

ITEC 1003 Introduction to Information Technology

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## Introduction

Welcome to Davis Technical College (Davis Tech). We are pleased you have chosen to continue your education by enrolling in this course. This course is competency-based, allowing you to progress at your own pace, while demonstrating your competency through a variety of assignments and assessments. Specific requirements for successful course completion will be outlined in this syllabus.

## Course Description

Introduction to Information Technology provides a professional overview of using computers. You will be introduced to computers, including their history, hardware, operating systems, program languages, software, databases, networking, data storage, and system security. During this course, you will perform essential IT tasks commonly performed by advanced end-users and entry-level IT professionals. As part of this course, you will complete the current CompTIA IT Fundamentals® exam.

## Course Objectives

* Identify the major components of a computer and understand their function
* Evaluate the advantages and disadvantages of various operating systems
* Discriminate between basic computing, data storage, database management, common programming languages, databases, multimedia technology, and security risks
* Recognize the personal computer’s position as the backbone of business, the computer industry and its use as a stand-alone or networked device

## Course Length

90 Hours

The average hours for a student to complete the course are the basis for the course hours. Your hours may vary slightly from the average. All coursework must be completed and submitted to your instructor by the end date given to you when you enrolled in the course. To complete this course in the time given, you will need to follow the Course Timeline in this syllabus. ***If you need additional time to complete the course, you will need to re-enroll in the course and pay for the course again.***

## Attendance

To see the college’s official attendance policy, please refer to the New Student Orientation in Canvas (davistech.edu/orientation). Your program may have specific attendance requirements. To see your program’s attendance policy, please refer to your program orientation.

## Course Materials

* **Textbook:** Jernigan, Scott, Mike Meyers, and Daniel Lachance. *CompTIA IT Fundamentals+ Exam Guide (Exam FC0-U61)*. 2nd ed. New York, McGraw-Hill Education, 2019. ISBN-13: 9781260441871 ISBN-10: 1260441873
* **Supplies:** USB Flash Drive

**Materials and Content Notice:** This is a course about Information Technology including the Internet. It is important to understand the dynamic, fluid nature of the Internet information lifecycle and the fact that there are constant changes in the availability and location of Internet content. As part of this class, you will encounter textbook content, internet sites and course content that may not function as anticipated; including but not limited to: non-functional or missing websites and changes in software screens and functionality. You will be challenged to adapt and innovate; embracing uncertainty and seeking out solutions is the norm…Welcome to Information Technology and the Internet!

## Grading Practices

We are a competency-based institution. To receive credit for this course, you must demonstrate competency in a number of activities and skills. To see how competency will be assessed, please refer to your program orientation.

## Canvas

You can access Canvas from any Internet-connected computer at the following URL: https://davistech.instructure.com/login. If you have problems logging in to Canvas, please see your instructor or email [online.support@davistech.edu.](mailto:online.support@davistech.edu) If you encounter technical problems while in Canvas, use the Help button in Canvas and the “Report a Problem” link.

## Course Navigation

**Class Schedule:** Review your course schedule (received from Student Services) and the classroom hours (listed on the first page of this syllabus). You are expected to be present and working in the classroom during your schedule class periods; likewise, you may not utilize the classroom outside of your scheduled hours without an appointment or permission from a faculty member.

Students may complete some course work outside of scheduled classroom hours; however, students should expect to complete the majority (85%+) of assignments in class; and many assignments (quizzes, labs, etc.…) simply cannot be completed outside of the classroom. Moreover, use caution when deciding to complete exercises outside of class; as some exercises may contain the possibility of corrupting system files and components that may render the PC unusable.

**Completing and Submitting Assignments:** All assignments need to be submitted through Canvas. Do not print out any classwork unless specifically instructed in Canvas or by the syllabus. For each course activity, you will find corresponding entry in both this syllabus and Canvas. Be sure to read and follow the instructions in Canvas for completing and submitting your assignments. To submit an assignment, click on the name of the assignment in Canvas. Then click on Submit Assignment on the right side of the screen. Use the Browse button to find the file(s) you need to submit then click Submit Assignment.

**Course Timeline Activity:** Learning to manage your time is key to your success and is part of Project Management practices that are commonplace in the IT and the Cybersecurity professional. As you progress through this course, you will complete “Course Timelines,” track module progress, monitor course and program progress, and check resource utilization such as time and attendance. These activities will prepare you to work in the face-paced, outcomes driven, project-based IT industry environment.

For this course, you have a course start and a course end date that is the deadline by which all assignments, requirements or activities must be completed and accepted by an instructor. Further the course is broken down into major milestones, more manageable chunks called modules, with shorter deadlines (module hours). In order to stay on schedule in this course, all assignments, requirements or activities within each module need to be completed within the hours allotted for the module.

Creating a managing your course timeline will help you with prioritizing your work and setting deadlines. You need to complete the Course Timeline activity in Canvas and review it with your instructor. At the end of each module, you will be asked to compare your progress to your timeline to see if you are meeting your goals. If you fall behind, you will be asked to come up with a plan that will allow you to catch up.

**Tracking Time:** You will need to track all hours you spend working on completing this course. This includes all time in or out of the classroom. You will need to track you scheduled classroom time and attendance, and any time spent outside the classroom working on this course. You should use the timeline table provided within this document as you progress through each module and you will be reporting this information, as well as, progress and attendance calculations on the **Module Completion Form**, which you will submit as part of the module completion process (assignments in Canvas) at the completion of each module. Understanding your progress, time usage and attendance is key developing your project management skill set. This information is also important to assisting your instructors and instructional design personnel in curriculum evaluation and setting course hour durations.

**Using your Textbooks:** There is a textbook required for this course; all students, excepting high school students, are expected to acquire a textbook on or before starting this course. Chapter reading assignments are a very important part of the course work and preparation for the industry exam CompTIA IT Fundamentals+. There are well over 1,000 Key Terms in this book and it is in your best interest to become familiar with all of the Key Terms, Acronyms, and Definitions, as this knowledge will affect the overall score on the CompTIA IT Fundamentals+ exam. Please refer to Canvas for the detail of each reading assignment.

**Textbook Assignments:** Various hands-on exercises may be encountered as you read each chapter, you will be required to complete and submit some of these exercises through Canvas. In some cases, you will need to complete modified versions of these exercises. Please refer to Canvas for the detail of each assignment and the required deliverable(s) for Canvas submission.

**Lab Assignments:** Various hands-on Lab exercises may need to be completed. These labs may be drawn from the textbooks or from other sources. Please refer to Canvas for the detail of each assignment and the required deliverable(s) for Canvas submission.

**Beyond the Book:** You may encounter “Beyond the Book” assignments, which extend and enhance the content from the textbook, labs, and other activities. These exercises are designed to help you gain additional skills and knowledge that should help you to generalize concepts and gain additional on the job functionality. Please refer to Canvas for the detail of each assignment and the required deliverable(s) for Canvas submission.

**Assessments:** Various Review Questions, Quizzes, Tests, and Exams will need to be taken using Canvas. Such assessments, which do not require password access may be taken at your seat, and are considering open book, open note. All assessments that require password access must be taken on the testing row and are closed book, closed note, and closed neighbor. For each assessment you will have up to three attempts to achieve a score of 80 percent or better. The scores of each attempt will be averaged. If after three attempts you still haven’t achieved the required 80 percent score on at least one attempt, you must meet with an instructor to determine how you may complete an alternative competency exercise (ACE) to demonstrate competence of the assessment content. Please refer to Canvas for the detail of each assessment.

**Final Competency:** This course requires you to pass the CompTIA IT Fundamentals+ (FC0- U61) industry certification exam. This exam must be scheduled, taken, and successfully passed on or before your course end-date. You should contact the Davis Tech Testing Center to schedule your exam **at least 1 full week prior to your scheduled end date**. The Davis Tech Testing Center is located inside Student Services. Visit <http://www.davistech.edu/testing>for more information about the testing center. Ask the testing center about discount pricing for students when you schedule your exam

**Module and Course Completion Meetings and Worksheets:** This course requires you to meet with an instructor at the end of each module, and at the conclusion of the course. Your instructor will review your progress, attendance, and advise to assist you with this course and guide you through the program.

**Module Completion Process:** You will need to complete a two-step process to “sign-off” each module. The process consists of submitting a completed module completion form through Canvas. You will then need to immediately meet with an instructor, who will review your form as part of a second instructor meeting assignment.

**Module Completion Form Submission:** You complete this assignment by submitting a completed module completion form. You will find these forms in the Getting Started module of Canvas.

**Module Completion Meeting:** Your instructor will grade review and score your completed module completion form as part of this one on one meeting. Each meeting will have one of three possible outcomes:

1. Provided all work on the module is complete, graded, and competent: Your instructor will approve your Module Completion Form and open access to the next module in the course.
2. If all work for the module has been properly submitted; however, there are ungraded assignments or minor re-work required: Your instructor **may** choose delay action or provide provisional acceptance of your Module Completion Form; and, **may** open access to the next module in the course. You will need to follow-up with your instructor on any items that were discussed with the instructor, which may include re-submission of the Module Completion Form. This option allows you to continue moving forward with coursework, while awaiting grading of and assignment or making minor upgrades to marginal assignments.
3. If the instructor determines that re-work of assignments will be required, the will mark the Module Completion Form as incomplete and may not open access to the next module in the course. You will need to follow-up with your instructor on any items that were discussed with the instructor, which will likely include re-submission of the Module Completion Form and another one on one meeting.

**Course Evaluation:** In your final module, you will be asked to complete a course evaluation for this course. Please be honest, but professional when providing feedback about this course. This evaluation is anonymous, and the information gathered is used by instructors to improve the course content and delivery, as well as the overall program. The evaluation can be located at http://www.davistech.edu/evaluation or in Canvas. If you have any problems with the course evaluation, send an email to stephen.fan@davistech.edu

## Course Timeline

For 100 percent progress, the course should be finished using the following timeline. Use the timeline to track your progress and ensure you finish within the required time frame.

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| --- | --- | --- | --- | --- | --- |
| **Projected Course End Date:** | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  (Find this date on your schedule) | | | |
| **Module** | **Hours** | **Start Date** | **Projected Finish Date** | **Finish Date** | **Actual Hours** |
| Module 1: Computer Basics and Project Management | 21 |  |  |  |  |
| Module 2: Setting Up and Using Computers | 21 |  |  |  |  |
| Module 3: Networking, Security, and Maintenance | 21 |  |  |  |  |
| Module 4: Database and Software Development | 18 |  |  |  |  |
| Module 5: Study for Final Exam, Course Feedback, and Final Exam | 9 |  |  |  |  |
| **Total Course Hours** | **90** |  |  |  |  |

## Course Assignments Table

\* Assignments marked with an asterisk MUST be completed in the classroom.

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| Module 1: Computer Basics and Project Management  * \*See your instructor for a brief orientation about expectations for this course. * Please refer to Canvas for further instructions on these assignments:   + Project Management     - M1 PM What is Project Management     - M1 PM Beyond the Book: Project Failure     - Course Timeline Activity   + Module 1: Start Tracking your Time   + Chapter 1: How People Use Computers     - M1 Ch01 Read Chapter 1: How People Use Computers     - M1 Ch01 Beyond the Book: History of Computing     - M1 Ch01 Beyond the Book: Utah Data Privacy Law     - M1 Ch01 Beyond the Book: Cloud Computing     - M1 Ch01 Supplemental Material(s)   + Chapter 2: System Hardware     - M1 Ch02 Read Chapter 2: System Hardware     - \*M1 Ch02 Lab Assignments: Handling Components / ESD     - M1 Ch02 Beyond the Book: IT Workplace Safety and Fire Prevention     - M1 Ch02 Supplemental Material(s)   + Chapter 3: Device Ports and Peripherals     - M1 Ch03 Read Chapter 3: Device Ports and Peripherals     - \*M1 Ch03 Lab Assignments: Take Apart a PC     - M1 Ch03 Supplemental Material(s)   + Chapter 4: Data Storage and Sharing     - M1 Ch04 Read Chapter 4: Data Storage and Sharing     - M1 Ch04 Beyond the Book: File Naming Conventions     - M1 Ch04 Supplemental Material(s)   + \*M1 Assessments: Module 1 Exam   + \*M1 Module Completion Form Submission   + \*M1 Module Completion Meeting |
| Module 2: Setting Up and Using Computers  * Please refer to Canvas for further instructions on these assignments:   + Module 2: Start Tracking your Time   + Chapter 5: Understanding Operating Systems     - M2 Ch05 Read Chapter 6: Understanding Operating Systems     - M2 Ch05 Beyond the Book: Command Line     - M2 Ch05 Beyond the Book: Accessibility Lab     - M2 Ch05 Supplemental Material(s)   + Chapter 6: Setting Up and Configuring a PC     - M2 Ch06 Read Chapter 6: Setting Up and Configuring a PC     - M2 Ch06 Beyond the Book: Workplace Safety - Ergonomics     - \*M2 Ch06 Lab Assignments: Thermodynamics - Conservation of Energy     - \*M2 Ch06 Lab Assignments: Patches and Updates     - M2 Ch06 Supplemental Material(s)   + Chapter 7: Setting Up and Configuring a Mobile Device     - M2 Ch07 Read Chapter 7: Setting Up and Configuring a Mobile Device     - \*M2 Ch07 Lab Assignments: Hands-On Mobile Device     - M2 Ch07 Supplemental Material(s)   + Chapter 8: Managing Files     - M2 Ch08 Read Chapter 8: Managing Files     - M2 Ch08 Beyond the Book: Permissions (Windows and Unix –sinology online)     - M2 Ch08 Supplemental Material(s)   + Chapter 9: Using and Managing Application Software     - M2 Ch09 Read Using and Managing Application Software     - M2 Ch09 Beyond the Book: Installing and Removing Software     - M2 Ch09 Supplemental Material(s)   + M2 Assessments: Module 2 Exam   + \*M2 Module Completion Form Submission   + \*M2 Module Completion Meeting |
| Module 3: Networking and Security and Maintenance  * Please refer to Canvas for further instructions on these assignments:   + Module 3: Start Tracking your Time   + Chapter 10: Configuring Network and Internet Connectivity     - M3 Ch10 Read Chapter 10: Configuring Network and Internet Connectivity     - M3 Ch10 Beyond the Book: How the Internet and World Wide Web Work     - \* M3 Ch10 Lab Assignment: Configure DEMO router     - \*M3 Ch10 Lab Assignments: Setup a SoHo Internet Connection     - M3 Ch10 Supplemental Material(s)   + Chapter 11: IT Security Threat Mitigation     - M3 Ch11 Read Chapter 11: IT Security Threat Mitigation     - M3 Ch11 Beyond the Book: Read Essential Information Security for Corporate Employees     - M3 Ch11 Beyond the Book: Passwords and Pass-Phrases     - M3 Ch11 Beyond the Book: Browser Security     - M3 Ch11 Supplemental Material(s)   + Chapter 12: Computer Maintenance and Management     - M3 Ch12 Read Chapter 12: Computer Maintenance and Management     - \*M3 Ch12 Lab Assignments: Preventative Maintenance     - M3 Ch12 Beyond the Book: Disaster Recover/ Business Continuity     - M3 Ch12 Supplemental Material(s)   + Chapter 13: IT Troubleshooting     - M3 Ch13 Read Chapter 13: IT Troubleshooting     - M3 Ch13 Beyond the Book: Trouble shooting Scenario I     - M3 Ch13 Beyond the Book: Trouble shooting Scenario II     - M3 Ch13 Supplemental Material(s)   + M3 Assessments: Module 3 Exam   + \*M3 Module Completion Form Submission   + \*M3 Module Completion Meeting |
| Module 4: Database and Software Development  * Please refer to Canvas for further instructions on these assignments:   + Module 4: Start Tracking your Time   + Chapter 14: Understanding Databases     - M4 Ch14 Read Chapter 14: Understanding Databases     - M4 Ch14: Understanding Databases – Additional Reading     - M4 Ch14 Section 1: About Databases     - M4 Ch14 Section 2: About RDBMS and SQL     - M4 Ch14 SQL Tutorial     - M4 Ch14 Supplemental Material(s)   + Software Development   + Chapter 15: Developing and Implementing Software     - M4 Ch15 Section 1: Introduction to algorithms, logic and programming     - M4 Ch15 Section 2: Binary and Data     - M4 Ch15 Binary Coding Lab Assignment     - M4 Ch15 Section 3: Procedural and Object Oriented programming and SDLC     - M4 Ch15 Read Chapter 15: Developing and Implementing Software     - M4 Ch15 Read Chapter 15: Developing and Implementing Software -- Additional Reading     - M4 Ch15 Python Tutorial     - M4 Ch15 Supplemental Material(s)   + M4 Assessments: Module 4 Exam   + \*M4 Module Completion Form Submission   + \*M4 Module Completion Meeting |
| **Module 5: Study for Final Exam, Course Feedback, and Final Exam**   * Please refer to Canvas for further instructions on these assignments:   + Module 5: Start Tracking your Time   + M5 Schedule Final Exam with Testing Center   + M5 Study for the Final Exam   + M5 Course Evaluation   + M5 Final Competency: Take the CompTIA IT Fundamentals (FC0-U61) Exam.     - \*Submit Copy of Test Results   + \*M5 Module Completion Form Submission   + M5 Course Completion Worksheet   + M5 Course Completion Meeting |