

METR 1313 Introduction to Programming for Meteorology. Fall 2013.

Instructor: Prof. Brian Fiedler bfiedler@ou.edu 325-2860 NWC 5636

Class time:

Section 1: 2:00pm-2:50 pm MWF in NWC 5720

Section 2: 2:00pm-3:15 pm TR in NWC 5720

Prerequisite: MATH 1523 (Precalculus and Trigonometry) or equivalent, either before or concurrent with METR 1313

Office Hours: To be arranged.

Topics:

- Connecting to server, the linux command line, the linux file system, basic linux commands, the linux text editors, offering a file on the WWW.
- A program as a script of sequential linux commands
- Introduction to Python: numerical variables and values, arithmetic, loops, print statements, a simple Python program
- Python data structures: strings, lists, tuples, sets, dictionaries
- control flow, booleans
- searching and sorting
- functions
- modules
- python plotting: matplotlib
- simple python cgi scripts
- arrays and numpy
- working with simple files of data: text files and netCDF files

Assessment: Letter graded. Four quizzes, total for 40% of the grade (possibly taken electronically, with random questions from a question bank). 6 programming projects, 10% each. There is no final exam.

- total \geq 80% : A
- 70% \leq total $<$ 80%: B
- 55% \leq total $<$ 70%: C
- 40% \leq total $<$ 55%: D
- total $<$ 40% : F

Textbooks: None required. Instructional material will be made available online.

Computer: Ownership of a personal computer may be helpful but is not required.

Attendance: Attendance in lecture/lab is NOT required. Students may find the online instructional material to be satisfactory.

Disability :

Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact the instructor personally as soon as possible so that accommodations necessary can be made to ensure full participation and to facilitate educational opportunities.

Religious Holidays :

It is the policy of the University to excuse the absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays.

-- OU Norman Campus Faculty Handbook, October 2008

Academic Misconduct :

All cases of academic misconduct will be reported to the Dean of the appropriate College for adjudication. For clarification of OU's policies on academic misconduct, see

<http://integrity.ou.edu/>

It is **YOUR** responsibility to be familiar with these policies and to comply with them. Ignorance of these policies is **NOT** an excuse for violating them.