IT 100 Foundations of Software Development

Course Description: A course on fundamental concepts related to programming. Topics include problem solving and developmental tools, design techniques such as flow-charting and pseudo coding, and testing techniques used in programming.
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Prerequisites(s): AFL 085 and AFM 095, or appropriate placement test scores

Corequisite(s): No corequisite

Lecture Hours: 2	Lab Hours: 3	Credit Hours: 3
Lab Fee: 90	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: ☒ Web	□ Hybrid	☒ Classroom
Semesters Offered: ☒ Fall	☒ Spring	☒ Summer

Course Primary Text:

Title: Systems Analysis and Design	Edition: Most current
Author(s): Rosenblatt	
Publisher: Cengage Learning	

Supplemental Materials:

None

Course Outcomes:

1	Understand the need for software developers.
2	Understand the opportunities for software developers.
3	Understand the knowledge needed to become an effective software developer.
4	Understand some of the basic terminology to being learning software development.
5	Understand how to solve a problem
6	Understand how to write logical algorithms that will solve a problem.
7	Understand how to test a completed algorithm.
8	Get all required technical software for future classes loaded on student's computer.
9	Introduction to .NET and Microsoft Visual Studio.
10	Introduction to databases and SQL Server.
11	Understand the purpose of each course in the HIT, BPA, and CPDM curriculum.

12	Understand the expectations and accountability of the student throughout the program.

Course Topics:

Week 1	Introduction to software development as a career. Chapter 1 – Using Technology to Change the World
Week 2	Understanding terminology and computers to become an effective software developer. Chapter 2 – Looking at computers and understanding the parts.
Week 3	Understanding the web and how it relates to the software developer. Chapter 3 – Using the internet: Making the most of the web's resources.
Week 4	Test 1 (First 3 weeks of class), Understand general problem-solving concepts. Beginning problem-solving concepts.
Week 5	Understand how to plan your solution. Understanding the programming structures
Week 6	Understand how to problem solve with sequential logic structure.
Week 7	Understand how to problem solve with conditional logic structure.
Week 8	Understand how to problem solve with sequential logic structure.
Week 9	Project 1
Week 10	Testing your solution. Testing methodologies.
Week 11	Understand how to problem solve with loop (iterative) logic structure.
Week 12	Project 2
Week 13	Program Learning Outcomes, curriculum review, what to know before coop, and taking accountability for your learning
Week 14	Installing Visual Studio, SQL Server, VISIO, Notepad++, etc.
Week 15	Final Project

Methods of Evaluation/Assessment

Assignments	40%
Exam	15%
Project 1	15%
Project 2	15%
Quiz	15%

CENTER FOR INNOVATIVE TECHNOLOGIES
MASTER COURSE DOCUMENT

Course Keeper: Bob Nields

Date Completed: 4/1/19