CPS 210 Computer Science I: Foundations

Course Information:

- Instructor: Michael Curry
- Email: currym6@newpaltz.edu
- Prerequisites: Math Placement Level 4 or MAT152 Minimum Grade of C-
- Credits: 4
- Lecture Location:
  - Section 1 & 2: CSB 222
  - Section 3 & 4: HUM 320
- Lecture Hours:
  - Section 1 & 2: MR 8:00 AM - 9:15 AM
  - Section 3 & 4: TF 11:00 AM - 12:15 PM
- Lab Hours & Location:
  - Section 1: W 8:00 AM-10:50 AM SH 259
    - TA: Sanket Kamble kambles1@newpaltz.edu
  - Section 2: W 12:30 PM-3:20 PM CSB 021
    - TA: Avi Drucker druckera2@newpaltz.edu
  - Section 3: W 3:30 PM-6:20 PM HUM 301
    - TA: Avi Drucker druckera2@newpaltz.edu
  - Section 4: R 3:30 PM-6:20 PM HUM 301
    - TA: Avi Drucker druckera2@newpaltz.edu
- Office Hours: T 2:30 PM - 4:30 PM.
- Office Location: Science Hall 245

Course Description:

Algorithms, computer organization, data representation, program structure, programming techniques, numerical and non-numerical problems with emphasis on the analysis of problems and the formulation of algorithms for their solution.

Objectives:

- Edit, compile, and run a Java program.
- Use an integrated development environment.
- Develop algorithms and write pseudo code for simple computing tasks
- Understand various data types.
- Understand classes and Objects, variables, methods and their implementation and uses.
- Use control structures.
- Understand concepts of encapsulation, information hiding, inheritance.
- Use of File I/O and Error handling.

SLO (Student Learning Objectives)

Critical Thinking and Reasoning (CTR) LEVEL 1

Students will

- clearly articulate an issue or problem;
- identify, analyze, and evaluate ideas, data, and arguments as they occur in their own or others' work;
- acknowledge limitations such as perspective and bias; and
- develop well-reasoned (logical) arguments to form judgments and/or draw conclusions.

Information Literacy (IL) LEVEL 1

Students will

- locate information effectively using tools appropriate to their need and discipline;
- evaluate information with an awareness of authority, validity, and bias; and
- demonstrate an understanding of the ethical dimensions of information use, creation, and dissemination.

Textbook:

The textbook below is not required, but it is what I will be referencing throughout the course. The lectures and labs should be enough to learn the material.

Introduction to JAVA Programming, Comprehensive Version, 10th edition by Y. Daniel Liang (On Brightspace)

Java Programming: A Student-Friendly Approach, Anthony J. Dos Reis. 2023.

Evaluation & Grading:

Progress in the course will be reflected in lab, quiz and exam grades covering the subject areas of the course. Attendance in classes is expected. All exams and quizzes will be taken via paper due to a plethora of cheating due to ChatGPT.

- Lab Quizzes: 15% Every lab except during exam weeks
- Labs: 5%
- Test 1: 20%
    - Section 1 & 2: Monday February 12th
    - Section 3 & 4: Tuesday February 13th
- Test 2: 20%
    - Section 1 & 2: Monday March 7th
    - Section 3 & 4: Tuesday March 8th
- Test 3: 20%
    - Section 1 & 2: Monday April 15th
    - Section 3 & 4: Tuesday April 16th
- Final Exam: 20%
    - Section 1 & 2: Monday May 16th 8:00 - 10:00 AM
    - Section 3 & 4: Tuesday May 14th 10:15 - 12:15 PM

Grade	Percentage Range
A	100 – 93
A-	92.9 – 90
B+	89.9 – 87.5
B	87.4 – 82.6
B-	82.5 – 80
C+	79.9 – 77.5
C	77.4 – 72.6
C-	72.5 – 70
D+	69.9 – 67.5
D	67.4 – 62.6
D-	62.5 – 60
F	Below 60

Labs:

Attendance in lab is mandatory. A laptop should be brought every lab. There are a few computers in the back of the lab if you are unable to bring one. A set of problems will be given each lab via Brightspace for you to complete after the lab quiz. When you are done with your lab, you must show your TA your work. It will be graded out of 2 points based on participation. Meaning, if it looks like you made an effort and tried to solve the problems, you will receive the full 2 points. However, if it's obvious you did not try, you will lose points. Solutions for the labs will be released on Fridays. DO THE LABS COMPLETELY. If you do well on them, you should do well on the exams. Ask for help from your TA when needed; they are there to help you!

Schedule

Week	Topic
1	Introduction to Computer Science & Binary
2	Variables
3	Control Structures
4	I/O & **Test 1**
5	Iteration & Loops
6	Iteration & Error handling
7	**Test 2** & Methods
8	Methods Continued & Arrays
9	Nesting & 2D Arrays

Week	Topic
10	Math Package & Classes
11	ArrayList & **Test 3**
12	Strings
13	File Reading & Handling
14	Recursion
15	Final Exam Review

SUPPLEMENTAL INSTRUCTION:

Supplemental Instruction is a peer-led study group facilitated by a student that has taken and done well in the class previously and received additional training in study skills and group facilitation. Your SI Leader, Shane Lapp, facilitates two sessions per week based off of the material presented in class. Students that attend can ask questions, work through problems, review class material and work with other students in the class. Sessions are open to all students. Session times and locations can be found by going to my.newpaltz.edu and then to the Center for Student Success tab. Signing up early is encouraged but walk-ins are also welcome.

CAMPUS-WIDE POLICY STATEMENTS:

- Academic integrity policy statement: Students are expected to maintain the highes standards of honesty in their college work. Cheating, forgery, and plagiarism ar serious offenses, and students found guilty of any form of academic dishonesty are subject to disciplinary action. New Paltz's policy on academic integrity is found at www.newpaltz.edu/ugc/policies/policies_integrity.html, and several excellent resources to help with avoiding plagiarism are available on the Sojourner Truth Library's website: lib.newpaltz.edu/assistance/plag.html.

- Reasonable accommodation of individuals with disabilities statement: Students needing classroom and/or testing accommodations related to a disability should contact the Disability Resource Center (Student Union, Room 210, 845-257-3020) as close as possible to the beginning of the semester. The DRC will then provide students' instructors with an Accommodation Memo verifying the need for accommodations. Specific questions about services and accommodations may be directed to Deanna Knapp, Assistant Director (knappd@newpaltz.edu) or Jean Vizvary, Director (vizvaryj@newpaltz.edu).

- Veteran & Military Services statement: New Paltz's Office of Veteran & Military Services (OVMS) is committed to serving the needs of veterans, service members and their dependents during their transition from military life to student life. Student veterans, service members or their dependents who need assistance while attending SUNY New Paltz may refer to www.newpaltz.edu/veterans; call 845- 257-3120 or e-mail np-vms@newpaltz.edu; or stop by the Student Union, Room 100 South.

- Computer and network policies statement: Users of New Paltz's computer resources and network facilities are required to comply with the institutional policies outlined in the Acceptable Uses and Privacy Policy, available at www.newpaltz.edu/itpolicy/.

- Identity verification policy statement for online courses: New Paltz's Online Identity Verification Policy is designed to verify that students enrolled in our online courses and/or programs are the ones who take the courses, complete the programs, and receive the academic credit. See www.newpaltz.edu/ugc/policies/policies_onlineverification.html for the complete policy.

STUDENT EVALUATION OF INSTRUCTION You are responsible for completing the Student Evaluation of Instruction (SEI) for this course and for all your courses with an enrollment of five (5) or more students. I value your feedback and use it to improve my teaching and planning.