CKSD Curriculum
Unit Template
Computer Applications 10-12
Suggested Length of Unit – 45 Days ½ Semester
Instructor: Walter

Unit title and short description

- File Management
- Microsoft Excel

Major Academic Standards Addressed

15.4.2.A. Identify various technologies used in the classroom and at home.
15.4.5.A. Identify emerging technologies used for educational and personal success.
15.4.8.A. Analyze the influence of emerging technologies on daily life.
15.4.12.A. Apply the creative and productive use of emerging technologies for educational and personal success.
15.4.2.B. Demonstrate responsible use of technology and equipment.
15.4.5.B. Identify and demonstrate understanding of ethical, safe, and social online behavior and potential consequences of unethical, unsafe, and inappropriate behavior.
15.4.8.B. Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.
15.4.12.B. Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship.
15.4.2.C. With prompting and support, identify peripheral devices of computer system including input and output devices.
15.4.5.C. Describe the purpose, use, and care of peripheral devices of computer systems including input, processing, storage, and output devices.
15.4.8.C. Compare and contrast peripheral devices of computing systems for specific needs.
15.4.12.C. Develop criteria for analyzing hardware options to meet defined needs. Input Technologies
15.4.2.D. Demonstrate the correct use of simple input technologies (e.g., mouse, touch screen, microphone, etc.).
15.4.5.D. Demonstrate the ergonomically correct use of more sophisticated input technologies.
15.4.8.D. Create projects using emerging input technologies. 15.4.12.D. Evaluate emerging input technologies.
15.4.8.E. Explain the different operating systems. 15.4.12.E. Analyze the different operating systems and recommend the appropriate system for specific user needs.
15.4.12.F. Compare and contrast network environments, including the function of network devices and connectivity issues.
15.4.2.G. With help and support, select and use various software/applications for an intended purpose.
15.4.5.G Create a digital project using appropriate software/application for an authentic task.
15.4.8.G. Create an advanced digital project using appropriate software/application for an authentic task.
15.4.12.G. Create an advanced digital project using sophisticated design and appropriate software/applications.
15.4.8.H. Explain the differences between a scripting language and a coding language.
15.4.12.H. Use programming languages to develop logical thinking and problem solving skills.

15.4.8.I. Solve a problem with an algorithm. 15.4.8.I. Compare and contrast programming languages; select most appropriate one to complete a specific task.
15.4.8.J. Explain the basic differences between encoding and decoding.
15.4.8.J. Create a complex computer program to solve a problem.
15.4.2.K. With help and support, identify similarities and differences between text, graphics, audio, animation, and video.
15.4.5.K. Use digital media to enhance a content specific work product.
15.4.8.K. Create a multimedia project using student created digital media.
15.4.12.K. Evaluate advanced multimedia work products and make recommendations based on the evaluation.
15.6.2.L. With help and support, use web browser to locate content specific websites.
15.6.5.L. Discuss the characteristics of a credible website.
15.6.8.L. Evaluate the accuracy and bias of online sources of information; appropriately cite online resources.
15.6.12.L. Find and use primary documentation; employ an accepted protocol for citation.
15.6.2.M. With help and support, identify various technologies used in the workplace.
15.6.5M. Discuss the impact of emerging technologies on a variety of careers.
15.6.8.M. Explore and describe how emerging technologies are used across different career paths.
15.6.12.M. Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field

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Concepts – Content ——**What students should know**
- Students should have basic knowledge of how to input data on a computer
- Students should have an understanding of computer terminology.

Objectives – also called competencies in the SAS
What students should be able to do as a result of the instruction
- Knowledge of how to create a file directory, save in different formats, and copy and move files.
- Knowledge of how to save locally and to the One Drive, and how to share with others.
- Knowledge of how to create, name, and save a workbook, identify rows, columns, and cell addresses, preview and print worksheets.
- Knowledge of how to resize rows and columns, center text vertically in cell, set a print area.
- Knowledge of how to insert and delete rows, select cells, insert and delete columns, rename a worksheet.
- Knowledge of how to insert a header, footer, change margins, print guidelines, print row and column headings.
- Knowledge of how to format data including fonts, fill colors, font colors, etc.
- Knowledge of how to format cells as number, dates, currency, percentages, dates, etc.
- Knowledge of how to sort data in ascending and descending order.
- Knowledge of how to use basic formulas such as addition, subtraction, division, and multiplication.

- Knowledge of how to use Sum, Average, Maximum, and Minimum
- Knowledge of Absolute Cell References, COUNTIF, and PMT.
- Knowledge of how to create a pie, line, column, and bar chart.

Essential Questions – meant to challenge study to ponder, question and query
- *What are some practical uses for Excel?*
- What are some functions used in Excel?
- How do I create a folder to manage files?
- What is absolute cell reference?

<u>Assessments</u>- Assessments should be directly related to the objectives identified for students in this unit.
- Students' completion of workbook exercises.
- Completion of class projects.

Best Instructional Practice(s): Teacher will demonstrate the topics using the whiteboard. Teacher will demonstrate how to complete text problems and show solutions. Students will then complete exercises and projects on their own to demonstrate understanding.

CKSD Curriculum
Unit Template
Computer Applications Grades 10-12
Suggested Length of Unit – 45 Days ½ Semester
Instructor: Walter

<u>*Unit title and short description*</u>
- Microsoft Word
- Microsoft PowerPoint

<u>*Major Academic Standards Addressed*</u>

15.4.2.A. Identify various technologies used in the classroom and at home.
15.4.5.A. Identify emerging technologies used for educational and personal success.
15.4.8.A. Analyze the influence of emerging technologies on daily life.
15.4.12.A. Apply the creative and productive use of emerging technologies for educational and personal success.
15.4.2.B. Demonstrate responsible use of technology and equipment.

15.4.5.B. Identify and demonstrate understanding of ethical, safe, and social online behavior and potential consequences of unethical, unsafe, and inappropriate behavior.

15.4.8.B. Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.

15.4.12.B. Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship.

15.4.2.C. With prompting and support, identify peripheral devices of computer system including input and output devices.

15.4.5.C. Describe the purpose, use, and care of peripheral devices of computer systems including input, processing, storage, and output devices.

15.4.8.C. Compare and contrast peripheral devices of computing systems for specific needs.

15.4.12.C. Develop criteria for analyzing hardware options to meet defined needs. Input Technologies

15.4.2.D. Demonstrate the correct use of simple input technologies (e.g., mouse, touch screen, microphone, etc.).

15.4.5.D. Demonstrate the ergonomically correct use of more sophisticated input technologies.

15.4.8.D. Create projects using emerging input technologies. 15.4.12.D. Evaluate emerging input technologies.

15.4.8.E. Explain the different operating systems. 15.4.12.E. Analyze the different operating systems and recommend the appropriate system for specific user needs.

15.4.12.F. Compare and contrast network environments, including the function of network devices and connectivity issues.

15.4.2.G. With help and support, select and use various software/applications for an intended purpose.

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15.4.8.K. Create a multimedia project using student created digital media.

15.4.12.K. Evaluate advanced multimedia work products and make recommendations based on the evaluation.

15.6.2.L. With help and support, use web browser to locate content specific websites.

15.6.5.L. Discuss the characteristics of a credible website.

15.6.8.L. Evaluate the accuracy and bias of online sources of information; appropriately cite online resources.

15.6.12.L. Find and use primary documentation; employ an accepted protocol for citation.

15.6.2.M. With help and support, identify various technologies used in the workplace.

15.6.5M. Discuss the impact of emerging technologies on a variety of careers.

15.6.8.M. Explore and describe how emerging technologies are used across different career paths.

15.6.12.M. Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field

Concepts – Content ——**What students should know**
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- Students should have an understanding of computer terminology.

Objectives – also called competencies in the SAS
What students should be able to do as a result of the instruction

- Create, name, and save documents. Revise and rename documents.
- Change fonts and sizes and print documents.
- Apply formatting to text such as bold, italics, and underlining.
- Align text, create a numbered list, symbols, strikethrough, bullets, and borders.
- Insert page breaks, hyperlinks, and use find/replace.
- Use spell check, grammar check, and thesaurus.
- Change line spacing and use word count.
- Insert tables, and format cells, rows, and columns as well as merge cells.
- Create columns, use dot leaders, insert header/footers, set tabs, and insert page numbers.
- Work with graphics and visual elements.
- Use shapes, insert pictures, resize, rotate, and use text boxes.
- Format documents including reports, letters, press releases, memos, newsletters, and resumes.

Essential Questions – meant to challenge study to ponder, question and query

- _What are some practical uses for Microsoft Word?_
- What are some practical uses for Microsoft PowerPoint?
- What are the differences between Word and PowerPoint?
- Are there similarities between Word and PowerPoint?

Assessments-

- Assessments should be directly related to the objectives identified for students in this unit.
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- Completion of class projects.

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