JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Programming Concepts/Appl

Course Abbreviation and Number: CSC 1570 **Credit Hours:** 3 **Course Type:** Lecture

Course Description: Students will learn the components of the programming cycle including problem analysis, algorithm development, design implementation, debugging, and acceptable documentation standards. Students will implement their algorithms using an object-oriented programming language.

Eligibility: college-level math.

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Write an algorithm that will solve a computer problem.
2. Understand the basic syntax of a programming language so that they can use that language to solve problems.
3. Demonstrate the ability to design and write structured programs.
4. Demonstrate the ability to debug a program.
5. Analyze a problem and craft an appropriate algorithmic solution.
6. Recognize the importance of ethical behavior in fostering a community of mutual respect and integrity.

Topics Covered:

- Problem Solving and program design
- Designing algorithms
- Data types
- Sequence statements
- Variable declaration
- Input and Output
- Selection statements
- Looping structures
- Raise awareness of Computer Science as a discipline
- Problem solving and algorithmic development
- Using real world applications in problem solving and programming tasks
- ACM Code of Ethics and Professional Conduct

Information for Students

- Expectations of Students
  - Civility Statement
  - Student Responsibility Statement
  - Academic Integrity Statement
- Accessibility Services
  Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.
- Get Help: JCC & Community Resources
- Emergency Closing Procedures
- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

A=4.0	B+=3.5	B=3	C+=2.5	C=2	D+=1.5	D=1	F=0

- Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

Effective Date: Fall 2021