

# **IT FUNDAMENTALS HYT 303**

**STUDENT HANDBOOK** 





# WELCOME!

Welcome to IT Fundamentals redesign.

#### Prince Georges Community College Mission Statement

Prince George's Community College transforms students' lives. The college exists to educate, train, and serve our diverse populations through accessible, affordable, and rigorous learning experiences.

### **Information Technology Entry Program Objective**

The Information Technology Entry Program (ITEP) is a comprehensive multi-phase program of Prince George's Community College that develops the skills needed to enter the demanding world of IT Support. Upon successful completion of the program, the student will be able to demonstrate practical knowledge and application of their skills, exceeding that of an Entry Level Desktop and Network IT Support Technician or Tier I Help Desk Support.

Through our comprehensive approach, the material is combined into an interconnected program, allowing the instructor and student adequate time on a specific subject such as: TCP/IP, DNS, DHCP, Wireless, IPv6 or troubleshooting.

Each student is treated and trained as an information technology support professional from day one. The student will design, build, administer and maintain a live network during the program. We can do this through the delivery method of the combined and interconnected nature of this dynamic multi-phase program.

Upon completion of the Information Technology Entry Program, and with adequate preparation in addition to the contact hours, the student should have developed the skills needed to sit for the following exams: CompTIA A+, CompTIA NET+, CompTIA SECURITY+, and Microsoft Certified Technology Specialist MCTS Configuring Windows 7.

#### **IT Fundamentals Objective**

Upon successful completion of this course, you will be able to safely set up a basic workstation, including installing basic hardware and software and establishing basic network connectivity; identify and correct compatibility issues; identify and prevent basic security risks; and practice basic support techniques on computing devices. You will:





- Identify hardware commonly found in or attached to computing devices.
- Identify software commonly installed on computing devices.
- Set up a basic workstation.
- Configure network access.
- Work with files, folders, and applications.
- Configure and use wireless devices.
- Secure computing devices.
- Support computers and users

# HOW TO USE THIS STUDENT GUIDE

The student guide provides students with course details and guidelines.

The Student Guide is intended to be used in conjunction with the Course Syllabus and Course Schedule documents. All electronic copies of all three documents are posted in the "Syllabus & Schedule" area of the Blackboard course site for this course.

Throughout this course, you should have easy access to the Student Guide, Course Syllabus and Course Schedule documents.

The Table of Contents below provides links to all of the pertinent information found in this document.

Let's get started!





# **TABLE OF CONTENTS**

Section 1: Course Information

If you are a high-end computer user at home or college considering a career in information technology, or interested in furthering your knowledge about personal computers, the CompTIA® IT Fundamentals<sup>™</sup> (Exam FC0-U51) course is the first step in your preparation. In this course, you will identify PC components, work with files and folders, and conduct basic software installations. This course will provide you with the fundamental skills and concepts required to maintain, support, and work efficiently with personal computers. In addition, you will acquire the essential skills and information you need to set up, configure, maintain, troubleshoot, and perform preventative maintenance of the hardware and software components of a basic personal computer workstation and basic wireless devices.

You will also implement basic security measures and implement basic computer and user support practices.

Whether you are a home user, an experienced knowledge worker, or someone new to the work force considering an information technology (IT) career, the CompTIA® IT Fundamentals<sup>™</sup> (Exam FC0-U51) course can benefit you in many ways. Having a basic foundational knowledge about personal computers and the skills required to work with them provides you with the starting point to build your career. If your existing job role is linked with personal computers, this course will provide you with the fundamental technical knowledge about personal computers that you need to work efficiently in your current role.

It will also assist you if you are preparing to take the CompTIA® IT Fundamentals ™ examination (Exam FC0-U51)

**Course Description** 

This course is designed for individuals who are considering a career in information technology (IT) and who might be planning to pursue CompTIA IT Fundamentals certification, CompTIA A+ <sup>TM</sup> certification, or other similar certifications. Required Textbook

CompTIA IT Fundamentals (Exam FCO - U51)



**Course Prerequisites** 



To ensure your success in your course you will need basic Windows end-user skills. You can obtain this level of skills and knowledge by taking either of the following LogicalCHOICE courses, or have equivalent experience: Using Microsoft® Windows® 8.1 Microsoft ® Windows ® 8.1 Transition from Windows 7

## **Course Meeting Schedule**

This course meet on Friday January 16, 2015 from 8:30am to 5pm.

## **Course Contact Hours**

8hours

## **Course Structure**

The course is hybrid which includes lecture and online. Technology Requirements

Computer with internet access

### Section 2: Course Objectives

Upon successful completion of this course, you will be able to safely set up a basic workstation, including installing basic hardware and software and establishing basic network connectivity; identify and correct compatibility issues; identify and prevent basic security risks; and practice basic support techniques on computing devices.

By the end of this course, students who successfully complete classroom and online activities will be able to:

- Identify hardware commonly found in or attached to computing devices.
- Identify software commonly installed on computing devices.
- Set up a basic workstation.
- Configure network access.
- Work with files, folders, and applications.
- Configure and use wireless devices.
- Secure computing devices.
- Support computers and users

### Section 3: Course Schedule

Friday January 16, 2015 from 8:30am to 5pm.

### **Section 4: Course Modules**

The program covers eight (8) Lessons with each lesson having various topics as listed in the table below:





- Identifying Computer Hardware
- Identifying Computer Software
- Setting Up a Basic Workstation
- Configuring Network Access
- Working with Files, Folders, and Applications
- Configuring and Using Wireless Devices
- Securing Computing Devices
- Supporting Computers and Users

# Section 5: Assignment Descriptions and Rubrics

There are eight topics in this course, cumulative question will be handed to student in class after teaching and grades will be posted within two business day.

Class Participation	50%
Test	40~%
Attendance	<u>10%</u>
	100%

Section 7: Course Technology Setup

Owl Mail

Blackboard

Section 8: Technology Quicklinks

# N/A

Section 9: Student Support

**ITEP Program Support** 

Technical Support

PowerPoint and Video will be used for this course.

**Disability Support Services** 

Students requesting academic accommodations are required to contact the College's Disability Support Services Office (B-124) or call (301) 546-0838 (voice) or (301) 546-0122 (TTY) to establish eligibility for services and accommodations. Students with documented disabilities should discuss the matter privately with their instructors at the beginning of the semester and provide a copy of the completed Student/Faculty Accommodation Form.





# SECTION 1: COURSE INFORMATION

### **Course Description**

This course is designed for individuals who are considering a career in information technology (IT) and who might be planning to pursue CompTIA IT Fundamentals certification, CompTIA A+ <sup>TM</sup> certification, or other similar certifications.

#### **Required Textbook**

CompTIA IT Fundamentals (Exam FCO – U51)

#### Other Required Course Materials N/A

#### **Required Technology Accounts**

To be successful in this course, students must have access to the following technology accounts:

- o Owl Mail Email Account
- Blackboard Account

Details on how to setup and access the technology accounts for this course can be found in the <u>Course Technology Setup</u> section of this document.

#### **Prerequisites**

The prerequisites for this course are: Using Microsoft® Windows® 8.1Microsoft® Windows® 8.1 Transition from Windows 7.

#### **Course Meeting Schedule**

This course will meet on the PGCC Largo campus on Friday January 16, 2015. The class meeting times and room location for this course can be found on the Course Syllabus document found in the Syllabus & Schedule area of the Blackboard course site.

#### **Course Length**

This course meets for 8 hours.

The course consists of: Lecture: % 60 Laboratory: % 10 E-Module: % 30

#### **Course Contact Hours**

The total number of contact hours for this course is: 8 hours





#### **Course Structure**

This course is designed to provide a hybrid experience, including a blend of face-to-face and online activities.

**Face-to-face sessions** will be held on the Largo campus location TBD. Face-to-face activities will consist of lecture, lab and group activities.

**Online sessions** will be a blend of self-paced and group activities using Blackboard and Lo-Choice tools. Online activities will consist of Video and PowerPoint presentations Technology Requirements.

Computer/internet access and mastery of basic computer skills are considered to be the student's responsibility. To be successful in this course, students must have access to:

- a Pentium-class or Mac computer with at least 256 MB RAM
- Broadband (DSL, Cable, FIOS) is highly recommended
- An Internet Service Provider (ISP)
- Your PGCC Owl Mail student email address
- Firefox version 22 (or higher), Chrome version 30 (or higher), or Internet Explorer 8 (or higher)
- Microsoft Word (word processing software)
- Video player and speakers for multimedia content



# **SECTION 2: COURSE OBJECTIVES**

Upon successful completion of this course, you will be able to safely set up a basic workstation, including installing basic hardware and software and establishing basic network connectivity; identify and correct compatibility issues; identify and prevent basic security risks; and practice basic support techniques on computing devices.

By the end of this course, students who successfully complete classroom and online activities will be able to:

You will:

- Identify hardware commonly found in or attached to computing devices.
- Identify software commonly installed on computing devices.
- Set up a basic workstation.
- Configure network access.
- Work with files, folders, and applications.
- Configure and use wireless devices.
- Secure computing devices.
- Support computers and users



# **SECTION 3: COURSE SCHEDULE**

## Syllabus: CompTIA IT FUNDAMENTALS

Course #: HYT 303 Material: "CompTIA IT Fundamentals Manual"

**Instructor:** 

8:30 – 8:40 Welcome and Introductions

#### 8:40 – 9:00 Identifying Computer Hardware

- Identify Types of Computing Devices
- Identify Internal Computer Components
- Common Computer Connector Types
- Identify Common Peripheral Devices
- Video (summary)

#### 9:00 – 9:20 **Identifying Computer Software**

- Compare Functions and Features of Common Operating Systems
- o Identify Application Software
- Video (summary)

#### 9:20 – 9:40 Setting Up a Basic Workstation

- o User accounts
- o Windows Firewall
- Automatic updates
- o Malware
- Video (summary)

#### 9:40 – 10:00 Configuring Network Access

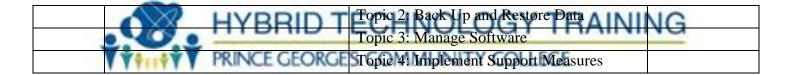
- Basic networking
- Network connections
- Video (summary)

#### 10:20 – 10:40 Working with Files, Folders, and Applications

o Create Files



Module #	Module Name	Course Objective(s) Covered	# Hours
1	Identifying Computer Hardware	Topic 1: Identify Types of Computing Devices	8:40 - 9:00
	HYBRID T	Devices Topic 2: Identify Internal Computer Components Topic 3: Common Computer Connector Types	NG
	PRINCE GEORGE	Topic 3: Common Computer Connector Types	
		Topic 4: Identify Common Peripheral Devices	
2	Identifying Computer Software	Topic 1: Compare Functions and Features of Common Operating Systems	9:00 - 9:20
		Topic 2: Identify Application Software	
3	Setting Up a Basic Workstation	Topic 1: User accounts	9:20 - 9:40
		Topic 2: Window Firewall	
		Topic 3: Automatic Updates	
		Topic 4: Malware	
4	Configuring Network Access	Topic 1: Basic networking	9:40 - 10:00
+	Comiguing Petwork Access	Topic 2: Network connections	7.40 - 10.00
		Topic 2: Network basics	
5	Working with Files, Folders, and Applications	Topic 1: Create Files	10:50 - 11:10
		Topic 2: Navigate a file structure	
		Topic 3: Manage Files and Folders	
		Topic 4: Compress and Extract Files	
		Topic 5: Create Screen Captures	
6 Configuring and Using Wireless Devices	Topic 1: Configure Wireless Devices	11:10 - 11:30	
		Topic 2: Use Wireless Devices	
7	Securing Computing Devices	Topic 1: Identify Security Threats	11:30 - 11:50
1	Securing Computing Devices	Topic 2: Apply Security Best Practices	11.30 - 11.30
		Topic 2: Apply Security Best Practices Topic 3: Perform Secure Web Browsing	
		Tople 5. Perform becare web blowsnig	
8	Supporting Computers and Users	Topic 1: Environmental and Safety Concepts	11:50 - 12:00
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- Navigate a File Structure
- Manage Files and Folders
- Compress and Extract Files
- Create Screen Captures
- Video (summary)

#### 10:40 – 10:50 **Short break**

#### 10:50 – 11:10 Configuring and Using Wireless Devices

- Configure Wireless Devices
- o Use Wireless Devices
- Video (summary)

#### 11:10 – 11:30 Securing Computing Devices

- Identify Security Threats
- Apply Security Best Practices
- Perform Secure Web Browsing
- Video (summary)

#### 11:30 – 11:50 Supporting Computers and Users

- Environmental and Safety Concepts
- Back Up and Restore Data
- o Manage Software
- o Implement Support Measures

#### 11:50 – 12:00 Modules review, Questions/Answers

#### 12:00 Class End

#### SECTION 4: COURSE MODULES



# SECTION 5: ASSIGNMENT DESCRIPTIONS AND RUBRICS

### **Course Assignment Descriptions**

Instructions on how to complete assignment will be pass out in class.

### **Assignment Submission Instructions**

Assignments for this course will be submitted via Instructor email. Assignments must be submitted by the stated deadline or special permission must be requested from instructor before the due date. Extensions will not be given beyond the next assignment except under extreme circumstances.





# **SECTION 6: COURSE POLICIES**

## **Grading Policy**

The detailed Grading Policy can be found on the Course Syllabus in Blackboard.

Instructions to access Course Syllabus in Blackboard:

- 1. Go to Blackboard course site for this course (<u>http://pgcconline.blackboard.com</u>)
- 2. Click on "Syllabus & Schedule" navigation button
- 3. Click on Course Syllabus document link

Attendance Policy [40%]

Late Work Policy [20%]

Participation Policy [40%]

Extra Credit Policy [N/A]

### **Plagiarism Policy**

At Prince George's Community College, cheating is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means.

Plagiarism is a form of cheating. At Prince George's Community College, plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person's contribution. Source: PGCC Student Handbook





# **SECTION 7: COURSE TECHNOLOGY SETUP**

Below are instructions to setup and access the technology tools used in this course.

# Owl Mail (http://mail.students.pgcc.edu)

Owl Mail is the college's student email system. Your instructor will use Owl Mail *to provide you with update or answer questions.* To be successful in this course, you should check your Owl Mail account regularly.

To activate your Owl Mail account, follow the directions at http://live.pgcc.edu/.

If you already have an active Owl Mail account, you may access your Owl Mail account at <u>http://mail.students.pgcc.edu</u>.

# Blackboard (http://pgcconline.blackboard.com)

Blackboard is a web based program that serves as the college's online classroom. In this course, you will use Blackboard to access the eModules. [ Instructions to login to Blackboard: [RHONDA WILL ADD login instructions here]

# **SECTION 8: TECHNOLOGY QUICKLINKS**

Below are url links to the technology tools used in this course:

Owl Mail	http://mail.students.pgcc.edu
Blackboard	http://pgcconline.blackboard.com
TestOut	http://www.testout.com





# **SECTION 9: STUDENT SUPPORT**

# **ITEP Program Support**

**Technical Support** For technical support in this course, contact *N/A* 

### **Disability Support Services**

Students requesting academic accommodations are required to contact the College's Disability Support Services Office (B-124) or call (301) 546-0838 (voice) or (301) 546-0122 (TTY) to establish eligibility for services and accommodations. Students with documented disabilities should discuss the matter privately with their instructors at the beginning of the semester and provide a copy of the completed Student/Faculty Accommodation Form.

