

## Computer Applications 1 Curriculum

**Course Description:** Computer Applications I is a course that is designed for students to use integrated software applications - with a focus on word processing, spreadsheet applications, presentation design, email usage, and organization of electronic files and documents. Computer Applications I is designed for any student who would like to develop professionalism and necessary software skills to be successful in the modern world of technology. Students will learn the necessary features of Google Drive, Google Email, Google Docs, Google Sheets, and Google Slides.

**Grades: 9-12 Grade**

### Course Priority Standards

#### NBEA 2020 National Business Education Standards

#### Information Technology: VII Applications

VII.1.2 Use collaborative application tools to support learning

VII.1.3 Explore web-based communication applications

VII.1.6 Use help features and reference materials to learn applications and solve problems

VII.1.7 Evaluate and select the appropriate applications to productively complete tasks

VII.1.10 Compare and contrast applications features

VII.1.13 Use the collaborative features of applications to accomplish organizational tasks

VII.1.14 Apply advanced features of applications for productivity

VII.1.15 Evaluate the effectiveness of applications to solve specific problems

VII.1.20 Demonstrate the transferability of skills between applications

VII.1.21 Diagnose and solve application problems

VII.1.22 Select and integrate productivity software products appropriate for various computer and cloud platforms

#### International Society for Technology in Education

#### Creative Communicator

1.6 Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.

1.6.a Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

1.6.b Students create original works or responsibly repurpose or remix digital resources into new creations.

1.6.c Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

1.6.d Students publish or present content that customizes the message and medium for their intended audiences.

## **Global Collaborator**

**1.7** Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

**1.7.a** Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.

**1.7.b** Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

**1.7.c** Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

## **Course Essential Questions**

- How do you determine what media and format to use to communicate information and ideas effectively?
- In what ways does technology enhance expression and communication?
- Why is collaboration important in a business environment?
- Why are effective communication skills necessary for success in business?
- What skills and knowledge are critical for success in a global economy?

## **Course Enduring Understandings**

- Effective oral, written, and online communication skills are an integral part of achieving success in the 21st century work environment.
- Application of essential business knowledge, creativity, innovation, critical thinking, and problem solving are essential to success in an advanced global economy.
- To operate effectively in the business world, collaboration with diverse groups of people in any setting is important.
- In the ever changing technology world that we live in, students need to be flexible, life-long learners.

## **Course Essential Vocabulary:**

G-suite, Google Drive, Google Docs, Google Sheets, Google Slides, Gmail, collaboration, shared documents, Google Drive, Gmail, files, storage, cloud, folders, subfolders, shared folders, filter, notifications, inbox, email subject line, signature, spacing, margins, save, undo/redo, spell check, borders, rulers, proofreading, business documents (letters, memos, e-mail, agenda, outlines, itinerary, reports), templates, hyperlinks, file format, mail merge, MLA & APA report format, open and mixed punctuation, block and modified block format, Spreadsheet, cell, active cell, columns, rows, formula bar, sheet tabs, cell reference, cell range, merged cell, formula tab, functions, formulas, average function, min/max functions, numbers group, table, merge, text wrap, tables, presentation deck, master slide, slides, layout, animation, themes, format background, texture/gradient fill, motion paths, embedding, transition, hyperlinks, usage rights, copyright, target audience

## **Course Resources & Materials**

- Applied Educational Systems (AES) <https://www.aeseducation.com/>
- B.E. Publishing - Ereadiness: Learn by Doing Google Apps 3 <https://www.ereadiness.com/>
- Google Edu [https://edu.google.com/intl/ALL\\_us/](https://edu.google.com/intl/ALL_us/)

<b>Unit 1</b>	<b>Google Suite (1 Week)</b> Students will be introduced to Google Suite. They will explore the different software systems within Google Suite and their purposes.
<b>Unit 1 Big Ideas</b>	The type of digital software used depends on the task to be completed.
<b>Unit 1 Essential Questions</b>	<ul style="list-style-type: none"> <li>• What are the considerations when selecting a technology tool to solve a problem, complete a task, or manage information?</li> <li>• How can I use media tools to clarify my message?</li> </ul>
<b>Unit 1 Student Learning Goals</b>	<ul style="list-style-type: none"> <li>• Students will independently evaluate and choose the most appropriate technology resources for presenting information.</li> </ul>
<b>Unit 1 Vocabulary</b>	G-suite, Google Drive, Google Docs, Google Sheets, Google Slides, Gmail, collaboration, shared documents
<b>Unit 1 National Business Education Standards</b>	<b>VII.1.2</b> Use collaborative application tools to support learning
	<b>VII.1.3</b> Explore web-based communication applications
	<b>VII.1.7</b> Evaluate and select the appropriate applications to productively complete tasks
	<b>VII.1.10</b> Compare and contrast applications features
	<b>VII.1.15</b> Evaluate the effectiveness of applications to solve specific problems
	<b>VII.1.20</b> Demonstrate the transferability of skills between applications
<b>Unit 1 International Society for Technology in Education Standards</b>	<b>1.6.a</b> Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
<b>Unit 1 Assessments</b>	Personal Exploration of Google Suite Interface Assignment

<b>Curricular Resources Utilized in Unit 1</b>	<ul style="list-style-type: none"> <li>• Applied Educational Systems (AES) <a href="https://www.aeseducation.com/">https://www.aeseducation.com/</a></li> <li>• B.E. Publishing - Ereadiness: Learn by Doing Google Apps 3 <a href="https://www.ereadiness.com/">https://www.ereadiness.com/</a></li> <li>• Google Edu <a href="https://edu.google.com/intl/ALL_us/">https://edu.google.com/intl/ALL_us/</a></li> </ul>
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<b>Unit 2</b>	<b>Workplace Readiness (1 Week)</b> Students will develop organizational tools to manage a professional email (Gmail) and digital filing system (Google Drive).
<b>Unit 2 Big Ideas</b>	<ul style="list-style-type: none"> <li>• Organizing, storing, and locating computer files is essential for efficiency in the workplace.</li> <li>• Files saved on a computer or in the cloud are stored in a hierarchy of folders.</li> </ul>
<b>Unit 2 Essential Questions</b>	<ul style="list-style-type: none"> <li>• Which file organizational system is right for my needs?</li> <li>• What are soft skills and why do I need them?</li> <li>• Why are ethics important in the workplace?</li> </ul>
<b>Unit 2 Student Learning Goals</b>	<ul style="list-style-type: none"> <li>• Students will exhibit organizational skills through filing systems they create.</li> <li>• Students will demonstrate ethical behavior when creating business documents.</li> </ul>
<b>Unit 2 Vocabulary</b>	Google Drive, Gmail, files, storage, cloud, folders, subfolders, shared folders, filter, notifications, inbox, email subject line, signature
<b>Unit 2 National Business Education Standards</b>	<b>VII.1.3</b> Explore web-based communication applications
<b>Unit 2 International Society for Technology in Education Standards</b>	<b>1.6.a</b> Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
<b>Unit 2 Assessments</b>	Google Drive Folder Setup Assignment Gmail - Professional email (summative)
<b>Curricular Resources Utilized in Unit 2</b>	<ul style="list-style-type: none"> <li>• Applied Educational Systems (AES) <a href="https://www.aeseducation.com/">https://www.aeseducation.com/</a></li> <li>• B.E. Publishing - Ereadiness: Learn by Doing Google Apps 3 <a href="https://www.ereadiness.com/">https://www.ereadiness.com/</a></li> <li>• Google Edu <a href="https://edu.google.com/intl/ALL_us/">https://edu.google.com/intl/ALL_us/</a></li> </ul>

<b>Unit 3</b>	<b>Google Docs (6 Weeks)</b> Students will learn to navigate the Google Docs workspace, utilize tools to properly format documents, and create professional communication pieces.
<b>Unit 3 Big Ideas</b>	Word processing is a tool used to construct a professional document that effectively communicates a professional message and helps to solve problems in the business world.
<b>Unit 3 Essential Questions</b>	<ul style="list-style-type: none"> <li>• What makes a document effective?</li> <li>• How does the format of a document impact the reader’s perception? (letters, memos, outlines, newsletters, reports, etc.)?</li> <li>• How can word processing software improve my written communication?</li> </ul>
<b>Unit 3 Student Learning Goals</b>	<ul style="list-style-type: none"> <li>• Students will properly format essential business documents.</li> <li>• Students will utilize advanced features of a word processing application.</li> <li>• Students will utilize a word processing application to demonstrate professional writing skills.</li> <li>• Students will create and format business documents such as letters, memos, reports, and press releases.</li> <li>• Students will create and format tables, mail-merge, and graphics.</li> <li>• Students will set up and edit document formatting options such as margins, page orientation, breaks, headers, and footers.</li> <li>• Students will create and edit layout and design formatting for tables and columns.</li> <li>• Students will create and format graphic options such as text wrapping, design, layout, style, and color.</li> <li>• Students will create and edit chart options such as design, titles, axes, data labels, and gridlines.</li> <li>• Students will use appropriate MLA and APA format to cite references in business documents.</li> </ul>
<b>Unit 3 Vocabulary</b>	spacing, margins, save, undo/redo, spell check, borders, rulers, proofreading, business documents (letters, memos, e-mail, agenda, outlines, itinerary, reports), templates, hyperlinks, file format, mail merge, MLA & APA report format, open and mixed punctuation, block and modified block format
<b>Unit 3 National Business Education Standards</b>	<b>VII.1.2</b> Use collaborative application tools to support learning
	<b>VII.1.3</b> Explore web-based communication applications
	<b>VII.1.6</b> Use help features and reference materials to learn applications and solve problems
	<b>VII.1.7</b> Evaluate and select the appropriate applications to productively complete tasks

	<b>VII.1.10</b> Compare and contrast applications features
	<b>VII.1.13</b> Use the collaborative features of applications to accomplish organizational tasks
	<b>VII.1.14</b> Apply advanced features of applications for productivity
	<b>VII.1.15</b> Evaluate the effectiveness of applications to solve specific problems
	<b>VII.1.20</b> Demonstrate the transferability of skills between applications
	<b>VII.1.21</b> Diagnose and solve application problems
	<b>VII.1.22</b> Select and integrate productivity software products appropriate for various computer and cloud platforms
<b>Unit 3 International Society for Technology in Education Standards</b>	<b>1.6</b> Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
	<b>1.6.a</b> Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
	<b>1.6.b</b> Students create original works or responsibly repurpose or remix digital resources into new creations.
	<b>1.6.c</b> Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
	<b>1.6.d</b> Students publish or present content that customizes the message and medium for their intended audiences.
	<b>1.7</b> Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.
	<b>1.7.a</b> Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.
	<b>1.7.b</b> Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
	<b>1.7.c</b> Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

<b>Unit 3 Assessments</b>	Projects: Create an Invitation Create a School Organization Flyer Complete a Report Using MLA Who's Who Autograph Project (Summative)
<b>Curricular Resources Utilized in Unit 3</b>	<ul style="list-style-type: none"> <li>• Applied Educational Systems (AES) <a href="https://www.aeseducation.com/">https://www.aeseducation.com/</a></li> <li>• B.E. Publishing - Ereadiness: Learn by Doing Google Apps 3 <a href="https://www.ereadiness.com/">https://www.ereadiness.com/</a></li> <li>• Google Edu <a href="https://edu.google.com/intl/ALL_us/">https://edu.google.com/intl/ALL_us/</a></li> </ul>

<b>Unit 4</b>	<b>Google Sheets (5 Weeks)</b> Students will learn when to use spreadsheet software and how to use its basic functions to organize and manipulate data.
<b>Unit 4 Big Ideas</b>	Spreadsheet software is used to organize, sort, calculate, and present data.
<b>Unit 4 Essential Questions</b>	<ul style="list-style-type: none"> <li>• When should I use spreadsheet software?</li> <li>• How can spreadsheet software be used to organize and manipulate data?</li> <li>• What factors should I consider when deciding to communicate via table or chart?</li> <li>• How do spreadsheet applications simplify data commonly used in business settings?</li> </ul>
<b>Unit 4 Student Learning Goals</b>	<ul style="list-style-type: none"> <li>• Students will understand how spreadsheets can be used to organize and manipulate numerical and categorical data.</li> <li>• Students will use a given set of data to create charts.</li> <li>• Students will utilize spreadsheet features such as: filter, sort, find, format, value, merge, and advanced print options.</li> <li>• Students will create a workbook with formatted spreadsheets.</li> <li>• Students will interpret a spreadsheet/chart information.</li> <li>• Students will enter data into a spreadsheet utilizing cell references, the formula bar, and the fill handle.</li> <li>• Students will calculate data in a spreadsheet by using formulas and functions.</li> <li>• Students will use relative and absolute references to create formulas that can easily be copied to new cell locations.</li> <li>• Students will generate appropriate charts, reports, and graphs for the type of data being used.</li> <li>• Students will visually enhance information with the use of pivot tables and pivot charts.</li> </ul>

<b>Unit 4 Vocabulary</b>	Spreadsheet, cell, active cell, columns, rows, formula bar, sheet tabs, cell reference, cell range, merged cell, formula tab, functions, formulas, average function, min/max functions, numbers group, table, merge, text wrap, tables
<b>Unit 4 National Business Education Standards</b>	<b>VII.1.2</b> Use collaborative application tools to support learning
	<b>VII.1.3</b> Explore web-based communication applications
	<b>VII.1.6</b> Use help features and reference materials to learn applications and solve problems
	<b>VII.1.7</b> Evaluate and select the appropriate applications to productively complete tasks
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	<b>VII.1.20</b> Demonstrate the transferability of skills between applications
	<b>VII.1.21</b> Diagnose and solve application problems
	<b>VII.1.22</b> Select and integrate productivity software products appropriate for various computer and cloud platforms
<b>Unit 4 International Society for Technology in Education Standards</b>	<b>1.6</b> Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
	<b>1.6.a</b> Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
	<b>1.6.b</b> Students create original works or responsibly repurpose or remix digital resources into new creations.
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	<b>1.6.d</b> Students publish or present content that customizes the message and medium for their intended audiences.



	<p><b>1.7</b> Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.</p> <p><b>1.7.a</b> Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.</p> <p><b>1.7.b</b> Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.</p> <p><b>1.7.c</b> Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.</p>
<b>Unit 4 Assessments</b>	<p>Projects:  Basketball Team Statistics  Food Order  Club Money Budget  Food Stand Budget  Who's Who - Show Me the Money Project (Summative)</p>
<b>Curricular Resources Utilized in Unit 4</b>	<ul style="list-style-type: none"> <li>• Applied Educational Systems (AES) <a href="https://www.aeseducation.com/">https://www.aeseducation.com/</a></li> <li>• B.E. Publishing - Ereadiness: Learn by Doing Google Apps 3 <a href="https://www.ereadiness.com/">https://www.ereadiness.com/</a></li> <li>• Google Edu <a href="https://edu.google.com/intl/ALL_us/">https://edu.google.com/intl/ALL_us/</a></li> </ul>

<b>Unit 5</b>	<p><b>Google Slides (4 Weeks)</b>  Students will utilize presentation software to create effective visual aids to improve communication with an audience.</p>
<b>Unit 5 Big Ideas</b>	<p>Presentation decks are a tool used to construct a professional document that effectively communicates a professional message and helps to solve problems in the business world.</p>
<b>Unit 5 Essential Questions</b>	<ul style="list-style-type: none"> <li>• How do you create an engaging, effective presentation?</li> <li>• How can presentation software improve communication with my audience?</li> <li>• What are the guidelines for setting up a presentation?</li> </ul>
<b>Unit 5 Student Learning Goals</b>	<ul style="list-style-type: none"> <li>• Students will evaluate principles of good design in a presentation.</li> <li>• Students will use the various tools embedded in Google Slides to create a presentation designed to appeal</li> </ul>

	<ul style="list-style-type: none"> <li>to a target audience including layout features, animation, motion paths, and transitions.</li> <li>● Students will use online resources to collaborate.</li> <li>● Students will effectively use Google Slides to aid in giving a successful presentation.</li> </ul>
<b>Unit 5 Vocabulary</b>	presentation deck, master slide, slides, layout, animation, themes, format background, texture/gradient fill, motion paths, embedding, transition, hyperlinks, usage rights, copyright, target audience
<b>Unit 5 National Business Education Standards</b>	<b>VII.1.2</b> Use collaborative application tools to support learning
	<b>VII.1.3</b> Explore web-based communication applications
	<b>VII.1.6</b> Use help features and reference materials to learn applications and solve problems
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<b>Unit 5 International Society for Technology in Education Standards</b>	<b>1.6</b> Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
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<b>Unit 5 Assessments</b>	<p>Presentation Project (themes, design, templates) - Favorite Sandwich  Presentation Project (text boxes, images, word art, shapes) - City Exploration  Presentation Project - Dream Vacation (Summative)</p>
<b>Curricular Resources Utilized in Unit 5</b>	<ul style="list-style-type: none"> <li>● Applied Educational Systems (AES) <a href="https://www.aeseducation.com/">https://www.aeseducation.com/</a></li> <li>● B.E. Publishing - Ereadiness: Learn by Doing Google Apps 3 <a href="https://www.ereadiness.com/">https://www.ereadiness.com/</a></li> <li>● Google Edu <a href="https://edu.google.com/intl/ALL_us/">https://edu.google.com/intl/ALL_us/</a></li> </ul>