

Spring 2020

## **BNFO 135-002: Programming for Bioinformatics**

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# BNFO 135: Programming For Bioinformatics

## Syllabus

### Instructor Info

Instructor: Jonathan Kapleau

Office: GITC 4412

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### Course Description

The ability to use existing programs and to write small programs to access bioinformatics information or to combine and manipulate various existing bioinformatics programs has become a valuable part of the skill set of anyone working with biomolecular or genetic data. This course provides an understanding of the architecture of bioinformatics toolkits and experience in writing small bioinformatics programs using one or more of the scripting ("glue") languages frequently employed for such tasks. Python will be used for this course.

### Textbooks



Think Python  
Allen B. Downey  
ISBN: 144933072X

### Grading Scheme

Midterm	20%
Final	30%
Homeworks	10%
Labs	15%
Projects	15%
Miscellaneous	10%

## Topics

- Introduction to python
- Variables, expressions, & statements
- Functions
- Conditionals & recursion
- Value returning functions
- Iteration
- String processing
- Lists, dictionaries, & tuples
- Files, input & output
- Classes

## Attendance Policy

Attendance in every lecture is mandatory. If a student is absent from lecture five times (the first day counts), the student's name will be recommended for withdrawal to the Dean of Freshman Studies. Two lates is equivalent to one absence. Make sure that you fully understand this attendance policy.

## Cheating Policy

Cheating on a programming assignment results in zero credit for all students involved. Programming assignments may **NOT** be solved in collaboration, unless specifically stated in the assignment. Cheating on an exam will result in an "F" in the course.

You may discuss problems with each other. Where does discussion end and cheating start? You may **NOT** copy lines of code from anybody or anywhere. You may **NOT** use code in your assignments that you did not write. As a general rule: If you don't understand the code and can't explain the code, you can't use the code.

Please familiarize yourself with the NJIT [Academic Honor Code](#). Violations of the honor code will be dealt with seriously and reported immediately to the Dean of Students.

## Late Policy

To receive credit, all lab assignments must have been demonstrated to the instructor on or before the due date. Assignments that are not submitted on time will not be accepted.

## Prerequisites

None

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