

Principles of Complex Systems, Vols. 1 and 2 CSYS/MATH 6701, 6713

University of Vermont, Fall 2025

"Oh my God Charlie, that was so brave!"

Assignment 12

It's Always Sunny in Philadelphia 2: The Gangs Saves the Day, S9E06 2

Episode links: IMDB 2, Fandom 2, TV Tropes 2.

Due: Friday, December 12, by 11:59 pm

https://pdodds.w3.uvm.edu/teaching/courses/2025-2026pocsverse/assignments/12/

Some useful reminders:

Deliverator: Prof. Peter Sheridan Dodds (contact through Teams)

Office: The Ether and/or Innovation, fourth floor

Office hours: See Teams calendar

Course website: https://pdodds.w3.uvm.edu/teaching/courses/2025-2026pocsverse

Overleaf: LATEX templates and settings for all assignments are available at

https://www.overleaf.com/read/tsxfwwmwdgxj.

Some guidelines:

- 1. Each student should submit their own assignment.
- 2. All parts are worth 3 points unless marked otherwise.
- 3. Please show all your work/workings/workingses clearly and list the names of others with whom you conspired collaborated.
- 4. We recommend that you write up your assignments in LATEX (using the Overleaf template). However, if you are new to LATEX or it is all proving too much, you may submit handwritten versions. Whatever you do, please only submit single PDFs.
- 5. For coding, we recommend you improve your skills with Python. And it's going to be a no for the catachrestic Excel. Please do not use any kind of AI thing unless directed. The (evil) Deliverator uses (evil) Matlab.
- 6. There is no need to include your code but you can if you are feeling especially proud.

Assignment submission:

Via **Brightspace** (which is not to be confused with the death vortex of the same name, just a weird coincidence). Again: One PDF document per assignment only.

Please submit your project's current draft in pdf format via Brightspace.

Finish your projects:

- Final report page minima:
 - \sim 3 pages for groups of 1.
 - \sim 4 pages for groups of 2.
 - \sim 5 pages for groups of 3.
 - \sim 6 pages for groups of 4.
- Final talk, 3:00 per person.

Instructions:

- Final presentations and project write-ups are due by Friday, 11:59 pm, December 12.
- Please submit recorded videos and pdfs via Brightspace.
- We will also organize for the videos to be uploaded to the course's Teams site.

Here's what you need to know and do. Grading will take into account all of these aspects and more.

- 1. Talks should absolutely be G rated and respectful of others. See the PoCS syllabus , UVM's student conduct standards, and UVM's Our Common Ground .
- 2. Time: Please aim for no more than 3 minutes per person.
- 3. Your mission is to:
 - (a) quickly review the problem/area you've been investigating; and
 - (b) describe what you've been able to achieve so far (or what went horribly wrong).

Please re-introduce yourself in a sentence (name + your field), and to acknowledge who you're working with.

- 4. Talks will be made available on Microsoft Streams for viewing on the day of the final exam.
- 5. Slides: Suggest 3 to 5. More may work but 100 is right out . Quality of slides forms part of the grade.
- 6. If you are feeling up for Beamer/LaTeX, I highly encourage it. Keynote is fine as well. Anything that ends up as a pdf will work.
- 7. Here's the Deliverator's universal paper template that will work on Overleaf: https://github.com/petersheridandodds/universal-paper-template.

 This is the PoCS-preferred paper production system.
- 8. Overleaf also provides many journal format templates. The universal template builds out from Physical Review's template:

 https://www.overleaf.com/latex/templates/revtex-4-dot-2-template-and-sample/yydsrzvrqrzs ...
- 9. Practice! These are short talks so you can run through them a number of times to straighten everything out.