

Atmospheric Sciences 6910-18

Fall 2016

Programming for Environmental Sciences

Objective: To familiarize students with the fundamentals of using computer programming for research, which includes acquiring, processing, and displaying data.

Location and Time: WBB 711; Tuesday,Thursday 3:40-5:00 pm

Format: Lectures twice a week which will include a reading assignment and a programming exercise.

Instructors:

- Adam Abernathy adam.abernathy@utah.edu
- Ryan Bares ryan.bares@utah.edu
- Sally Benson sally.benson@utah.edu
- Chris Galli chris.galli@utah.edu

Class Webpage: <http://www.inscc.utah.edu/~u0079358/atmos6910/>

Weekly Schedule

- Tues Oct 18 Lecture #1 Workflow (RYAN)
- Thurs Oct 20 Lecture #2 Brief Overview & Variables (RYAN)
- Tues Oct 25 Lecture #3 Input Part 1 (CHRIS)
- Thurs Oct 27 Lecture #4 Input Part 2 (CHRIS)
- Tues Nov 1 Lecture #5 Arrays, Conditional Operations, Loops (SALLY)
- Thurs Nov 3 Lecture #6 Best Practices - Basics (ADAM)
- Tues Nov 8 Lecture #7 Best Practices - Pseudocode (ADAM)
- Thurs Nov 10 Lecture #8 Best Practices – Algorithm Development (CHRIS)
- Tues Nov 15 Lecture #9 Best Practices – Debugging (ADAM)
- Thurs Nov 17 Lecture #10 Best Practices – Optimization (CHRIS)
- Tues Nov 22 Lecture #11 Visualization - Line plots (SALLY)
- Tues Nov 29 Lecture #12 Visualization – More Line plots (ADAM)
- Thurs Dec 1 Lecture #13 Visualization – Images (SALLY)
- Tues Dec 6 Lecture #14 Visualization – Maps (SALLY)
- Thurs Dec 8 Lecture #15 Workflow revisited (CHRIS)

Policies:

- ADA Accommodation: The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you need accommodation in this class, reasonable prior notice must be given to the Center for Disability Services, 162 Olpin Union Bldg, 801-581-5020 (V/TDD), <http://disability.utah.edu/>. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.
- Content Accommodation: The University recognizes that students' sincerely-held core beliefs might make it difficult for students to fulfill some requirements of some courses or majors. It is the student's obligation to determine, before the last day to drop courses without penalty, when course requirements conflict with the student's sincerely-held core beliefs.
<http://admin.utah.edu/facdev/pdf/accommodations-policy-background.pdf>
- Integrity: Academic dishonesty of any kind, including plagiarism and cheating, will result in failure in the class.