Cleveland State University  
Department of Electrical Engineering and Computer Science

CIS 151: Invitation to Computing

Catalog Description: 
CIS 151 Invitation to Computing (3-0-3)  
Pre-requisite: None  
Introduces principles that form the foundation of computer science for students with no prior background in computing. Suitable for students with a non-technical background who wish to explore a career in computing or in a field where computing is used extensively. No prior programming experience is necessary or expected for this course. Key principles of computing are explored through the use of sequential, conditional, iterative logic and the issue of inheritance. Good computing practices are discussed along with problem solving and organization. Students who have completed CIS 260 with a grade of “C” or higher are not permitted to register for this course. The course includes lecture hours and lab hours. Labs provide experience with the concepts covered in the lectures. Selected experiments in digital systems.

Textbook: 
None  
Repository of Information: Blackboard Learn

Coordinator: 
Dr. Ben Blake  
Associate Professor of Electrical Engineering and Computer Science  
Phone: 216-687-4767  
Email: benblake@csuohio.edu

Expected Outcomes: 
Ability to code solutions to small problems. Understanding the different aspects of IT.

Fulfillment of EE, CE and CIS Program Objectives and Outcomes: 
Objectives: 
1. Graduates will apply the concepts of the discipline including analysis, design, and implementation of information and computing systems.

Outcomes: 
1. An ability to apply knowledge of computing and mathematics appropriate to the program’s student outcomes and to the discipline  
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution

Student Characteristics: 
a. An ability to apply knowledge of computing and mathematics appropriate to the program’s student outcomes and to the discipline  
b. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution  
e. An understanding of professional, ethical, legal, security and social issues and responsibilities

Prerequisites by Topic: 
None
## Topics:

1. Introduction to computing 1
2. Introduction to computing, Hardware 1
3. Programming and problem solving 2
4. Variables, Types, Style, Input, Output 2
5. Sequential logic, Conditional Logic 3
6. Nested statements, Boolean methods 2
7. Looping logic 3
8. Concept of Objects, Inheritance, Files and I/O 1
9. Final Exam 1

Total Weeks 16

## Computer Usage:

Java, TextPad, Eclipse Editors