

## SU Department of Computer Science Syllabus COSC 116 Introduction to Computer Systems

Description: This course introduces fundamental concepts of computer science, evolution of digital world and digital citizenship. Topics include computer hardware, digital communication, networks; software application usage, web page development and programming, ethical, legal, and social issues of computing. Three hours lecture and two hours lab per week.

Prerequisites: None

Required Textbook: New Perspectives on Computer Concepts 2018: Introduction (20<sup>th</sup> ed.), by June Jamrich Parsons, ISBN 81305956391

	Weeks
1.Computer Concepts Impact of Digital Technology A History of Computation, Computer Hardware Devices, von Neumann Computer Architecture (processors, memory, storage, input/output), Operating System, File Management and Software Applications and Apps. Introduction to spreadsheet and database software applications	4.0
2.Introduction to the Internet and Web Developments Introduction to the essential technologies that are the foundation of the Wide Web. Design and create a website using HTML and CSS	4.0
3.Programming Introduction to computational thinking, problem solving strategies, software programming process. Object oriented programming using an object oriented language.	4.0
4.Digital Communication and Digital Citizenship Exploration of digital communication, networking, digital transformation such as cloud, e-commerce, and AI. Discussion on digital citizenship such as ethical, legal, and social issues in digital world	2.0

### Grading Scale

A = 920–1000	C+ = 770–799
A- = 900–919	C = 700–769
B+ = 870–899	D = 600–699
B = 820–869	F = 0–599
B- = 800–819	