



# **Computer Applications**

## ***Course Description***

Computer Applications is a 5-credit business course designed ultimately to prepare students to be productive in the college and career of their choice. Unit one provides students with opportunities to learn and practice effective and appropriate personal and digital communication skills, netiquette, health and safety in the workplace, and Internet ethics such as privacy, copyright infringement and plagiarism. In unit two, a career research project is completed and students complete self-assessments to best identify their future careers. Students prepare a career portfolio including resume, references, and cover letters in Microsoft Word, as well as learning interview skills to facilitate potential job acquisition. Additionally, students gain invaluable Microsoft Word skills, such as formatting, editing text, working with tables, lists and document management among many word processing skills. The students learn about the many facets of Microsoft Excel in unit three, including data collection and analysis and the many uses for these skills in the workplace. Students are taught in unit three, the tools for properly creating visually appealing and engaging Microsoft PowerPoint presentations including effective use of transitions, animations and slide show effects. Each unit contains a suggested time length, required materials, and recommended goals and objectives. A great deal of time is committed to Microsoft Word as many of the skills learned in this unit are transferrable to the remaining two units. Emphasis is placed on the interconnectedness of the three core Microsoft applications. Computer Applications is offered to students grades 9-12 and is comprised of 4 units: Computer Applications in the Workplace, Microsoft Word, Microsoft Excel, and Microsoft PowerPoint.

## Computer Applications

### Pacing Guide

Unit	Topic	Suggested Timing
Unit 1	Computer Applications in the Workplace	approx. 4 weeks
Unit 2	Microsoft Word	approx. 14 weeks
Unit 3	Microsoft Excel	approx. 10 weeks
Unit 4	Microsoft PowerPoint	approx. 7 weeks

## Educational Technology Standards

8.1.12.A.1, 8.1.12.B.2, 8.1.12.C.1, 8.1.12.D.1, 8.1.12.E.1, 8.1.12.F.1

➤ **Technology Operations and Concepts**

- Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.

➤ **Creativity and Innovation**

- Apply previous content knowledge by creating and piloting a digital learning game or tutorial.

➤ **Communication and Collaboration**

- Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

➤ **Digital Citizenship**

- Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.

➤ **Research and Information Literacy**

- Produce a position statement about a real world problem by developing a systematic plan of investigation with peers and experts synthesizing information from multiple sources.

➤ **Critical Thinking, Problem Solving, Decision Making**

- Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.

## Career Ready Practices

*Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.*

### **CRP1. Act as a responsible and contributing citizen and employee**

Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.

### **CRP2. Apply appropriate academic and technical skills.**

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.

### **CRP3. Attend to personal health and financial well-being.**

Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.

### **CRP4. Communicate clearly and effectively and with reason.**

Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.

**CRP5. Consider the environmental, social and economic impacts of decisions.**

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization.

**CRP6. Demonstrate creativity and innovation.**

Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.

**CRP7. Employ valid and reliable research strategies.**

Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.

**CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.**

Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.

**CRP9. Model integrity, ethical leadership and effective management.**

Career-ready individuals consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' action, attitudes and/or beliefs. They recognize the near-term and long-term

effects that management's actions and attitudes can have on productivity, morals and organizational culture.

**CRP10. Plan education and career paths aligned to personal goals.**

Career-ready individuals take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals.

**CRP11. Use technology to enhance productivity.**

Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.

**CRP12. Work productively in teams while using cultural global competence.**

Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

## Differentiated Instruction

### Strategies to Accommodate Students Based on Individual Needs

<p style="text-align: center;"><b><u>Time/General</u></b></p> <ul style="list-style-type: none"> <li>● Extra time for assigned tasks</li> <li>● Adjust length of assignment</li> <li>● Timeline with due dates for reports and projects</li> <li>● Communication system between home and school</li> <li>● Provide lecture notes/outline</li> </ul>	<p style="text-align: center;"><b><u>Processing</u></b></p> <ul style="list-style-type: none"> <li>● Extra Response time</li> <li>● Have students verbalize steps</li> <li>● Repeat, clarify or reword directions</li> <li>● Mini-breaks between tasks</li> <li>● Provide a warning for transitions</li> <li>● Reading partners</li> </ul>	<p style="text-align: center;"><b><u>Comprehension</u></b></p> <ul style="list-style-type: none"> <li>● Precise step-by-step directions</li> <li>● Short manageable tasks</li> <li>● Brief and concrete directions</li> <li>● Provide immediate feedback</li> <li>● Small group instruction</li> <li>● Emphasize multi-sensory learning</li> </ul>	<p style="text-align: center;"><b><u>Recall</u></b></p> <ul style="list-style-type: none"> <li>● Teacher-made checklist</li> <li>● Use visual graphic organizers</li> <li>● Reference resources to promote independence</li> <li>● Visual and verbal reminders</li> <li>● Graphic organizers</li> <li>● Digital Forms with instant feedback</li> </ul>
<p style="text-align: center;"><b><u>Assistive Technology</u></b></p> <ul style="list-style-type: none"> <li>● Computer/whiteboard</li> <li>● Spell-checker</li> <li>● Voice to text application</li> <li>● Headphones with mic</li> </ul>	<p style="text-align: center;"><b><u>Tests/Quizzes/Grading</u></b></p> <ul style="list-style-type: none"> <li>● Extended time</li> <li>● Study guides</li> <li>● Shortened tests</li> <li>● Read directions aloud</li> <li>● Performance-based tests</li> </ul>	<p style="text-align: center;"><b><u>Behavior/Attention</u></b></p> <ul style="list-style-type: none"> <li>● Consistent daily structured routine</li> <li>● Simple and clear classroom rules</li> <li>● Frequent feedback</li> <li>● Appropriate seating</li> </ul>	<p style="text-align: center;"><b><u>Organization</u></b></p> <ul style="list-style-type: none"> <li>● Individual daily planner</li> <li>● Display a written agenda</li> <li>● Note-taking assistance</li> <li>● Color code materials</li> <li>● Multilingual directions</li> </ul>

## Enrichment

### Strategies Used to Accommodate Based on Students Individual Needs:

- Adaption of Material and Requirements
- Evaluate Vocabulary
- Elevated Text Complexity
- Open-ended Activities
- Independent Student Options
- Projects Completed Individually or with Partners
- Self-Selection of Research
- Tiered/Multi-Level Activities for Ability Levels
- Digital and Classroom Resource-based Projects
- Individual Response Board via Google Classroom or Alternative Classroom Site
- Alternative Projects
- Text-to-talk or talk-to-text applications

## Assessments

### Suggested Formative/Summative Classroom Assessments

- Student Generated Timelines, Maps, Charts, Graphic Organizers Using Microsoft Word, Excel or PowerPoint
- Teacher-created Unit Assessments, Chapter Assessments, Quizzes
- Teacher-created DBQs, Essays, Short Answer
- Accountable Talk, Debate, Oral Report, Role-Playing, Think Pair, and Share
- Projects, Portfolios, PowerPoint Presentations, Gallery Walks
- Homework
- Use Google Docs, Sheets or Slides to Demonstrate Skills, Knowledge or Ability
- Rubric-based Business Application, Cross-curricular or Present and Publish Projects
- Photo, Video, Graphic Art, Radio, Song Utilization in Word, Excel, or PowerPoint Projects
- Create a Presentation and add Audio, Video, Sound or Narration
- Complete Assessments using Google Forms, presentations, or performance-based activities
- Use Tumblr or Symbaloo to Create Resource Boards
- Review and Critically Analyze Video-based Resources; use Digital resources to Respond - Google Docs & Forms, or MS Word

## Interdisciplinary Connections

### English Language Arts

- Journal writing
- Close reading of job search related content
- Create a travel or other sales brochure
- Keep a running word wall of topic-related vocabulary

### Social Studies

- Research the history of a given industry/profession
- Research prominent poets, authors or book genres to create newsletters
- Research geographic locations to prepare a presentation for travel in coordination with a budget spreadsheet and brochure

### World Language

- Translate industry-content using digital resources
- Create a translated index of topic-related vocabulary in a journal
- Generate a translated list of words and phrases related to workplace safety
- Create a presentation of common phrases or useful terms for travel to another country

### Math

- Research industry salaries for a geographic area and juxtapose against local cost of living
- Create tables and spreadsheets with formulas to calculate various math functions
- Collect and analyze data using charts and graphs
- Develop a program in computer programming using various applications

### Fine & Performing Arts

- Create a poster for a social function
- Design, develop and create a book for presentation to the class
- Design a logo to represent a company for use on letterhead, invoices and presentations
- Perform for the class a formal job interview with one or two students

### Science

- Research the environmental impact of a given career or industry
- Research latest developments eco-friendly technology
- Investigate applicable-careers in STEM fields

## [New Jersey Student Learning Standards](#)

### 9.3 – Career and Technical Education

#### Career Cluster: Various

- 9.3.12.ED.2: Demonstrate effective oral, written and multimedia communication in multiple formats and contexts.
- 9.3.12.BM.1: Utilize mathematical concepts, skills and problem solving to obtain necessary information for decision-making in business.
- 9.3.ST.2: Use technology to acquire, manipulate, analyze and report data.

#### Pathway: Various

- 9.3.12.BM-ADM.2: Access, evaluate and disseminate information for business decision-making.
- 9.3.12.BM-ADM.3: Plan, monitor and manage day-to-day business activities.
- 9.3.GV-GOV.1: Employ research skills to gather and document factual information, analyze data and interpret statistics applicable to matters of public policy.

## Common Career Technical Core (CCTC)

### Career Cluster - Various

9.3.12.ED.2 – Demonstrate effective oral, written and multimedia communication in multiple formats and contexts.

- ED.2.1 – Write informational correspondence to stakeholders in the learning environment.

9.3.12.BM.1: Utilize mathematical concepts, skills and problem solving to obtain necessary information for decision-making in business.

- BM.1.1 -- Solve mathematical problems using numbers and operations.
- BM.1.4 -- Perform data analysis to make business decisions.

9.3.12.BM-ADM.2 -- Access, evaluate and disseminate information for business decision-making.

- BM-ADM.2.3 – Prepare documentation of business activities to communicate with internal/external clients.
- BM-ADM.2.4 – Utilize information technology tools to manage and perform work responsibilities.

9.3.12.BM-ADM.3 – Plan, monitor and manage day-to-day business activities.

- BM-ADM.3.3 – Maintain work flow to enhance productivity.

9.3.ST.2: Use technology to acquire, manipulate, analyze and report data.

- ST.2.1 -- Use IT tools to manipulate data and create reports, plans, processes, or projects from data provided.
  - Create knowledge from data.

## Common Core State Standards (CCSS)

### CCSS - English-Language Arts

#### Production and Distribution of Writing:

- CCSS.ELA-LITERACY.W.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

#### Research to Build and Present Knowledge:

- CCSS.ELA-LITERACY.W.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

## Common Core State Standards (CCSS)

### CCSS - Mathematics

#### Summarize, represent, and interpret data on a single count or measurement variable:

- CCSS.MATH.CONTENT.HSS.ID.A.1 Represent data with plots on the real number line (dot plots, histograms, and box plots).

#### Make inferences and justify conclusions from sample surveys, experiments, and observational studies:

- CCSS.MATH.CONTENT.HSS.IC.B.6 Evaluate reports based on data.

<p><b>Course:</b> Computer Applications</p> <p><b>Unit:</b> 3 – Microsoft Excel</p> <p><b>Grade Level:</b> 9-12</p>	<p><b>Unit Overview:</b> This unit provides students with the opportunity to learn about the many facets of Microsoft Excel. Topics include data collection and analysis and the many uses for these skills in the workplace. Students will create charts and graphs, learn how to set up document margins, print area, header, footer and print options. Additionally, students will insert pictures, Clipart and SmartArt in the workbooks.</p>
<p><b>New Jersey Student Learning Standards (NJSLS):</b> 9.3.12.ED.2, 9.3.12.BM.1, 9.3.12.BM-ADM.2, 9.3.12.BM-ADM.3, 9.3.ST.2</p>	
<p><b>Common Career Technical Core (CCTC):</b> ED 02.1, BM 1.1, BM 1.4, BM-ADM.2.3, BM-ADM.2.4, BM-ADM.3.3, ST 02.1</p>	
<p><b>Common Core State Standards (CCSS):</b> W.11-12.4, W.11-12.7, HSS.ID.A.1, HSS.IC.B.6</p>	

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
<p>Explore Microsoft Excel and how it works and understand how to enter values and formulas into worksheet cells.</p> <p><b>NJSLS:</b> 9.3.12.ED.2, 9.3.ST.2,</p> <p><b>CCTC:</b> ED 02.1, ST 02.1</p> <p><b>CCSS:</b> W.11-12.4, W.11-12.7</p>	<p>How can Excel help me organize important data?</p> <p>How can developing my ability to organize data in Microsoft Excel help in my search for a career?</p> <p>To what extent can excellent organizational skills benefit me in the workplace?</p>	<ul style="list-style-type: none"> <li>▪ Collect from online resources various data and enter it into Microsoft Excel for the purpose of tracking information.</li> <li>▪ Identify cell address by placing the cursor in specified cell address.</li> <li>▪ Save a spreadsheet.</li> <li>▪ Set a print area in a spreadsheet.</li> </ul>	<p><b><u>DOL (Demonstration of Learning)</u></b>            Prepare a spreadsheet using data provided. Set the print area and save the file according to the directions.</p> <p><b><u>Journal</u></b>            Explain in your own words how Microsoft Excel differs from Microsoft Word.</p>	<p>B.E. Publishing Excel It! Teen-based Activities for Microsoft Excel.            or            B.E. Publishing Learn by Doing – Microsoft Excel 2013 Hands on Lessons and Assessments.</p> <p><b>Glencoe.com: iCheck™ Series Microsoft Office 2010</b></p> <p><b><u>Present and Publish Projects</u></b>  <a href="http://glencoe.mheducation.com">http://glencoe.mheducation.com</a></p>

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				<p><a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html">n.com/sites/007661395x/student_view0/present_and_publish_projects.html</a></p> <p><b>Business Application Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html</a></p> <p><b>Academic Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html</a></p> <p><b>Real World Connection Activities:</b> <a href="#">Unit 2: Excel 2010: Business Finances</a></p>
<p>Demonstrate proper use of Excel worksheet and workbook editing tools.</p> <p><b>NJSLS:</b> 9.3.12.ED.2 9.3.12.BM.1</p>	<p>What are some ways that businesses might use Excel to make their business more efficient?</p> <p>What are some of the benefits to using Excel</p>	<ul style="list-style-type: none"> <li>▪ Understand numbers, ways of representing numbers.</li> <li>▪ Enter, edit, clear, find and replace cell contents</li> </ul>	<p><b>Journal</b> Describe one new use for Excel that you learned.</p> <p><b>Create a Party Budget</b> Track expenses for a party. You start with a</p>	<p>B.E. Publishing Excel It! Teen-based Activities for Microsoft Excel. or B.E. Publishing Learn by Doing – Microsoft Excel 2013 Hands on Lessons</p>

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<p><b>CCTC:</b> ED.2.1, BM 1.1 BM 1.4</p> <p><b>CCSS:</b> W.11-12.4, W.11-12.7, HSS.ID.A.1, HSS.IC.B.6</p>	<p>for creating budgets?</p> <p>How can I utilize Microsoft Excel to recognize relationships among numbers or predict reasonable estimations in business?</p>	<ul style="list-style-type: none"> <li>▪ Use AutoSum, AVERAGE, MIN, and MAX functions.</li> <li>▪ Use the Fill handle tool.</li> <li>▪ Use cut, copy and paste.</li> <li>▪ Insert, modify and remove hyperlinks.</li> </ul>	<p>budget of \$400. You must include food, music, decorations, and gifts. Calculate total costs using the AutoSum function. Make alterations to the budget as instructed to recalculate costs.</p>	<p>and Assessments.</p> <p><b>Glencoe.com: iCheck™ Series Microsoft Office 2010</b></p> <p><b><u>Present and Publish Projects</u></b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html</a></p> <p><b><u>Business Application Projects</u></b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html</a></p> <p><b><u>Academic Projects</u></b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html</a></p> <p><b>Real World Connection</b></p>

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				<p><b>Activities:</b> <a href="#">Unit 2: Excel 2010: Business Finances</a></p> <p><b>Tips for AutoFill Feature MS Excel 2010</b></p> <p><a href="https://www.youtube.com/watch?v=e2tZFawBsGk">https://www.youtube.com/watch?v=e2tZFawBsGk</a></p>
<p>Perform tasks quickly and easily with Excel's automated tools and commands.</p> <p><b>NJSLS:</b> 9.3.12.ED.2, 9.3.12.BM.1, 9.3.12.BM-ADM.2, 9.3.12.BM-ADM.3</p> <p><b>CCTC:</b> ED 02.1, BM 1.1, BM 1.4, BM-ADM.2.3, BM-ADM.2.4, BM-ADM.3.3</p> <p><b>CCSS:</b> W.11-12.4, W.11-12.7, HSS.ID.A.1, HSS.IC.B.6</p>	<p>To what extent do you think many people prefer to use Excel's built-in formulas instead of calculators to process data?</p> <p>How can a business utilize Microsoft Excel to assess various measurements correctly to make business decisions?</p> <p>What types of positions might I pursue in my career search where I</p>	<ul style="list-style-type: none"> <li>▪ Create and edit formulas and functions.</li> <li>▪ Understand and utilize the order of precedence for math operations.</li> </ul>	<p><b>Compute Payroll</b></p> <p>Create a payroll register that includes hours worked, hourly rate, gross pay, federal tax, social security tax, medicate tax, state tax, pension and net pay.</p>	<p>B.E. Publishing Excel It! Teen-based Activities for Microsoft Excel.</p> <p>or</p> <p>B.E. Publishing Learn by Doing – Microsoft Excel 2013 Hands on Lessons and Assessments.</p> <p><b>Glencoe.com: iCheck™ Series Microsoft Office 2010</b></p> <p><b>Present and Publish Projects</b></p> <p><a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html</a></p>

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	can utilize my Microsoft Excel skills?			<p><b>Business Application Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html</a></p> <p><b>Academic Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html</a></p> <p><b>Real World Connection Activities:</b> <a href="#">Unit 2: Excel 2010: Business Finances</a></p>
<p>Explore ways to format content in order to have an easily understandable worksheet.</p> <p><b>NJSLS:</b> 9.3.12.ED.2, 9.3.12.BM.1, 9.3.12.BM-ADM.2, 9.3.12.BM-ADM.3</p> <p><b>CCTC:</b> ED 02.1, BM 1.1,</p>	<p>How can I determine which table and cell styles are the most appropriate for presenting the data in a Microsoft Excel worksheet?</p> <p>To what extent does</p>	<ul style="list-style-type: none"> <li>▪ Create and modify tables to showcase data.</li> <li>▪ Change font, font size, font style and font color.</li> <li>▪ Apply cell and table styles.</li> <li>▪ Modify the size of rows and columns.</li> </ul>	<p><b>Journal</b>            Explain in your notebooks the kind of formatting you used in your Microsoft Word documents. Discuss how you would use format features such as bold, italics, color or underline in a Microsoft</p>	<p>B.E. Publishing Excel It! Teen-based Activities for Microsoft Excel.            or            B.E. Publishing Learn by Doing – Microsoft Excel 2013 Hands on Lessons and Assessments.</p> <p><b>Glencoe.com: iCheck™</b></p>

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<p>BM 1.4, BM-ADM.2.3, BM-ADM.2.4, BM-ADM.3.3</p> <p><b>CCSS:</b> W.11-12.4, W.11-12.7, HSS.ID.A.1, HSS.IC.B.6</p>	<p>formatting influence how an audience responds to a document?</p> <p>How can Microsoft Excel assist me in evaluating information that would be disseminated to other employees for business decision-making?</p>	<ul style="list-style-type: none"> <li>▪ Hide and unhide rows, columns, and worksheets.</li> <li>▪ Change horizontal and vertical alignment.</li> <li>▪ Insert, move and modify SmartArt graphics.</li> </ul>	<p>Excel workbook that contains financial data for a year. Give examples.</p> <p><b>College Research</b> Search the Internet and select a minimum of 15 colleges you would like to attend. Obtain the following information about each: College name, State, Setting (ex. rural, urban or suburban), number of students, the average SAT or ACT score, the tuition and fees, room and board, and capture the logo for each school. Format the titles and adjust column widths according to the direction provided.</p> <p><b>Assessment</b> Respond correctly to at</p>	<p style="text-align: center;"><b>Series Microsoft Office 2010</b></p> <p><b>Present and Publish Projects</b> <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html</a></p> <p><b>Business Application Projects</b> <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html</a></p> <p><b>Academic Projects</b> <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html</a></p> <p><b>Real World Connection Activities:</b> <a href="#">Unit 2: Excel 2010: Business Finances</a></p>

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			least 70% of the questions for the video about formatting cells.	<b>Excel 2010: Format Cells</b> <a href="https://www.youtube.com/watch?v=AH7cT96frWs">https://www.youtube.com/watch?v=AH7cT96frWs</a>
<p>Make numerical data easier to understand by using charts and diagrams.</p> <p><b>NJSLS:</b> 9.3.12.ED.2, 9.3.12.BM.1, 9.3.12.BM-ADM.2, 9.3.12.BM-ADM.3</p> <p><b>CCTC:</b> ED 02.1, BM 1.1, BM 1.4, BM-ADM.2.3, BM-ADM.2.4, BM-ADM.3.3</p> <p><b>CCSS:</b> W.11-12.4, W.11-12.7, HSS.ID.A.1, HSS.IC.B.6</p>	<p>To what extent can Excel be used to analyze, develop or display data?</p> <p>How can creating and saving a custom format meet the business needs of an organization?</p> <p>To what extent does applying design concepts to a workbook enhance or improve the final document?</p>	<ul style="list-style-type: none"> <li>▪ Create and modify tables to showcase data.</li> <li>▪ Filter and sort data</li> <li>▪ Write, edit and use formulas</li> <li>▪ Create, modify, and position diagrams in a worksheet.</li> <li>▪ Create modify, and position charts in a worksheet.</li> <li>▪ Customize how data is calculated using relative and absolute references.</li> </ul>	<p><b>Journal</b> Respond in writing to the following question in your notebook: Why is it sometimes better to present data as a graphic than as numbers or words?</p> <p><b>Assessment</b> Respond correctly to at least 70% of the questions for the video about formatting tables.</p> <p><b>Google Form</b> Correctly respond to a minimum of 70% of the questions about how to create a basic chart in Microsoft Excel 2010.</p>	<p>B.E. Publishing Excel It! Teen-based Activities for Microsoft Excel. or B.E. Publishing Learn by Doing – Microsoft Excel 2013 Hands on Lessons and Assessments.</p> <p><b>Glencoe.com: iCheck™ Series Microsoft Office 2010</b></p> <p><b>Present and Publish Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html</a></p> <p><b>Business Application Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html</a></p>

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				<p><a href="http://www.patersonschools.com/sites/007661395x/student_view0/business_application_projects.html">n.com/sites/007661395x/student_view0/business_application_projects.html</a></p> <p><b>Academic Projects</b>  <a href="http://www.patersonschools.com/sites/007661395x/student_view0/academic_projects.html">http://www.patersonschools.com/sites/007661395x/student_view0/academic_projects.html</a></p> <p><b>Real World Connection Activities:</b> <a href="#">Unit 2: Excel 2010: Business Finances</a></p> <p><b>Excel 2010: Formatting Tables</b>  <a href="https://www.youtube.com/watch?v=zD7LPePnDfM">https://www.youtube.com/watch?v=zD7LPePnDfM</a></p> <p><b>Microsoft Tutorial: How to create a basic chart in Microsoft Excel 2010</b>  <a href="https://support.office.com/en-us/article/How-to-create-a-basic-chart-in-Excel-2010-d2267ad9-4abb-4ea5-b1e2-">https://support.office.com/en-us/article/How-to-create-a-basic-chart-in-Excel-2010-d2267ad9-4abb-4ea5-b1e2-</a></p>

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				<p><a href="https://www.office.com/en-us/article/Use-Excel-tables-to-manage-information-1c3d9852-4b0b-4496-a1fc-30c5121fb05e?ui=en-US&amp;rs=en-US&amp;ad=US">fb094596f118?ui=en-US&amp;rs=en-US&amp;ad=US</a></p> <p><b>Use Excel tables to manage information</b>  <a href="https://support.office.com/en-us/article/Use-Excel-tables-to-manage-information-1c3d9852-4b0b-4496-a1fc-30c5121fb05e?ui=en-US&amp;rs=en-US&amp;ad=US">https://support.office.com/en-us/article/Use-Excel-tables-to-manage-information-1c3d9852-4b0b-4496-a1fc-30c5121fb05e?ui=en-US&amp;rs=en-US&amp;ad=US</a></p>
<p>Demonstrate how to create a business report using data collected and organized in a readable, useful worksheet.</p> <p><b>NJSLS:</b> 9.3.12.ED.2, 9.3.12.BM.1, 9.3.12.BM-ADM.2, 9.3.12.BM-ADM.3</p> <p><b>CCTC:</b> ED 02.1, BM 1.1, BM 1.4, BM-ADM.2.3,</p>	<p>How can a chart or diagram display information in a report more clearly than a full page of data and text in a worksheet?</p> <p>What types of graphics draw a viewer to an advertisement? How can I utilize the same concepts when designing Microsoft</p>	<ul style="list-style-type: none"> <li>▪ Sort and filter columns to target data you need.</li> <li>▪ Create worksheets with multiple calculations, such as car loan payment options.</li> <li>▪ Use Microsoft Excel as an organizational tool.</li> <li>▪ Discover the importance of protecting sensitive</li> </ul>	<p><b>Performance task</b>            Create a schedule in a worksheet. Include each day of the week. Create a one-week schedule. Plan a task for four days a week, three hours each day. Include three different activities, such as a workout schedule (ex. cardio, weights, circuit). In your journal, explain how you can use an</p>	<p>B.E. Publishing Excel It! Teen-based Activities for Microsoft Excel.            or            B.E. Publishing Learn by Doing – Microsoft Excel 2013 Hands on Lessons and Assessments.</p> <p><b>Glencoe.com: iCheck™ Series Microsoft Office 2010</b></p> <p><b>Present and Publish</b></p>

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<p>BM-ADM.2.4, BM-ADM.3.3</p> <p><b>CCSS:</b> W.11-12.4, W.11-12.7, HSS.ID.A.1, HSS.IC.B.6</p>	<p>Excel worksheets?</p> <p>How can utilizing Excel's file protection feature allow me to collaborate with others and manage files without a loss of data?</p>	<p>material in workbooks.</p> <ul style="list-style-type: none"> <li>▪ Consider how to share a workbook so multiple users have access from their own computers.</li> </ul>	<p>Excel schedule to improve your self-management skills.</p>	<p><b>Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/present_and_publish_projects.html</a></p> <p><b>Business Application Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/business_application_projects.html</a></p> <p><b>Academic Projects</b>  <a href="http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html">http://glencoe.mheducation.com/sites/007661395x/student_view0/academic_projects.html</a></p> <p><b>Real World Connection Activities:</b> <a href="#">Unit 2: Excel 2010: Business Finances</a></p> <p><b>Excel 2010 Tutorial for Beginners #3 – Calculation Basics &amp; Formulas</b></p>

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				<p><a href="https://www.youtube.com/watch?v=RgvdCHjOKYg">https://www.youtube.com/watch?v=RgvdCHjOKYg</a></p> <p><b>Excel 2010 Tutorial For Beginners #4 - AutoSum Function</b></p> <p><a href="https://www.youtube.com/watch?v=gqIXj_NFcMc">https://www.youtube.com/watch?v=gqIXj_NFcMc</a></p> <p><b>Excel 2010 Tutorial For Beginners #5 - Functions AVERAGE MAX MIN COUNT</b></p> <p><a href="https://www.youtube.com/watch?v=DUoz9v2CHjo">https://www.youtube.com/watch?v=DUoz9v2CHjo</a></p>

## Unit 3 Vocabulary

Autofill	Illustration
Autosum	MAX
AVERAGE	Merge
Budget	MIN
Cell	Modify
Cell content	Page setup
Cell style	Print area
Chart	Range
Column	Row
Command	ScreenTip
Conditional formatting	Sheet tab
Data	Sort
Dialog box	Sparkline
Filter	Split
Format	Spreadsheet
Formula	Tab
Formula Bar	Titles
Function	Workbook
Graph	Workbook view
Hyperlink	Worksheet

## Suggested Unit Projects

*Choose At Least One*

Students will make paper airplanes. In a safe area where they will not disturb other classes, students will fly their planes at least 5 times and measure the distance of each flight. Students will share the flight measurements with at least three other people. Using this data, students will create a spreadsheet and at least three graphs or charts. Students should use their skills for inserting pictures or clipart, formatting of shapes, lines and fill.

Candy is Dandy Lesson on candy color distribution.  
<http://webcache.googleusercontent.com/search?q=cache:NRYe150d5TkJ:www.be.wednet.edu/cms/lib2/WA01001601/Centricity/Domain/287/Candy%2520is%2520Dandy.pdf+&cd=2&hl=en&ct=clnk&gl=us>

## Suggested Structured Learning Experiences

In collaboration with the Principal or Climate and Culture staff member, create a survey, distribute the survey and collect responses. Manage the response data and create charts and graphs by determine the best type to present the information.