

Adult Basic Education  
**Science**

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# Computer Technology 3102

# Study Guide

**Prerequisite:** Computer Technology 3101

**Credit Value:** 1

**Resources:** Haag, S.E. (2009). *Computer Concepts in Action*. New York: McGraw Hill.

<b><u>Technology Courses [Adult Oriented Electives]</u></b>
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Computer Technology 3101 <b>Computer Technology 3102</b>
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## To the Student

### **I. Introduction to Computer Technology 3102**

Computer Technology 3102 is the second of two courses designed to give the adult learner with limited or no experience using a personal computer the skills necessary to use computers in their everyday life. In this course, you will further develop your word processing skills, learn how to use spreadsheet and presentation software, use various forms of help, learn about e-commerce, and manipulate system settings using the control panel.

In Unit 1, *Advanced Word Processing*, you will continue learning how to use word processing software. You will learn how to format a document, use tabs, and insert headers and footers. You will learn how to create columns and tables, add a border and shading, add a graphic, use Find and Replace, and insert symbols.

In Unit 2, *Introduction to Spreadsheets*, you will identify the parts of the Excel window, move between cells in a worksheet, create and save a new worksheet, enter data into cells, edit and delete data, format cells, define and use ranges, insert and delete columns and rows, change column width, add a title, change row height, and print a worksheet. You will also calculate results using arithmetic operators, enter formulas in cells, add a column of numbers with AutoSum, find the minimum and maximum values in a range, count and average the numbers in a range, explore relative addressing, and copy functions.

In Unit 3, *Introduction to Presentation Software*, you will identify PowerPoint features and views, apply a design template, modify the Slide Master, add the date and time to a slide, navigate through a slide show, and view a slide show. You will learn how to enhance a presentation by applying bullets and numbering, adding a table and entering data, using borders and shading, adding a graph, applying slide transitions, applying custom animation, and adding sounds and pictures.

In Unit 4, *Using Help*, you will open Microsoft Windows Help and identify search options. You will perform a content search, keyword search, and index search, and identify keywords and phrases for searches.

In Unit 5, *E-commerce*, you will learn how e-commerce benefits consumers and businesses, compare ways of doing business on the Web, identify elements of a successful e-commerce Web site, and evaluate privacy and security on the Internet.

In Unit 6, *System Settings and the Control Panel*, you will learn how to change the date and time, modify the desktop background and screen saver, adjust the volume on your computer's audio devices and speakers, customize the mouse, add a printer, and customize Internet options.

One textbook is required for this course: ***Computer Concepts in Action*** by Haag, S.E. (2009).

## To the Student

### II. Use of Technology Study Guides

Before beginning this course, ensure you have the text and any other resources needed (*see the information in the Introduction to this course for specifics*).

As you work through the Study Guide, you will see that it is divided according to the Units listed in the Table of Contents. When you open a unit it will have the following components:

#### Reading for this Unit:

Here you will find the chapters, sections and pages of the text you will use to cover the material for this unit. Skim the sections of the textbook, look at the titles of the sections, scan the figures and read any material in the margins. Once you have this overview of the unit, you are ready to begin. Do not be intimidated by the content. You will work through the text, section by section, gaining knowledge and understanding of the material as you go.

<b>References and Notes</b>  This left hand column guides you through the material to read from the text. Read any highlighted notes that follow the reading instructions. The symbols ►► direct you to the questions that you should complete when finished a reading assignment.	<b>Work to Complete</b>  You come across three (3) headings in this right hand column.  <b>Writing:</b> This section comprises your notes for the unit. Here you will find either written questions or references to specific questions or problems from your text. You may want to write out each question followed by the answer. This material should be checked by your instructor before moving on to the next unit.  <b>Portfolio:</b> A portfolio is an organized, purposeful collection of your work that displays knowledge, understanding, skills, accomplishments, interests, and achievement throughout the course. You will maintain both an electronic portfolio, where you will store digital documents, and a physical portfolio, where you will keep hard copies of your work. At the end of the course, you will submit both your electronic and physical portfolios for evaluation, but it is recommended that you consult with your instructor regularly to ensure your portfolio is maintained at a high standard.  <b>Assignment:</b> This section indicates if there is an assignment that should be completed for the Unit. The information in the “References and Notes” column will indicate how you obtain the assignment. Some assignments will be submitted digitally while others will involve a hard copy. Ensure you read the directions carefully to determine which format is required.
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<b>To the Student</b>
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**III. Recommended Evaluation**

Written Notes	10%
Portfolio	25%
Assignments	35%
Test(s)	10%
Final Exam	<u>20%</u>
	100%





## Unit 1 – Advanced Word Processing

To fulfill the objectives of this unit, students should complete the following:

**Reading for this unit:**     *Computer Concepts in Action*  
Unit 4 Project 3, pages 167 – 183  
Unit 4 Project 4, pages 184 – 206

References and Notes	Work to Complete
<p><i>Refer to page 168 to write answers for questions 1.1 – 1.2</i> ▶▶</p>	<p><b>Writing:</b></p> <p>1.1 What is a margin?</p> <p>1.2 What is a default setting?</p>
<p><i>Refer to pages 168 – 170 to complete question 1.3</i> ▶▶</p>	<p><b>Practice:</b></p> <p>1.3 Read the text on page 168 and complete the “<i>Step-by-Step</i>” exercise on pages 169 – 170.</p>
<p><i>Refer to page 171 to write answers for questions 1.4 – 1.6</i> ▶▶</p>	<p><b>Writing:</b></p> <p>1.4 What is a tab?</p> <p>1.5 What is a quotation?</p> <p>1.6 What is the difference between a short quotation and a long quotation?</p>
<p><i>Refer to pages 171 – 173 to complete questions 1.7 – 1.8</i> ▶▶</p>	<p><b>Practice:</b></p> <p>1.7 Read the text on page 171 and complete the “<i>Step-by-Step</i>” exercise on pages 171 – 172.</p> <p>1.8 Read the text on page 173 and complete the “<i>Step-by-Step</i>” exercise on page 173.</p>
<p><i>Refer to page 174 to write an answer for question 1.9</i> ▶▶</p>	<p><b>Writing:</b></p> <p>1.9 What is a header? What is a footer?</p>

## Unit 1 – Advanced Word Processing

### References and Notes

*Refer to pages 174 – 175 to complete question 1.10* ►►

*Refer to page 176 to write an answer for question 1.11* ►►

*Refer to pages 176 – 177 to complete questions 1.12 – 1.13* ►►

*Refer to pages 178 – 180 to complete question 1.14* ►►

*Refer to page 181 to write an answer for question 1.15* ►►

*Refer to pages 181 – 182 to complete the assignment* ►►

*Refer to pages 185 – 186 to complete question 1.17* ►►

### Work to Complete

#### Practice:

1.10 Read the text on page 174 and complete the “*Step-by-Step*” exercise on pages 174 – 175.

#### Writing:

1.11 What is a citation?

#### Practice:

1.12 Read the text on page 176 and complete the “*Step-by-Step*” exercise on page 176.

1.13 Read the text on page 177 and complete the “*Step-by-Step*” exercise on page 177.

#### Portfolio:

1.14 Read the text on page 178 and complete the “*Step-by-Step*” exercise on pages 178 – 180. Place a printed copy of the edited research paper in your portfolio.

#### Writing:

1.15 Complete questions 1 – 3 under “*Key Concepts Check*” and 4 – 5 under “*Critical Thinking*”.

#### Assignment:

1.16 Complete the “*Step-by-Step*” exercise on pages 181 – 182 and submit a copy of the edited research paper to your instructor for marking.

#### Practice:

1.17 Read the text on page 185 and complete the “*Step-by-Step*” exercise on pages 185 – 186.

## Unit 1 – Advanced Word Processing

### References and Notes

*Refer to pages 187 – 194 to complete questions 1.18 – 1.21*



*Refer to pages 196 – 198 to complete question 1.22*



*Refer to page 201 to write an answer for question 1.23*



*Refer to pages 201 – 202 to complete the assignment*



**Note:** This is the end of Unit 1. You should check with your instructor to see if there is review work or any other additional work for this unit.

### Work to Complete

#### Practice:

- 1.18 Read the text on page 187 and complete the “*Step-by-Step*” exercise on pages 187 – 188.
- 1.19 Read the text on page 189 and complete the “*Step-by-Step*” exercise on pages 189 – 191.
- 1.20 Read the text on page 192 and complete the “*Step-by-Step*” exercise on pages 192 – 193.
- 1.21 Read the text on page 194 and complete the “*Step-by-Step*” exercise on pages 194 – 195.

#### Portfolio:

- 1.22 Read the text on page 196 and complete the “*Step-by-Step*” exercise on pages 196 – 198. Place a copy of your printed newsletter in your portfolio.

#### Writing:

- 1.23 Complete questions 1 – 3 under “*Key Concepts Check*” and 4 – 5 under “*Critical Thinking*”.

#### Assignment:

- 1.24 Complete the “*Step-by-Step*” exercise on pages 201 – 202. Submit a hard copy of the newsletter to your instructor for marking.

## Unit 2 – Introduction to Spreadsheets

To fulfill the objectives of this unit, students should complete the following:

**Reading for this unit:**     *Computer Concepts in Action*  
Unit 5 Project 1, pages 214 – 227  
Unit 5 Project 2, pages 228 – 238

References and Notes	Work to Complete
<p><i>Refer to page 215 to write answers for questions 2.1 – 2.4 ►►</i></p>	<p><b>Writing:</b></p> <p>2.1 What is the function of spreadsheet software?</p> <p>2.2 What is a worksheet?</p> <p>2.3 What is a workbook?</p> <p>2.4 Define the following:</p> <ul style="list-style-type: none"><li>i. row</li><li>ii. column</li><li>iii. cell</li></ul>
<p><i>Refer to pages 216 – 220 to complete questions 2.5 – 2.6 ►►</i></p>	<p><b>Practice:</b></p> <p>2.5 Read the text on page 215 and complete the “<i>Step-by-Step</i>” exercise on pages 216 – 217.</p> <p>2.6 Read the text on page 218 and complete the “<i>Step-by-Step</i>” exercise on pages 218 – 220.</p>
<p><i>Refer to page 221 to write answers for questions 2.7 – 2.8 ►►</i></p>	<p><b>Writing:</b></p> <p>2.7 What is a range?</p> <p>2.8 What does the AutoFit tool do?</p>
<p><i>Refer to pages 221 – 222 to complete question 2.9 ►►</i></p>	<p><b>Practice:</b></p> <p>2.9 Read the text on page 221 and complete the “<i>Step-by-Step</i>” exercise on pages 221 – 222.</p>

## Unit 2 – Introduction to Spreadsheets

### References and Notes

Refer to pages 223 – 224 to complete question 2.10 ►►

Refer to page 225 to complete question 2.11 ►►

Refer to pages 225 – 226 to complete the assignment ►►

Refer to page 229 to write answers for questions 2.13 – 2.14 ►►

Refer to pages 229 – 230 to complete question 2.15 ►►

Refer to page 231 to write an answer for question 2.16 ►►

Refer to pages 231 – 233 to complete question 2.17 ►►

Refer to page 234 to write an answer for question 2.18 ►►

### Work to Complete

#### Portfolio:

2.10 Read the text on page 223 and complete the “*Step-by-Step*” exercise on pages 223 – 224. Place a printed copy of the worksheet in your portfolio.

#### Writing:

2.11 Complete questions 1 – 4 under “*Key Concepts Check*” and 5 – 6 under “*Critical Thinking*”.

#### Assignment:

2.12 Complete the “*Step-by-Step*” exercise on pages 225 – 226. Submit a copy of the worksheet to your instructor for marking.

#### Writing:

2.13 What is an arithmetic operator?

2.14 What is a formula?

#### Practice:

2.15 Read the text on page 229 and complete the “*Step-by-Step*” exercise on pages 229 – 230.

#### Writing:

2.16 What is a function?

#### Practice:

2.17 Read the text on page 231 and complete the “*Step-by-Step*” exercise on pages 232 – 233.

#### Writing:

2.18 What is relative addressing?

## Unit 2 – Introduction to Spreadsheets

### References and Notes

*Refer to pages 234 – 235 to complete question 2.19* ▶▶

*Refer to page 236 to write an answer for question 2.20* ▶▶

*Refer to pages 236 – 237 to complete the assignment* ▶▶

**Note:** *This is the end of Unit 2. You should check with your instructor to see if there is review work or any other additional work for this unit.*

### Work to Complete

#### Portfolio:

2.19 Read the text on page 234 and complete the “*Step-by-Step*” exercise on pages 234 – 235. Place a copy of the worksheet in your portfolio.

#### Writing:

2.20 Complete questions 1 – 3 under “*Key Concepts Check*” and 4 – 5 under “*Critical Thinking*”.

#### Assignment:

2.21 Complete the “*Step-by-Step*” exercise on pages 236 – 237. Submit an electronic copy of the worksheet to your instructor for marking.

## Unit 3 – Introduction to Presentation Software

To fulfill the objectives of this unit, students should complete the following:

**Reading for this unit:**     *Computer Concepts in Action*  
Unit 7 Project 1, pages 311 – 325  
Unit 7 Project 2, pages 326 – 341

### References and Notes

*Refer to page 312 to write an answer for question 3.1* ▶▶

*Refer to pages 312 – 316 to complete questions 3.2 – 3.3* ▶▶

*Refer to page 317 to write an answer for question 3.4* ▶▶

*Refer to pages 317 – 322 to complete questions 3.5 – 3.7* ▶▶

*Refer to page 323 to write an answer for question 3.8* ▶▶

### Work to Complete

#### Writing:

3.1 What is presentation software used to create?

#### Practice:

3.2 Read the text on page 312 and complete the “*Step-by-Step*” exercise on pages 312 – 313.

3.3 Read the text on page 314 and complete the “*Step-by-Step*” exercise on pages 314 – 316.

#### Writing:

3.4 What is a theme?

#### Practice:

3.5 Read the text on page 317 and complete the “*Step-by-Step*” exercise on pages 317 – 318.

3.6 Read the text on page 319 and complete the “*Step-by-Step*” exercise on pages 319 – 320.

3.7 Read the text on page 321 and complete the “*Step-by-Step*” exercise on pages 321 – 322.

#### Writing:

3.8 Complete questions 1 – 3 under “*Key Concepts Check*” and 4 – 5 under “*Critical Thinking*”.

## Unit 3 – Introduction to Presentation Software

### References and Notes

Refer to pages 323 – 324 to complete the assignment ►►

Refer to page 327 to write an answer for question 3.10 ►►

Refer to pages 327 – 331 to complete questions 3.11 – 3.12 ►►

Refer to page 332 to write an answer for question 3.13 ►►

Refer to pages 332 – 333 to complete question 3.14 ►►

Refer to page 334 to write answers for questions 3.15 – 3.16 ►►

Refer to pages 334 – 335 to complete question 3.17 ►►

### Work to Complete

#### Assignment:

3.9 Complete the “*Step-by-Step*” exercise on pages 323 – 324. Submit an electronic copy of the presentation to your instructor for marking.

#### Writing:

3.10 List five guidelines for creating slides.

#### Practice:

3.11 Read the text on page 327 and complete the “*Step-by-Step*” exercise on pages 327 – 328.

3.12 Read the text on page 329 and complete the “*Step-by-Step*” exercise on pages 329 – 331.

#### Writing:

3.13 What is a spreadsheet? What is a legend?

#### Practice:

3.14 Read the text on page 332 and complete the “*Step-by-Step*” exercise on pages 332 – 333.

#### Writing:

3.15 What is a transition? What is animation?

3.16 List three design tips to keep in mind when using transitions and animations.

#### Practice:

3.17 Read the text on page 334 and complete the “*Step-by-Step*” exercise on pages 334 – 335.



## Unit 3 – Introduction to Presentation Software

### References and Notes

*Refer to pages 336 – 338 to complete question 3.18* ▶▶

*Refer to page 339 to write an answer for question 3.19* ▶▶

*Refer to pages 339 – 340 to complete the assignment* ▶▶

**Note:** *This is the end of Unit 3. You should check with your instructor to see if there is review work or any other additional work for this unit.*

### Work to Complete

#### Portfolio:

3.18 Read the text on page 336 and complete the “*Step-by-Step*” exercise on pages 336 – 338. Place an electronic copy of the worksheet in your portfolio.

#### Writing:

3.19 Complete questions 1 – 3 under “*Key Concepts Check*” and 4 – 5 under “*Critical Thinking*”.

#### Assignment:

3.20 Complete the “*Step-by-Step*” exercise on pages 339 – 340. Submit an electronic copy of the presentation to your instructor for marking.

## Unit 4 – Using Help

To fulfill the objectives of this unit, students should complete the following:

**Reading for this unit:** *Computer Concepts in Action*  
Unit 2 Project 2, pages 69 – 81

References and Notes	Work to Complete
<p><i>Refer to page 70 to write answers for questions 4.1 – 4.2 ►►</i></p>	<p><b>Writing:</b></p> <p>4.1 What is a keyword?</p> <p>4.2 List and describe the two basic types of searches.</p>
<p><i>Refer to pages 70 – 74 to complete questions 4.3 – 4.4 ►►</i></p>	<p><b>Practice:</b></p> <p>4.3 Complete the “<i>Step-by-Step</i>” exercise on pages 70 – 71.</p> <p>4.4 Read the text on page 72 and complete the “<i>Step-by-Step</i>” exercise on pages 72 – 74.</p>
<p><i>Refer to page 75 to write an answer for question 4.5 ►►</i></p>	<p><b>Writing:</b></p> <p>4.5 List and describe the four basic ways to use Help in a Microsoft Office application.</p>
<p><i>Refer to pages 75 – 78 to complete questions 4.6 – 4.7 ►►</i></p>	<p><b>Practice:</b></p> <p>4.6 Read the text on page 75 and complete the “<i>Step-by-Step</i>” exercise on pages 75 – 76.</p> <p>4.7 Read the text on page 77 and complete the “<i>Step-by-Step</i>” exercise on pages 77 – 78.</p>
<p><i>Refer to page 79 to write an answer for question 4.8 ►►</i></p>	<p><b>Writing:</b></p> <p>4.8 Complete questions 1 – 3 under “<i>Key Concepts Check</i>” and questions 4 – 6 under “<i>Critical Thinking</i>”.</p>
<p><i>Refer to pages 79 – 80 to complete question 4.9 ►►</i></p>	<p><b>Practice:</b></p> <p>4.9 Complete the “<i>Step-by-Step</i>” exercise on pages 79 – 80.</p>

## Unit 4 – Using Help

### References and Notes

***Note:** This is the end of Unit 4. You should check with your instructor to see if there is review work or any other additional work for this unit.*

### Work to Complete

## Unit 5 – E-commerce

To fulfill the objectives of this unit, students should complete the following:

**Reading for this unit:** *Computer Concepts in Action*  
Unit 6 Tech Talk: E-commerce, pages 255 – 265

References and Notes	Work to Complete
<i>Refer to pages 255 - 256 to write answers to questions 5.1 – 5.2 ►►</i>	<b>Writing:</b> 5.1 What is e-commerce?
<i>Refer to page 256 to write an answer for question 5.3 ►►</i>	5.2 Compare and contrast the benefits of e-commerce for consumers and businesses.
<i>Refer to pages 257 – 258 to write an answer for question 5.4 ►►</i>	5.3 Answer questions 1 and 2 under “ <i>Reading Check</i> ”.
<i>Refer to page 259 to write answers for questions 5.5 – 5.6 ►►</i>	5.4 What is difference between brick-and-mortar, click-and-mortar, and click-and-order businesses?
<i>Refer to page 260 to write an answer for question 5.7 ►►</i>	5.5 List and describe the three types of e-commerce.
<i>Refer to page 261 to write answers for questions 5.8 – 5.9 ►►</i>	5.6 Answer questions 1 and 2 under “ <i>Reading Check</i> ”.
<i>Refer to page 262 to write answers for questions 5.10 – 5.11 ►►</i>	5.7 What is a banner ad?
<i>Refer to page 263 to write answers for questions 5.12 – 5.13 ►►</i>	5.8 What is a pop-up ad?
<i>Refer to page 264 to write an answer for question 5.14 ►►</i>	5.9 What is a click-through?
	5.10 List and describe three ways that Web sites attract and retain visitors.
	5.11 Answer questions 1 and 2 under “ <i>Reading Check</i> ”.
	5.12 What are some possible risks with buying products on the Internet?
	5.13 What are some guidelines for reducing risk while shopping online?
	5.14 Answer questions 1 and 2 under “ <i>Reading Check</i> ”.

## Unit 5 – E-commerce

### References and Notes

Refer to page 265 to write an answer for question 5.15 ►►

**Note:** This is the end of Unit 5. You should check with your instructor to see if there is review work or any other additional work for this unit.

### Work to Complete

5.15 Answer questions 4 – 6 under “Review and Assessment”.

## Unit 6 – System Settings and the Control Panel


To fulfill the objectives of this unit, students should complete the following:

**Reading for this unit:**     *Computer Concepts in Action*  
Appendix C: System Settings and the Control Panel, pages  
483 – 492

References and Notes	Work to Complete
<p>Refer to pages 484 – 489 to complete questions 6.1 – 6.6 ►►</p>	<p><b>Practice:</b></p> <p>6.1 Read the text on page 484 and complete the “<i>Step-by-Step</i>” exercise on page 484.</p> <p>6.2 Read the text on page 485 and complete the “<i>Step-by-Step</i>” exercise on page 485.</p> <p>6.3 Read the text on page 486 and complete the “<i>Step-by-Step</i>” exercise on page 486.</p> <p>6.4 Read the text on page 487 and complete the “<i>Step-by-Step</i>” exercise on page 487.</p> <p>6.5 Read the text on page 488 and complete the “<i>Step-by-Step</i>” exercise on page 488.</p> <p>6.6 Read the text on page 489 and complete the “<i>Step-by-Step</i>” exercise on page 489.</p> <p><b>Writing:</b></p> <p>6.7 What is a cookie?</p> <p><b>Practice:</b></p> <p>6.8 Read the text on page 490 and complete the “<i>Step-by-Step</i>” exercise on page 490.</p> <p><b>Writing:</b></p> <p>6.9 Complete questions 1 – 3 under “<i>Key Concepts Check</i>” and questions 4 – 5 under “<i>Critical Thinking</i>”.</p>
<p>Refer to page 490 to write an answer for question 6.7 ►►</p>	
<p>Refer to page 490 to complete question 6.8 ►►</p>	
<p>Refer to page 491 to write an answer for question 6.9 ►►</p>	

## Unit 6 – System Settings and the Control Panel

### References and Notes

Refer to pages 491 – 492 to complete question 6.10 

**Note:** This is the end of Unit 6. You should check with your instructor to see if there is review work or any other additional work for this unit.

### Work to Complete

#### Practice:

6.10 Complete the “Step-by-Step” exercise on pages 491 – 492.