Chapter 01 Digital Information Technology Course Introduction (Preface)

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Where is the “any” key?

—Homer Simpson, in response to the message, “Press any key.”

Overview

In today’s digital age, technology permeates every aspect of our lives. Understanding the fundamentals of information technology is increasingly critical for personal satisfaction and professional success. Whether you are a curious novice or an aspiring technology professional, this book is your gateway to unlocking the mysteries and endless possibilities of the world of computing.

This book aims to give someone with no background in information technology the essential working knowledge of computers while also offering a sweeping view of the more complex topics. Whether you aspire to build cutting-edge applications, do groundbreaking research, or simply want to gain a deeper understanding of technology to be proficient at your job, this book will equip you with the essential knowledge and tools to thrive.

By the end of this book, you will know the history of computers; be comfortable using the common productivity tools to write a document, create a spreadsheet, make a presentation, send an email; organize your files; use the web for research; understand the ethical issues associated with information technology; and know the pitfalls of social media. This will help you participate in intelligent conversations about current and upcoming technologies with professionals in the field.

Through clear explanations, practical examples, and hands-on exercises, we aim to demystify complex concepts like cybersecurity and computer networks, empower you to think critically, and encourage you to embrace a creative and problem-solving mindset that lies at the heart of information technology. We also hope that this information will encourage you to consider college and career options in the dynamic world of digital information technologies.

Are you ready to embark on this adventure? Let’s dive into the captivating realm of digital information technologies and unlock the boundless opportunities therein.

Key Features and Outline

This book is divided into a few sections. The first section covers the fundamentals and provides an overview of the components of digital information technologies. Chapter 2 covers the history of information technology, from the time women served as “computers” to today’s mobile revolution. In Chapter 3, you will learn about all the possible career options and the skills necessary to be a proficient worker in the digital age. Chapter 4 will equip you with skills to navigate the web, find online training, and make you aware of the risks associated with online information. Chapter 5 is all about the architecture of microcomputers, including tablets, smartphones, and smartwatches. Chapter 6 will give you the basics of file and folder management, including compression, decompression, and backup. The next section focuses on personal productivity applications. Chapter 7 provides an overview of production by apps. Chapters 8, 9, 10, and 11 delve into the intricacies of word processing, spreadsheets, presentation applications, and emails. After productivity applications, we introduce enterprise technologies, the core technologies used by large companies to manage their operations. You will spend a lot of time using these technologies if you choose information technologies as your career. Chapter 12 teaches basic HTML and website development skills. Chapters 13 and 14
introduce computer languages and databases to give you a taste of what it might be like to work as a programmer. Chapters 15 and 16 offer the basics of computer networks and cybersecurity. The last section focuses on issues of personal and social concern. Chapter 17 talks about ethical issues and Chapter 18 discusses social media.

Digital Information Technology Standards

This book supports a course titled Digital Information Technology (DIT) (8207310) used within the Florida Department of Education (FDOE) public school system. The content included in this book aligns with the FDOE Student Performance Standards for DIT. The FDOE describes the DIT course as:

This core course is designed to provide a basic overview of current business and information systems and trends, and to introduce students to fundamental skills required for today’s business and academic environments. Emphasis is placed on developing fundamental computer skills. The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of: databases, the internet, social media, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation, HTML, web page design, and the integration of these programs using software that meets industry standards.


Beyond this textbook, there are additional resources that can be used to supplement the DIT course. These resources can be downloaded from here: https://digitalcommons.usf.edu/dit/. These supplemental course resources include a comic book and a learning management system course designed using Canvas. The comic book serves as an alternative medium to learning topics covered in DIT. The Canvas course includes resources that can help students learn and instructors teach DIT according to the FDOE standards.

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