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# Applied Cyberinfrastructure

This course includes the hands-on tutorials and auxiliary material for the CI Compass Fellowship technical course. This course is taught at UA as Applied Cyberinfrastructure 429/529.

Videos and Slides will be available on D2L. The course GitHub Site is https://github.com/ci-compass/cicf

Assignments (due on Sundays the week they are assigned at 11:59pm, unless stated): D: Packback Discussions based on video lectures (1 question, 2 answers) P: Packback Polls feedback from completing labs (1 poll question) L: Course Project (1 -lighnting talk in Voicethreads on D2L) DD: Course Project (1 - Deep Dive in Packback) for graduate students only

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## Spring 2025 Schedule

week	Technical Skills	Data Life Cycle	dates	assignments
Week 0	Setting up a virtual machine	N/A	1/20-1/24	
Week 1	Command line	Intro to CI	1/27-1/31	P1, D1
Week 2	Python programming	Guest - NCAR	2/3-2/7	P2, D2
Week 3	Scientific computing	Guest - TACC	2/10-2/14	P3, D3
Week 4	Git and coding standards	Guest - RCRV	2/17-2/21	P4, D4
Week 5	Containers and debugging	Project work	2/24-2/28	P5, D5
Week 6	FAIR data and systems	Guest - ORCID	3/3-3/7	P6, D6
UA Spring Break	N/A	N/A	3/10-3/14	
Week 7	Architecture + Archives	Guest - MagLab	3/17-3/21	P7, D7
Week 8	Cloud computing	Guest - NEON	3/24-3/28	P8, D8
Week 9	N/A	Communication skills	3/31-4/4	
Week 10	Data workflows	Guest - OOI	4/7-4/11	P9, D9
Week 11	Machine Learning	Project work	4/14-4/18	P10, D10
Week 11b	Neural Networks	Project work	4/21-4/24	

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Weeks 16 and	N/A	Presentations	4/28-5/7	L and DD on 5/7

## People and Contact

The CICF course was created and is run by the following team:

- Angela Murillo
- Nicole Virdone
- Don Brower
- Sajith Sasidharan
- Sarowar Hossain
- Jaya Bharti
- Christina Clark
- Erik Scott

The UA instructor team:

- Bonnie Hurwitz (Instructor and Faculty mentor)
- Mikaela Sanchez (Undergraduate TA)

#### **Thanks**

The CICF course was developed with support from the National Science Foundation Office of Advanced Cyberinfrastructure in the Directorate for Computer Information Science under Grant #2127548.

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