## Outcome:

**Create an ePortfolio of 3 pieces of BS that you have taken on and investigated/refuted to show that you can implement the skills learned in this course.** Skills include: identifying BS through a variety of techniques discussed by Carl and Jevin, critiquing and creating visualizations, using R, and crafting arguments that call bull with effective techniques to shift bullshitter minds. This project also includes a final learning reflection.

## Step I: Find Bullshit

For the final project, find three contemporary documented pieces of bullshit that fit the three criteria below. By ***contemporary***, I mean you should use techniques from the class to spot them - e.g. don’t google “bad visualization” - it should be worth your time to investigate and refute. By ***documented*** I mean you can’t just recount a conversation of BS - it should be written/recorded. You will need to investigate each piece of bullshit as part of Step 2. By ***criteria****,* I mean I want to see bullshit investigation and refutation techniques that span your learning in the course. You might think of these criteria each BS matches exactly 1 criteria, but you might also have BS that spans more than one - if so, that is okay, as long as all three are covered and you have three BS pieces to debunk.

1. **Visual BS Busting**: Find visual bullshit to debunk, evaluate it with the visualization rubric ([Data Viz Rubric](https://docs.google.com/document/d/1wLfn0jxz249VKEz29dzh_686HizOb4szrkg0ln3PP_c/edit?usp=sharing)) co-created in class. (In Step II you will create a better visualization, so make sure this is something you can make better).
2. **BS Busting with R**: At least one should require the use of R to either confirm the truth or refute BS. If you plan to use R to make the visualization in #1, then you still need 3 pieces of BS, so this can just be another fake news/BS piece that you refute.
3. **Public BS Busting:** At least one should generate something that will be deployed to counter/refute the bullshit publically, and you should track the effectiveness of deployment (not a perfect study, quotes/responses from those that see it or documentation about whether the bull was pulled will do). If you plan to use use the product form #1 or #2 to deploy publically, then you still need 3 pieces of BS, so this can just be another fake news/BS piece that you refute.

**Note:** All bullshit sources should be cited, so make sure you keep records of where you collected the bullshit from. To scaffold the finding of all three, the selections of BS will be shared one at a time on discussion forums - see Lyceum for prompts. The BS do not have to be related, but sometimes that can create an interesting cohesive storyline for your portfolio. For example, one student took an article a friend shared on social media with several pieces of BS inside and debunked at least three of the article's main points with a public refutation. Another student looked at the Tweets of the same person/organization that are particularly damaging and debunked each.

## Step II: Call bullshit

Design and implement a refutation technique for each piece of bullshit. Make sure the criteria in Step I has been met.

1. **Visual BS Busting**: Create a better evaluation for your visual BS, then grade your visualization with the [Data Viz Rubric](https://docs.google.com/document/d/1wLfn0jxz249VKEz29dzh_686HizOb4szrkg0ln3PP_c/edit?usp=sharing) co-created in class. Hopefully you got a 10/10, but if you didn’t, explain why.
2. **BS Busting with R**: At least one should require the use of R to either confirm the truth or refute BS. If you plan to use R to make the visualization in #1, then you still need 3 pieces of BS, so this can just be another fake news/BS piece that you refute.
3. **Public BS Busting:** Create a refutation that is appropriate for the fake news and the audience at hand. Track the effectiveness of deployment (not a perfect study, quotes/responses from those that see it or documentation about whether the bull was pulled will do). Then grade your refutation with the [Refutation rubric co-created in class.](https://docs.google.com/document/d/1vISlgViSJiQjTP6hfHT6Us33wAzCOX7gTyaNzjqI1yU/edit?usp=sharing) Note: if you plan to use use the product form #1 or #2 to deploy publically, then you still need 3 pieces of BS, so this can just be another fake news/BS piece that you refute.

**Note:** All bullshit sources should be cited and refutation techniques should be identified/named in the description in your ePortfolio, connecting what you did to our class discussions/content. Make sure you include all rubrics in your portfolio (including both the pre- & post- viz rubric). You might find that something you chose for BS actually isn’t complete BS or ends up having truth. This is okay. Sometimes our bias leads us to suspect things that are true as false and it is good also to have times where you question your own bias as BS!

## Step III: Put together portfolio of bullshit refutation

When you put together the portfolio, each piece of bullshit should include:

* The original bullshit, (cite source)
* Your refutation,
* A short narrative about the technique you chose and how you refuted the bull (cite sources),
* Which of 1-3 this bullshit exercise satisfies,
* Supplementary documentation as required: Visualization rubric for #1 (for both the original BS and then for your better viz), R code for #2, and Deployed counterbull for #3 (with the refutation rubric grading it).

You will also need to include a final reflection (see Step 4).

You may use any website platform you would like for the ePortfolio. Below I outline two possible structures for your ePortfolio and recommend website platform options which are supported through college resources:

* One main page with a tab for each BS: homepage that creates a project overview with reflection and then links to each piece of BS on a separate page, each page following the outline above. Google Sites is an easy tool for this as it is part of the Google Apps using your bates.edu account. Course AT, Ben van Paassen, can help with this platform.
* One page: Another way is to create your portfolio is create a main page that has all three BS pieces, and uses embedded links to provide the supplementary information and reflection in the outline above. Just make sure the links work and are clear. For this format, I recommend Adobe Spark Page, which is free. Here are [step-by step instructions](https://docs.google.com/document/d/1OFDNq9iuGgt2nD29M6_F4qdxJCXKvl03bErY1TBBe-E/edit?usp=sharing) - note: do not use your @bates.edu email!!! Dr. Stephanie Wade and many of the ARC tutors can provide remote support for Adobe Spark. All of ARC's remote tutoring services can be accessed at ARC's [Remote Tutoring Page](https://www.bates.edu/academic-resource-commons/remote/).

## Step IV: Reflect on Calling Bull

Return to your Self-assessment from Week 1 and fill out the Final portion of the self-assessment. Then write a 1-2 page (600 words) reflection on the whole semester and on your final project. Did you achieve your learning outcomes throughout the semester? What did you learn? What was your favorite part? What were the challenges? How did the ePortfolio help you advance your skills and showcase your learning?

## Grading rubric

|  |  |
| --- | --- |
| Criteria met for #1 (Forum week 5) | \_\_\_/5 |
| Criteria met for #2 (Forum week 5) | \_\_\_/5 |
| Criteria met for #3 (Forum week 6) | \_\_\_/5 |
| Peer review of ePortfolio (Forum week 7) | \_\_\_/5 |
| Overall work on refutation | \_\_\_/15 |
| Overall ePortfolio look and feel | \_\_\_/10 |
| Final self-assessment (5 pt) and Final reflection (10 pt) | \_\_\_/15 |
| **Final grade** | **\_\_\_/60** |

## FAQ:

**Q: Given that two of my refutations (Visual and R) will fall under the first piece of BS, what do I need to do for a third piece?**

A: So in this case you have BS piece 1 which satisfies Visual and R. BS piece 2 satisfies Public refutation. Now BS piece 3 can be any kind of refutation (does not need to be public, but does need to showcase some refutation skill). For that BS piece 3 - plan at least 2 paragraphs which can be the context in which the BS occured, why it is BS, how you are drawing on the class skills to say why it is BS, etc.

**Q: Where do we put the rubrics? How much information about the grade do you want?**

A: You should use the detailed rubrics to illustrate your grades for each section/category for the Visual and Public refutation BS portions. In total, I will be looking for 3 rubrics, one for before viz, one for after viz and one for public refutation. You can provide this level of detail directly copied and pasted in the portfolio, or attach the detailed rubric through a Google Drive link (permissions should be open to both Ben and I) and provide a summary of findings in the main webpage of the portfolio.

**Q: How should we do a public roll-out for the third category of refutation?**

A: This depends on the context. If it was BS you saw on social media, you should refute directly in context and provide screenshots of evidence. If it was BS that happened in person, you should refute in person probably - or go back to that person later - and then you'll have to recount the story of it. If you are planning a refutation out of context, like you saw something in the paper, but no one else was reading that with you, so you have to force the conversation about it - you'll have to set up the context really well and find a way to engage peers or parents or some set of folx (again, on social media, through email, and/or should them your portfolio) and then you have to have some way of collecting feedback on your refutation.