# Introduction to Computers and the Internet: Preparing for IC³ eCourse Pacing Guide

To assist you in planning class time, the following chart provides recommended time allotments for each lesson in Introduction to Computers and Information Technology: Preparing for IC³ eCourse.

- The course provides a full year of content. There are three parts, which align with the three IC³ exams. Each part is organized into units, each unit is organized into chapters, and each chapter is organized into lesson.

- Each lesson includes the text, an As You Read Graphic Organizer students can use to take notes as they read, and a Demonstrate Your Knowledge worksheet to review lesson content. Embedded in the eText are links to multimedia content that supports the lesson text, including animations, simulations, and videos.

- Each chapter includes an End-of-Chapter Review and Assessment worksheet, Vocabulary Review and Problem-Solving worksheets, and an automatically graded concept test for assessment.

- There are also hands-on step-by-step activities for the key applications in Part 2, as well as for operating systems, e-mail, and the Web.

- There is also bonus material, including automatically graded application projects, a Jeopardy game, and crossword puzzles and word search activities for each unit.

Following this pacing guide, if you start at the beginning and work through every lesson using the recommended amount of time, you will spend 150 hours on the course. If you do not have 150 hours available in which to complete the course, you may choose to allot less time to each lesson, or you may choose to adapt the material that you cover to fit your time frame.

The recommended allotments are just that—recommended. Each class will progress at its own pace. If you find your class moving quickly, you may choose to incorporate more of the multimedia, sidebar, and special feature content into your class time. If you find your class moving more slowly, you may choose to skip some of the activities or worksheets.

The recommended time for each lesson is based on either a 45 or 90 minute class. If your class length is different, you may need to adjust the amount of time spent on a particular section. For example, you may need to spend less time viewing the multimedia or assign the worksheets or activities as homework. If you have more time available, you may choose to spend more time exploring the sidebar and special feature material, or allot more class time for students to complete activities or worksheets.

| | | Recommended Pacing (in hours) |
|---|---|---|
| **PART 1** | **COMPUTING FUNDAMENTALS** | |
| **UNIT 1** | **EXPLORING COMPUTERS** | |
| **Chapter 1** | **Computer Basics** | |
| Lesson 1-1 | What is a Computer? | 1.50 |
| Lesson 1-2 | What is Computer Hardware? | 1.50 |
| Lesson 1-3 | What is Computer Software? | 1.50 |
| **Chapter 2** | **Understanding Computers** | |
| Lesson 2-1 | Exploring Computer Systems | 1.50 |
| Lesson 2-2 | Making Computers Work | 0.75 |
| Lesson 2-3 | Group and Individual Computing | 0.75 |
| **UNIT 2** | **EXPLORING INPUT AND OUTPUT** | |
| **Chapter 3** | **Input/Output Basics** | |
| Lesson 3-1 | Basic Input Devices | 1.50 |
| Lesson 3-2 | Basic Output Devices | 0.75 |
| **Chapter 4** | **Understanding Specialized Input/Output** | |
| Lesson 4-1 | Specialized Input Devices | 0.75 |
| Lesson 4-2 | Specialized Output Devices | 0.75 |
| **UNIT 3** | **ANALYZING STORAGE** | |
| **Chapter  5** | **Storage Basics** | |
| Lesson 5-1 | Understanding Computer Storage | 1.50 |
| Lesson 5-2 | Classifying Storage Devices | 0.75 |
| Lesson 5-3 | Common Storage Devices | 0.75 |
| **Chapter 6** | **Understanding How Data Storage Works** | |
| Lesson 6-1 | Understanding Hard Drives and Flash Drives | 0.75 |
| Lesson 6-2 | Optical Storage Devices | 0.75 |
| Lesson 6-3 | Storage Trends | 0.75 |
| **UNIT 4** | **EXPLORING SYSTEMS SOFTWARE** | |
| **Chapter 7** | **System Software Basics** | |
| Lesson 7-1 | Introducing the Operating System | 1.50 |
| Lesson 7-2 | Operating Systems and Utilities | 1.50 |
| **Chapter 8** | **Understanding System Software** | |
| Lesson 8-1 | Exploring the Operating System | 1.50 |
| Lesson 8-2 | Exploring System Utilities | 1.50 |
| | Operating System Activities | 1.50 |

| PART 2 | APPLICATIONS | |
|---|---|---|
| **UNIT 1** | **ANALYZING APPLICATIONS** | |
| **Chapter 9** | **Applications Basics** | |
| Lesson 9-1 | Selecting Application Software | 1.50 |
| Lesson 9-2 | Obtaining Application Software | 1.50 |
| Lesson 9-3 | Getting Started with an Application | 1.50 |
| **Chapter 10** | **Understanding Applications** | |
| Lesson 10-1 | Examining Types of Application Software | 1.50 |
| Lesson 10-2 | Application Documentation and Versions | 1.50 |
| Lesson 10-3 | Using Application Software | 1.50 |
| **UNIT 2** | **WORD PROCESSING** | |
| **Chapter 11** | **Word-Processing Basics** | |
| Lesson 11-1 | Creating a Document | 1.50 |
| Lesson 11-2 | Editing a Document | 1.50 |
| Lesson 11-3 | Formatting a Document | 1.50 |
| Lesson 11-4 | Basics of Desktop Publishing | 1.50 |
| **Chapter 12** | **Understanding Word Processing** | |
| Lesson 12-1 | Viewing a Document | 1.50 |
| Lesson 12-2 | Enhancing a Document | 1.50 |
| Lesson 12-3 | Formatting and Printing | 1.50 |
| Lesson 12-4 | Making and Tracking Edits | 1.50 |
| | Word Processing Activities | 2.25 |
| **UNIT 3** | **SPREADSHEETS** | |
| **Chapter 13** | **Spreadsheet Basics** | |
| Lesson 13-1 | Exploring Spreadsheets | 1.50 |
| Lesson 13-2 | Entering and Editing Data | 1.50 |
| Lesson 13-3 | Using Formulas | 1.50 |
| Lesson 13-4 | Sharing Data Among Programs | 1.50 |
| **Chapter 14** | **Understanding Spreadsheets** | |
| Lesson 14-1 | Formatting and Managing Worksheets | 1.50 |
| Lesson 14-2 | Creating Effective Spreadsheets | 1.50 |
| Lesson 14-3 | Automatic Spreadsheet Features | 1.50 |
| Lesson 14-4 | Using Functions in a Worksheet | 1.50 |
| | Spreadsheet Activities | 2.25 |
| **UNIT 4** | **DATABASES** | |
| **Chapter 15** | **Database Basics** | |
| Lesson 15-1 | The Essentials of a Database | 1.50 |
| Lesson 15-2 | Types of Databaase Programs | 1.50 |
| Lesson 15-3 | Database Techniques | 1.50 |

| Chapter 16 | Understanding Databases | |
|---|---|---|
| Lesson 16-1 | Creating an Effective Database | 1.50 |
| Lesson 16-2 | Maintaining Efficient Databases | 1.50 |
| Lesson 16-3 | Using Queries and Filters | 1.50 |
| | Database Activities | 2.25 |
| UNIT 5 | GRAPHICS | |
| Chapter 17 | Graphics Basics | |
| Lesson 17-1 | Graphics and Their Uses | 1.50 |
| Lesson 17-2 | Exploring Graphics Programs | 1.50 |
| Lesson 17-3 | Working with Graphics | 1.50 |
| Chapter 18 | Understanding Graphics | |
| Lesson 18-1 | Preparing Computer Graphics | 1.50 |
| Lesson 18-2 | Exploring Image Editing | 1.50 |
| Lesson 18-3 | Draw and Animation Features | 1.50 |
| | Graphics Activities | 2.25 |
| UNIT 6 | PRESENTATION PROGRAMS | |
| Chapter 19 | Presentation Basics | |
| Lesson 19-1 | Exploring Presentation Software | 1.50 |
| Lesson 19-2 | Creating Presentations | 1.50 |
| Lesson 19-3 | Previewing Presentations | 1.50 |
| Chapter 20 | Enhancing Presentations | |
| Lesson 20-1 | Presentation Options | 1.50 |
| Lesson 20-2 | Developing Presentations | 1.50 |
| Lesson 20-3 | Enhancing and Finalizing Presentations | 1.50 |
| | Presentation Activities | 2.25 |
| UNIT 7 | MULTIMEDIA | |
| Chapter 21 | Multimedia Basics | |
| Lesson 21-1 | Introducing Multimedia | 1.50 |
| Lesson 21-2 | Multimedia File Formats | 1.50 |
| Lesson 21-3 | Introducing Virtual Reality | 0.75 |
| Chapter 22 | Understanding Multimedia | |
| Lesson 22-1 | Exploring Multimedia | 1.50 |
| Lesson 22-2 | Developing Online Multimedia | 1.50 |
| Lesson 22-3 | Exploring Virtual Reality | 1.50 |
| | Multimedia Activities | 2.25 |
| PART 3 | COMMUNICATIONS AND NETWORKS | |
| UNIT 1 | COMMUNICATINOS | |
| Chapter 23 | Communications Basics | |
| Lesson 23-1 | The Telephone System | 1.50 |
| Lesson 23-2 | Using Telephone Communications | 0.75 |
| Lesson 23-3 | Exploring High-Speed Telecommunications | 0.75 |

| Chapter 24 | Understanding Communications | |
|---|---|---|
| Lesson 24-1 | Using Cell Phone Technology | 0.75 |
| Lesson 24-2 | Choosing Digital Options | 0.75 |
| UNIT 2 | NETWORKS | |
| Chapter 25 | Networking Basics | |
| Lesson 25-1 | Introducing Computer Networks | 1.50 |
| Lesson 25-2 | Local Area Networks | 0.75 |
| Lesson 25-3 | Wide Arean Networks | 0.75 |
| Chapter 26 | Using Networks | |
| Lesson 26-1 | Connecting Computers | 1.50 |
| Lesson 26-2 | Creating Local Area Networks | 0.75 |
| Lesson 26-3 | Connecting Remote Networks | 0.75 |
| UNIT 3 | THE INTERNET | |
| Chapter 27 | Internet Basics | |
| Lesson 27-1 | What is the Internet? | 1.50 |
| Lesson 27-2 | Connecting to the Internet | 0.75 |
| Lesson 27-3 | Comparing Internet Services | 0.75 |
| Chapter 28 | Understanding the Internet | |
| Lesson 28-1 | Internet Structure | 0.75 |
| Lesson 28-2 | Access Data on the Internet | 0.75 |
| Lesson 28-3 | Internet Communications | 0.75 |
| UNIT 4 | THE WORLD WIDE WEB | |
| Chapter 29 | World Wide Web Basics | |
| Lesson 29-1 | Understanding the Web | 0.75 |
| Lesson 29-2 | Web Browsing | 1.50 |
| Lesson 29-3 | Introducing E-commerce | 0.75 |
| Chapter 30 | Using the Web | |
| Lesson 30-1 | Understanding Hypertext | 0.75 |
| Lesson 30-2 | Designing for the Web | 1.50 |
| Lesson 30-3 | Working on the Web | 1.50 |
| Lesson 30-4 | Conducting Business Online | 0.75 |
| | Web Activities | 2.25 |
| UNIT 5 | E-MAIL AND OTHER MESSAGING SYSTEMS | |
| Chapter 31 | Personal Communications Basics | |
| Lesson 31-1 | Using E-mail | 1.50 |
| Lesson 31-2 | Avoiding E-mail Problems | 1.50 |
| Lesson 31-3 | Other Electronic Communications | 1.50 |
| Chapter 32 | Understanding Personal Communications | |
| Lesson 32-1 | The Science of E-mail Systems | 1.50 |
| Lesson 32-2 | E-mail Benefits and Hazards | 1.50 |
| | E-mail Activities | 2.25 |

| UNIT 6 | ONLINE SAFETY | |
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| **Chapter 33** | **Issues for Computer Users** | |
| Lesson 33-1 | Privacy Online | 1.50 |
| Lesson 33-2 | All About Cybercrime | 1.50 |
| Lesson 33-3 | Avoiding Cybercrime | 1.50 |
| **Chapter 34** | **Using Computers Responsibly** | |
| Lesson 34-1 | Computer Ethics | 1.50 |
| Lesson 34-2 | Protecting Your Data | 1.50 |
| Lesson 34-3 | Troubleshooting Your Computer | 1.50 |