CSC 101 Articulation Competencies

Introduction to Programming *(5 Credits)*

Introduction to computer programming. Intended for non-science majors. Explores the basics of computer programming using the BASIC language. Topics include console I/O, variables, expressions, decisions, arrays, repetition, console graphics, file I/O and functions.

Upon completion of this course, successful students will score 80% or better on the following competencies to receive WVC college credits.

Student Learning Outcomes:

CATEGORIES			
1. **Problem Solving**:	A. Critical Thinking	3. **Social Interaction**:	A. Collaboration
	B. Creative Thinking		B. Ethical Conduct
	C. Quantitative Reasoning		C. Professional Conduct
	D. Qualitative Reasoning		D. Cultural Diversity
2. **Communication**:	A. Oral Expression	4. **Inquiry:**	**A.** Information Literacy
	B. Written Expression		B. Research
	C. Artistic Expression		C. Documentation

Course Competencies Checklist:

- ❑ Apply programming skills to provide solutions to data processing tasks. (1A)
- ❑ Apply stepwise logic to general problems. (1A)
- ❑ Understand the software development lifecycle. (1A)
- ❑ Apply variables and expressions in a computer programming application. (1A)
- ❑ Apply logic based decision making and repetition in a computer programming application. (1A)
- ❑ Understand and apply the concept of problem decomposition using top-down design. (1A)

Program Outcomes:
Students taking computer science classes will be able to:

- Have a beginning knowledge of a computer programming language
- Work independently to write a basic computer program
- Diagnose and troubleshoot computer programming code
- Develop a foundation on which to build further knowledge of computer programming and computer science

Course Topics:

- Data types and expressions
- Variables
- Console I/O
- Decisions (If and select case statements)
- Repetition (while and for statements)
- Basic computer graphics
- Arrays
- Sequential File I/O
- Functions and subroutines