

# STA303H1S/1002H Module 2

## Professional skills for data analysis

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# Our plan today

- Two truths and one lie / introductions
- 'Netiquette' for class
- Module 2 overview
- Joins
- Mini-portfolio
- Upcoming assessments
- To-dos
- Quick break (hopefully)
- Office hour (in same call)



Image source: <https://www.shopify.com/blog/business-plan>

# Reminder: 'Netiquette' during class

To keep chat a useful and friendly place, please abide by the following:

- Don't send **private messages** to ask questions
  - similar logic to Piazza, the answer will help everyone
  - if it really should be private, it should be an email (on anon Piazza post)
- If I have **missed your question**, it is okay to post it again
- **Stay on topic!** This helps to not distract your peers and makes it easier for us to keep up with questions.
- **Download a copy of the slides** from the [course overview](#) page to skim through while you wait for class to start. You may see that I've already answered your question and can save yourself the effort.
  - My first years would often ask questions to which the answers were literally on the slide in front of them. I am always happy to clarify things, though!
- Be **kind** to each other.

# Module 2 overview

## Subtopics

- Tidy data
- Student grades case study




## Resources and readings

- Content in the [course guide](#)
- 📖 Wickham & Grolemund. *R for Data Science*. 2017 [Chapter 3: Data Visualization](#) and [Chapter 5: Data transformation](#)
- Student grades case study
  - 📺 3 videos, and
  - 💻 associated coding activity

## Subtopics

- Why should we be ethical?
- Getting data
- Analyzing data
- Making decisions

## Resources and readings

- Content in the course guide
-  Motulsky, H.J., 2014. *Common misconceptions about data analysis and statistics*. <https://doi.org/10.1007/s00210-014-1037-6>
-  Lum, K & Isaac, W. *To predict and serve?*(2016). <https://rss.onlinelibrary.wiley.com/doi/full/10.1111/j.1740-9713.2016.00960.x#sign960-bib-0001>
-  Aschwanden, C. (2015). *Science Isn't Broken: It's just a hell of a lot harder than we give it credit for*. Retrieved from <https://fivethirtyeight.com/features/science-isnt-broken>

## Subtopics

- Why communication is important
- What we can learn from Churchill's mother
- Common report components
- Paraphrasing

## Resources and readings

- [Content in the course guide](#)

# Joins

**Join me (JupyterHub interactive)**



# Mini-portfolio

The mini-portfolio is due February 3 at 3:03 p.m. The instructions are best viewed directly in the course guide or on JupyterHub as it won't be submitted through Quercus, but Markus.

**Instructions**

**Template on JupyterHub**

# Upcoming assessments

# Module 2 writing

## Link

## Prompt

Read *Science isn't broken* (Aschwanden, 2015) using the *previewing* and *skimming* strategy outlined below. Discuss what you learn from the article, with a focus on what you **notice about your own thinking** when playing with the "*Hack Your Way To Scientific Glory*" interactive. Make sure you paraphrase appropriately (see [Module 2 paraphrasing section](#)) and add the reference for the article. (It is okay to put the reference by itself on a second page, if required.)

# Pre-knowledge check workshop next Wednesday (in class time)

Earn 0.5 points towards your knowledge basket\*!

This counts even if you didn't do the knowledge check (folks who joined off the waitlist take note.)

There is also a *no points* practice version of the pre-knowledge check available now.

\*unless you've already earned the full 1 point for completing + scoring 80%+

# Professional development task proposal due Feb 3 (at 3:03 p.m. ET)

[Task overview link](#)



[Specific proposal instructions](#)

The task you choose must be clearly relevant to improving your **communication** and **collaboration** skills as a statistician or data professional. I have given several examples of possible tasks, with potential resources, on the instructions page. BUT you can choose anything that fits this purpose. You can heck ideas with me before submitting, either via office hour or Piazza.



*If a tree falls in a forest, and there's no one around to hear it, does it make a sound? Or, more relevant to this course, if you do a data analysis and can't share it with anyone in helpful ways, did you really do anything?*

# To do

-  **Module 2 writing**
  - *Create* phase due Jan 28 at 3:03 p.m.
  - *Assess* phase due Feb 01 at 3:03 p.m.
  - *Reflect* phase due Feb 04 at 3:03 p.m.
-  **Professional development proposal**  
due Thursday, Feb 3 at 3:03 p.m. ET
- **Mini-portfolio** due Thursday, Feb 3 at 3:03 p.m. ET
- Make sure you're up to date with the course announcements
- Read (and save) the syllabus!
- Join Piazza

Have a great week!

Next Wednesday: Pre-knowledge workshop