



Syllabus

Introduction To Computing (CS-1113)

Course Title:

Introduction To Computing (CS-1113)

Course Author:

Dr. Ted Song

Offering Institution:

John Brown University

Credits:

3 credit hours

Course Description:

An introduction to algorithmic problem solving in the context of a modern programming language. Such topics as problem-solving strategies, basic data structures, data and procedural abstraction, and algorithm complexity are discussed. Three hours lecture-discussion per week. An additional fee is associated with this course.

Textbooks/Resources:

<https://www.zybooks.com/>

Learning Outcomes:

- Ability to design an algorithm
- Ability to write and use selection statements in C++
- Ability to write and use repetition statements in C++
- Ability to write and use functions in C++
- Ability to use files and streams in C++
- Ability to use strings in C++
- Ability to use classes in C++

Assessments:

8 Modules using Zybooks courseware

Each module has variable numbers of activities, formative and summative assessments

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Modules:**MODULE 1**

Introduction to
C++ / Variables

MODULE 2

Variables /
Branches

MODULE 3

Branches / Strings /
Loops

MODULE 4

Loops / Arrays /
Vectors

MODULE 5

Arrays / Vectors /
Pointers

MODULE 6

Functions

MODULE 7

Objects and
Classes

MODULE 8

Files / Streams