

Principles of Complex Systems, Vols. 1, 2, & 3D CSYS/MATH 6701, 6713, & a pretend number University of Vermont, Fall 2023 Assignment 11

"For Arcadia, Press 3" 🖸

Due: Thursday, December 14, by 11:59 pm

https://pdodds.w3.uvm.edu/teaching/courses/2023-2024pocsverse/assignments/11/ Some useful reminders: Deliverator: Prof. Peter Sheridan Dodds (contact through Teams) Assistant Deliverator: Chris O'Neil (contact through Teams) Office: The Ether Office hours: See Teams calendar Course website: https://pdodds.w3.uvm.edu/teaching/courses/2023-2024pocsverse Overleaf: LaTeX templates and settings for all assignments are available at https://www.overleaf.com/read/tsxfwwmwdgxj.

All parts are worth 3 points unless marked otherwise. Please show all your workingses clearly and list the names of others with whom you conspired collaborated.

For coding, we recommend you improve your skills with Python, R, and/or Julia. The (evil) Deliverator uses (evil) Matlab.

Graduate students are requested to use $\[mathbb{E}T_{E}X$ (or related TEX variant). If you are new to $\[mathbb{E}T_{E}X$, please endeavor to submit at least n questions per assignment in $\[mathbb{E}T_{E}X$, where n is the assignment number.

Assignment submission:

Via Brightspace or other preferred death vortex.

Please submit your project's current draft in pdf format via Brightspace by the same time specified for this assignment. For teams, please list all team member names clearly at the start.

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 Thursday, 11:59 pm, December 14 (the day of the course's final exam period).
- Please submit recorded videos and pdfs via Brightspace.
- We will 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 C, UVM's student conduct standards, and UVM's Our Common Ground C.
- 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 \mathbf{C} . 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.

- 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 C.
- 9. Practice! These are short talks so you can run through them a number of times to straighten everything out.