

Introduction to Information Technology Support and Services		Scope and Sequence
Unit	Lesson	Objectives
SYSTEM DESIGN AND IMPLEMENTATION		
	Supporting the Business Workflow Model	<p>Explain the basic concept of business workflow in a technological role.</p> <p>Understand the basic process that all businesses use to coordinate resources and people.</p> <p>Discuss strategies for developing an e-commerce website.</p> <p>Explain the role of technological processes and techniques in project management and design.</p>
	Project: Understanding Software Development Models	
	Operating Systems, Hardware, and Software Selection	<p>List basic PC hardware, operating systems (OS), and application suites.</p> <p>Explain the procedure for designing the migration of thirty machines from an open-source to a proprietary platform.</p> <p>Discuss some of the complexities of project management.</p>
	Project: Building a Mind Map	
	Implementation and End-User Training	<p>Explain how Information Technology (IT) support and services integrate with overall business operations.</p> <p>Support the premise that IT support and services improves efficiency for company stakeholders.</p> <p>Evaluate hardware, software, and operating system (OS) options when designing an IT infrastructure designed for on-premises systems.</p> <p>Describe the process used to convert a company's computing infrastructure.</p> <p>List the key elements needed to ensure an effective conversion.</p> <p>Describe the communication features of a good conversion plan and its relationship to the overall</p>

Unit Lesson**Objectives**

business goal.

Project: Preparing a Support Plan

Public Clouds

Explain some of the challenges of an IT managerial career.

Describe the role of telecommunications in the OSI Reference Model.

Define what a cloud is and what role it plays in computing.

Evaluate the OSI Reference Model and its connection to cloud computing.

Describe basic public cloud architecture and how it relates to the design of the Internet.

List and define some of the terminology and rationale for public cloud computing.

Discuss some of the problems involved with actually using public clouds.

Project: Moving to the Cloud

Private Clouds

Describe a private cloud.

Explore data center design.

Discuss the basic drivers of private cloud computing.

Recognize some of the problems involved with using private clouds.

Understand where private clouds might best be used.

Hybrid Clouds

Understand what a hybrid cloud is and what role it might play in your company.

Understand the benefits of a business intelligence application in a hybrid cloud model.

Explain application programming interfaces as a method to enable a hybrid solution.

Project: Companies in the Hybrid Cloud

Unit Lesson**Objectives**

Unit 1 Test

SYSTEM MAINTENANCE

Anti-malware

Understand what malware is from both an academic and experiential perspective.

Explore the solutions to malware and how they are implemented.

Investigate the process by which businesses and organizations respond to malware events.

Comprehend the importance of an effective anti-malware strategy.

Patch Management

Understand the nature of computers and networks that make patch management a requirement for system administrators.

Investigate software vulnerabilities and their role in the compromise of computer privacy and security.

Explore patch management as a key IT function to ameliorate the impact of software defects on computer security.

Project: Patch Management Project

Network Vulnerabilities

Discuss the nature of hacking and explore some of its forms.

Investigate the process by which businesses and organizations prevent hacking, and create a preliminary hacking protection plan for your home.

Describe the importance of an effective strategy to immunize your network from hacking.

Project: Hackers

Hardware and Software Redundancy-1

List available hardware and software systems from the perspective of redundancy.

Explain the types of redundancy and how they operate in the real world.

Unit Lesson

Objectives

Describe the "layers" of redundancy and see how these concepts apply to nearly all aspects of computing.

Hardware and Software Redundancy-2

Explore and evaluate at least three disaster recovery and planning scenarios.

List the multiple factors in disaster recovery that must be considered.

Develop an inventory of the necessary components of a disaster recovery plan.

Project: Disaster!

Hardware and Software Redundancy-3

Examine the nature of computer systems backup for businesses and describe a common configuration of software and hardware.

Review the technology that enterprises deploy for storage and backup and present a list of the five most widely employed products or services.

Understand and evaluate information systems theory and best practices for backup.

Project: Selecting Storage Area Networking Products

Unit 2 Test

END-USER SUPPORT

Types of Help Desk Systems and Support

Understand the nature of a help desk and describe its basic framework.

Discuss some of the main problems that affect help desk quality.

Evaluate and discuss the connection between overall IT quality and its effect on help desk quality.

Discuss the philosophical and emotional components of help desk services.

Evaluate both cloud- and server-based solutions and create a table depicting similarities and differences.

Unit Lesson**Objectives**

Project: Training for a Service Desk

Resolution Methodologies for Help Desks

Compare help desk resolution methodologies and describe three you find most supportive for the customer.

Evaluate the perspectives of experts on help desk systems and debate the perspectives of three experts.

Explain how a dissatisfied customer can affect the success of an entire business.

Project: Branding and Customer Service

Customer Service

Define customer service.

Investigate the types of customer service and make a list of four types and their basic attributes.

Describe the psychological qualities of great customer service.

Discuss the basic models of customer support delivery.

Discuss the limits and concerns about outsourcing customer service to another company.

Evaluate and describe how customer service contributes to business success.

Ticketing Systems

Explain the importance of an efficient trouble-ticket system.

Create the architecture of trouble-ticket systems.

Design the layout of a trouble-ticket record.

Describe how managed networks and managed environments integrated with trouble tickets are the future of the IT help desk.

Protocols and Procedures

Discuss human problem solving from an analytical perspective.

Unit Lesson

Objectives

Explain some of the problem-solving methods.

Describe the ability of computers to assist in problem solving.

Evaluate and describe the methods of problem solving in an IT context.

Project: From Plato to Technical Support, a Paper on Problem Solving in History

Building a Knowledge Base

Investigate knowledge management and knowledge bases.

Explain major milestones in the history of knowledge management and knowledge bases.

Review some examples of technologies used in knowledge management and list their attributes.

Explain techniques for the implementation of knowledge management services.

Compose a knowledge base article.

Project: Creating a Knowledge Management Site

Unit 3 Test

MANAGEMENT COLLABORATION AND REPORTING

Working with the Management Team

Explain why and how meetings with senior management do not follow ordinary paths.

Explore the lives of senior executives.

Understand their approach to work.

Explore the undefinable skills that executives use.

Investigate and report on the manager's approaches to time and complexity.

Describe the purpose and value of cross-functional teams..

Project: Role-playing Senior Management Meeting

Unit Lesson**Objectives**

Departmental Reporting

Explain the structure and purpose of department report writing.

Compare examples of effectively crafted reports and describe their positive attributes.

Explain the relationship between departmental reporting and business intelligence.

List several professional departmental reporting tools.

Project: Role-playing with Departmental Reports

Emerging Technologies

Understand the strategic nature of emerging technologies in business competitiveness.

Explore the many methods that IT managers use to stay abreast of emerging technologies.

Investigate the relationship between IT governance and emerging technologies.

Review the basics of technology evaluation programs.

Creating and Managing an IT Project

Define project management.

Identify the creative process involved in project creation.

Review the components of project invention.

Analyze and suggest changes to the templates that project manager's use.

Understand how to exercise leadership in project management.

Project: Create a Feasibility Study

Managing IT Projects

Examine the impact that effectively managing projects can have on society.

Review and list several of the concepts that underlie project management.

Discuss factors, both internal and external, which can derail a project.

Introduction to Information Technology Support and Services

Scope and Sequence

Unit Lesson

Objectives

Project Management Applications

Explain the benefits of project management applications.

Understand the use of organizational protocols and systems.

Understand how to implement project methodologies to manage information system projects.

Demonstrate proper use of project charts and reports.

Understand how to create, organize, and review a project plan using project management software.

Project: Creating a Project in an Open-Source Project Management Software

Unit 4 Test

CONTINUING EDUCATION AND CAREER OPPORTUNITIES

Pursuing Technical Education

Describe something of the content and benefits of vendor programs.

Explore the factors necessary to career success and the value of technical education.

Understand the limits of education when compared with a student's drive and motivation.

Review the availability of online certifications available from the vendor neutral organization, CompTIA.

Technical Education Degree Programs

Explore technical education through college programs.

Investigate ways to obtain college degrees that are more affordable and very well constructed.

Understand the best ways to think about college-level education and to grasp that only aptitude and perseverance are required. Anyone can apply.

Project: Take a Free Course in Computing

On-the-Job Training

Introduction to Information Technology Support and Services

Scope and Sequence

Unit Lesson

Objectives

Examine the topic of on the job education.

Discuss three types of on the job training.

Describe several strategies for securing comprehensive on-the-job training.

Project: Developing a Personal Syllabus

Insourced IT Support

Understand the economic scenario where firms outsourced IT and its broad effects.

Explore and explain three reasons why firms chose outsourcing and offshoring.

Examine the emerging trend of insourcing.

Review what career areas are available to those who pursue an insource model.

Project: Understanding Job Requirements and Certifications

Outsourced IT Support

Discuss outsourcing and its many variants.

Describe three advantages to outsourcing.

Discuss ways to position yourself in an outsource environment and suggestions to look for ways to gain skills that will enable you to obtain this kind of work.

Consultant/Educator

Review the kinds of consultants and some of what they do.

Understand the kinds of skills that people look for in a consultant.

Examine some examples of consultancies and describe their value proposition.

Project: Imagining a Consulting Practice

Unit 5 Test

COURSE REVIEW AND EXAM

Unit	Lesson	Objectives
	Review	
	Exam	