BNFO 135 - Programming for Bioinformatics

Instructor: Dr. Jun Wu Email: <u>jw65@njit.edu</u> Office: GITC 4321A

Office Hours: Monday, Wednesday 12:00 PM – 12:45 PM or by Appointment

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 provide an introduction to programming and problem solving skills using Python. Topics include basic strategies for problem solving, constructs that control the flow of execution of a program and the use of high-level data types such as lists, strings and dictionaries in problem representation.

Online Textbook: zyBooks

Instruction to subscribe:

- 1. Sign in or create an account at learn.zybooks.com
- 2. Enter code NJITBNF0135WuSpring2025
- 3. Subscribe

Reference Book:

Think Python by Allen B. Downey, third edition. This is an open source book. It is available without charge in HTML and PDF formats at https://greenteapress.com/wp/think-python-3rd-edition/.

Brief List of Topics to be Covered:

- 1. Introduction to Python
- 2. Variables and Expressions
- 3. Types
- 4. Branching
- 5. Loops
- 6. Function
- 7. Classes

Grading:

10%
10%
15%
15%
15%
15%
20%
100%

The final grade will be curved.

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Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing, or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu