

Due date of this homework: Monday, September 2nd, 2024 at 11:59:59.

1. All of your homework assignments should ideally be typed. So you have two options: you can torture yourself by using MS Word or make life easier and learn how to use \LaTeX . Please use whatever software you're comfortable with. \LaTeX produces a much better-looking document and typing it in is super easy, especially when typing equations and formatting figures. Please go through this 30-minute guide:

- https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes
- <https://www.overleaf.com/learn/latex/Tutorials>

For this problem, I want you to type the content of this PDF

https://www.dropbox.com/scl/fi/ts5s1yu1hcao7n6fc1e5h/sample_homework.pdf?rlkey=1w6f7b608v8omy4b03wzdl=0

which I will also upload on Brightspace. Try to get it as close as possible to the PDF.

2. One of the core objectives of the class is to improve communication skills of engineering topics. Engineers get a bad reputation for communicating in an effective way. For this homework:

- Thoroughly read the ASCE Report Card 2021. Here's some links:
 - <https://infrastructurereportcard.org>
 - Executive summary: <https://www.infrastructurereportcard.org/wp-content/uploads/2020/12/2021-IRC-Executive-Summary.pdf>
 - Longer version: https://infrastructurereportcard.org/wp-content/uploads/2020/12/National_IRC_2021-report-2.pdf
 - Infographic: <https://www.asce.org/-/media/asce-images-and-files/about-asce/annual-report/2021-asce-annual-report-infographic.jpg>

- Prepare a 2-3 minute video about a summary of the report. Essentially, I want you to pretend that you're a journalist who's covering the findings of this report. I will talk more about this homework in class, but essentially I want you to produce a compelling case for spending more on the US infrastructure. You can choose to focus on a specific infrastructure if you want (or just give a broad overview of the report, or focus on two-three infras), but the whole idea is to work in a group to produce a well-developed video. Start with this early. Form your groups ASAP.

- You can work in groups of 2 or 3 maximum. All of you should show up on the video or the recordings.

- Here's an example of what the video should like:

<https://www.dropbox.com/scl/fi/h7dp392n2adfp946kvli/HW2-Video.mp4?rlkey=z7api0mxzycjos3hv6tdm...dl=0>

- You can either upload your video or you can share a link with me.