviewed work
- 3. Decide how much detail to keep from each branch
- 4. Interpret the graphs and the numbers: a few tips
  - Never neglect the axes, always...ALWAYS define the axes for the reader
  - When describing shapes or curves or points on a chart, always use precise language
  - Avoid vague adjectives
- 5. Polish: use the delete button, use metaphor where appropriate, keep details in a hierarchy

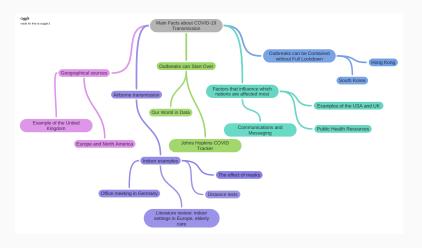


Figure 4: This is an example of a mind map of the 5 things article.

**Collaborate on Google Docs**: Go to Google Docs and log in with your Whittier College credentials. Click on Shared with Me, and you should see the agenda page for today entitled Concise Writing,

- 2. Using the Coggle map I've created, let's start writing!
  - 1. Group A: Pink branch
  - 2. Group B: Purple branch
  - 3. Group C: Teal branch
  - 4. Group D: Blue branch
  - 5. Dr. Hanson: Lime branch

Aaaaand...go!

# Conclusion

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**Bibliography**