

Fall 2019

IT 114-001: Advanced Programming for Information Technology

Matthew Toegel

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IT 114-001 Syllabus

Instructor:

Matt Toegel (matthew.toegel@njit.edu)

Office Hours: M, T, W, Th 2:30 - 3:30 (Timely notice is preferred; times subject to change)

Office: GITC 3420->3901C

Academic Integrity:

The work done is expected to be your own, any group work should clearly distinguish ownership of tasks. Use of snippets/material from others should be kept to a minimum and the source should be accredited where applicable.

That being said, please also note the below:

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:

<http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>

*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* Any violations of the NJIT Honor Code will be brought to the attention of the Dean of Students.

Overview:

This course will utilize the Java programming language to demonstrate/expand on data structures, client/server programming, and various other problem solving skills such as recursion. You'll be able to utilize Java libraries, carry out inter-process communication via sockets, and develop a recursive solution. There may be opportunities to dive deeper into certain topics or include other topics per general interest of the class.

Topics:

Arrays

File I/O

Objects and OOP topics

Lists

Stacks

Queues

Sockets (Client/Server)

Recursion

Trees

Extra topics if time allows

Assignments:

Any assigned materials are expected to be read before it's to be discussed in class.

There will be a number of programming projects that'll be turned in for grading. Eclipse will be the IDE of choice, but you're free to use your preference. There may be times where the Java Compiler available on our AFS Account will be used.

There will be lab assignments given during some sessions which will be graded.

Lab assignments and projects are different sections. Lab assignments will be scenarios of a particular topic whereas projects will be putting together many/all topics into a final solution.

Grading:

Midterm: 20%

Final: 25%

Participation/Attendance/Lab: 20%

Projects/Non-Lab Assignments: 35%

Extra credit may be given for exceptional programming projects.

Materials/Technologies:

Eclipse (or preferred IDE)

AFS Access

Java SDK

Online Resources (No book required)

Canvas

GitHub

Late Policy:

There will be deductions for late submissions of any homework or lab assignments. I will accept assignments up to two weekdays late, however no assignment will be accepted after it's reviewed/discussed in class.

If you are going to miss a class and cannot hand in an assignment, it's your responsibility to let me know.

There also will be no make-up exams (except, at the discretion of the instructor in the case of a documented medical or family emergency).

Syllabus is subject to change, attend class to stay current.