

TOWNSHIP OF UNION PUBLIC SCHOOLS



Accounting II **Updated December 18, 2018**

Mission Statement

The mission of the Township of Union Public Schools is to build on the foundations of honesty, excellence, integrity, strong family, and community partnerships. We promote a supportive learning environment where every student is challenged, inspired, empowered, and respected as diverse learners. Through cultivation of students' intellectual curiosity, skills and knowledge, our students can achieve academically and socially, and contribute as responsible and productive citizens of our global community.

Philosophy Statement

The Township of Union Public School District, as a societal agency, reflects democratic ideals and concepts through its educational practices. It is the belief of the Board of Education that a primary function of the Township of Union Public School System is to formulate a learning climate conducive to the needs of all students in general, providing therein for individual differences. The school operates as a partner with the home and community.

Course Description

College Accounting II expands on basic concepts learned in the first year of accounting. Topics will expand to cover managerial accounting as well as financial analysis. This course will provide an excellent background and preparation for students who seek to continue studies as a business or accounting major. Accounting II will allow students to apply mastered manual accounting concepts in an automated system. Students will use computer software to complete the accounting cycle.

Statement of District Goals

- Develop reading, writing, speaking, listening, and mathematical skills.
- Develop a pride in work and a feeling of self-worth, self-reliance, and self- discipline.
- Acquire and use the skills and habits involved in critical and constructive thinking.
- Develop a code of behavior based on moral and ethical principles.
- Work with others cooperatively.
- Acquire a knowledge and appreciation of the historical record of human achievement and failures and current societal issues.
- Acquire a knowledge and understanding of the physical and biological sciences.
- Participate effectively and efficiently in economic life and the development of skills to enter a specific field of work.
- Appreciate and understand literature, art, music, and other cultural activities.
- Develop an understanding of the historical and cultural heritage.
- Develop a concern for the proper use and/or preservation of natural resources.
- Develop basic skills in sports and other forms of recreation.

Recommended Resources

- **Century 21 Accounting: General Journal, 2012 Update, 9th Edition**

Claudia Bienias Gilbertson - North Hennepin Community College

Mark W. Lehman - Mississippi State University

ISBN-10: 1111988625 ISBN-13: 9781111988623

832 Pages Hardcover

2012 Published

- **Century 21 Accounting on-line working papers**

Gilbertson/Lehman 9th Edition [Professional and Educational, 2009] 9780538448123 / 0538448121

- www.C21accounting.com
- www.accountingcoach.com
- www.smallbizu.org/a101/
- www.accounting-world.com
- www.Misscpa.com
- www.principlesofaccounting.com

Curriculum Units

Unit 1: Accounting for a Merchandising Business Organized as a Corporation

- Chapter 9-16
- Reinforcement Activities

Unit 2: Accounting for a Business Organized as a Corporation Adjustments and Valuation

- Chapters 17-22
- Reinforcement Activities

Unit 3: Additional Accounting Procedures

- Chapters 23-24

Pacing Guide –

<u>Content</u>	<u>Number of Days</u>
Unit 1: Accounting for a Merchandising Business Organized as a Corporation	95
• Chapter 9	10
• Chapter 10	10
• Chapter 11	10
• Chapter 12	10
• Chapter 13	10
• Reinforcement activity part A	10
• Chapter 14	10
• Chapter 15	10
• Chapter 16	10
• Reinforcement Activity Part B	5
Unit 2: Accounting for a Merchandising Business Organized as a Corporation Adjustments and Valuations	60
• Chapter 17	10
• Chapter 18	10
• Chapter 19	10
• Chapter 20	10
• Chapter 21	10
• Chapter 22	10
Unit 3: Additional Accounting Procedures	25
• Chapter 23	8
• Chapter 24	7
• Reinforcement Activity 3 Part B	7
• Final Exam Review	3

New Jersey Student Learning Standards

21st Century Life and Careers

- **9.1 Personal Financial Literacy**

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

- **9.2 Career Awareness, Exploration, and Preparation**

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

- **9.3 Career and Technical Education**

This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.

Unit 1: Accounting for a Merchandising Business organized as a Corporation

Unit 1: During this unit, students will learn the accounting cycle for a Merchandising Business organized as a corporation. Students will analyze transactions and record them in special journals, post to the general ledger, accounts receivable and payable subsidiary ledgers, prepare payroll records and tax reports as well as completing the cycle by completing financial statements and end of period activities.

Essential Questions	Instructional Objectives/ Skills and Benchmarks <i>(CPIs)</i>	Activities	Assessments
<ul style="list-style-type: none"> • What is a special journal? • What are the 9 steps in the accounting cycle for a merchandising business organized as a corporation? • Why do corporations utilize subsidiary ledgers? • How do businesses prepare payroll records? • What happens to the tax collected from the customers? 	<ul style="list-style-type: none"> • Journalize purchases of merchandise using a purchases journal • Journalize cash payments and cash discounts using a cash payments journal • Prepare a petty cash report and journalize the reimbursement of petty cash funds • Journalize sales on account using a sales journal • Journalize cash receipts using a cash receipts journal • Record sales, sales returns and allowances, purchases, and purchases returns and allowances using a general journal • Post separate as well as column totals from the purchases, cash payments, sales, and cash receipts journals to the accounts payable, 	<ul style="list-style-type: none"> • Each chapter contains a work together problem that will be worked on as a total class with the instructor leading the discussion and demonstrating the item to be completed • Each chapter contains a problem called on your own that will be completed after the students have been walked through the initial problem with the instructor • Each chapter 	<ul style="list-style-type: none"> • Problems from each chapter will be graded • Quizzes from each section • Chapter Tests • Reinforcement problems when students have completed the first 4 steps on the accounting cycle as well as the last 5 steps • Midterm

<ul style="list-style-type: none"> • How do you distribute dividends? • How do end of fiscal period financial statements differ for a corporation? • How do we calculate if a merchandising business is doing well or failing? • What changes can be made when a merchandising business is performing poorly? 	<p>accounts receivable subsidiary ledgers and general ledgers</p> <ul style="list-style-type: none"> • Post individual amounts from general journal to general ledger as well as subsidiary ledgers • Complete a payroll register and employee earning records • Journalize a declaration and payment of dividends • Prepare a worksheet for a corporation • Prepare financial statements for a corporation • Record adjusting and closing entries for a merchandising business organized as a corporation • Prepare a post-closing trial balance 	<p>section contains an application problem that the students will complete on their own to show that they have mastered the skill from the section</p> <ul style="list-style-type: none"> • Each chapter contains a mastery problem that will combine all of the items learned in the entire chapter into 1 total problem • Each chapter will have the students complete a challenge problem using the information learned in the chapter in a challenging way. 	
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Unit 2: Accounting for a merchandising business organized as a corporation adjustments and valuation

Unit 2: During this unit, students will continue with activities for a merchandising business organized as a corporation. They will learn to calculate, journalize, and post uncollectible accounts, record the buying of plant assets, calculate depreciation using the three methods, prepare stock records, calculate cost of merchandise, calculate maturity dates, analyze transactions about notes payable, and record adjusting and closing entries.

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<ul style="list-style-type: none"> • What accounting procedures result in additional end of year activities that need to be completed? • How do you write off uncollectible accounts? • How do you report plant assets? • What are FIFO, LIFO, and the 	<ul style="list-style-type: none"> • Define accounting terms related to uncollectible accounts • Calculate, journalize, and post estimated uncollectible accounts expense • Journalize and post entries related to writing off and collecting uncollectible accounts receivable • Record the buying of a plant asset and the paying of property tax • Calculate depreciation expense and book value using straight-line method of depreciation 	<ul style="list-style-type: none"> • Class discussions and power point presentations • Note taking • Problem demonstrations via the work together problems at the end of each section • On your own problems at the end of each section • Application problems at the end 	<ul style="list-style-type: none"> • Teacher observation of cooperative learning work together problems at end of each section • Homework • Complete end of chapter questions. • All problems and critical thinking activities are completed. • Quizzes on information learned.

<p>Average Methods used for?</p> <ul style="list-style-type: none"> • What do we use notes payable and receivable for? • How do you handle end of fiscal period work for a merchandising business organized as a corporation? 	<ul style="list-style-type: none"> • Record entries related to disposing of plant assets • Prepare a stock record • Determine the cost of merchandise inventory using the FIFO, LIFO, and weighted average inventory costing methods • Calculate interest and maturity dates for notes • Analyze and record transactions for notes payable and receivable • Record adjusting and closing entries for accrued revenue • Record adjusting, closing, and reversing entries for accrued expenses 	<p>of each chapter</p> <ul style="list-style-type: none"> • Mastery and challenge problems at the end of each chapter • Reinforcement activities at midpoint • Accounting Simulation at the end of the Unit 	<ul style="list-style-type: none"> • Test at the end of each chapter • Final mastery test on unit. • Projects and Simulations
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Unit 3: Additional Accounting Procedures

Unit 3: During this unit, students will perform accounting for partnerships as well as recording international and internet sales.

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<ul style="list-style-type: none"> • What is accounting for partnerships? • What is a partnership? • How do you form, dissolve, and distribute earnings to partnerships? • How do you record transactions for both international and internet sales? 	<ul style="list-style-type: none"> • Identify accounting concepts and practices to forming, dissolving, and distributing earnings of a partnership • Journalize entries related to forming, dissolving, and distributing earnings of a partnership • Calculate the distribution of partnership earnings • Prepare an owners equity statement for a business organized as a partnership • Identify accounting practices related to international and Internet sales 	<ul style="list-style-type: none"> • Class discussions and power point presentations • Note taking • Problem demonstrations via the work together problems at the end of each section • On your own problems at the end of each section • Application problems at the end of each chapter • Mastery and 	<ul style="list-style-type: none"> • Teacher observation of cooperative learning work together problems at end of each section • Homework • Complete end of chapter questions. • All problems and critical thinking activities are completed. • Quizzes on information learned. • Test at the end of each chapter

	<ul style="list-style-type: none">• Record transactions for international and Internet sales	<p>challenge problems at the end of each chapter</p> <ul style="list-style-type: none">• Reinforcement activities at midpoint• Accounting Simulation at the end of the Unit	<ul style="list-style-type: none">• Final mastery test on unit.• Projects and Simulations
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Resource Links

- <https://login.cengage.com/cb/>
- www.C21accounting.com
- www.accountingcoach.com
- www.smallbizu.org/a101/
- www.accounting-world.com
- www.Misscpa.com
- www.principlesofaccounting.com

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.
- CRP2.** Apply appropriate academic and technical skills.
- CRP3.** Attend to personal health and financial well-being.
- CRP4.** Communicate clearly and effectively and with reason.
- CRP5.** Consider the environmental, social and economic impacts of decisions.
- CRP6.** Demonstrate creativity and innovation.
- CRP7.** Employ valid and reliable research strategies.
- CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP9.** Model integrity, ethical leadership and effective management.
- CRP10.** Plan education and career paths aligned to personal goals.
- CRP11.** Use technology to enhance productivity.
- CRP12.** Work productively in teams while using cultural global competence.

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.

2014 New Jersey Core Curriculum Content Standards - Technology

Content Area		Technology	
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.	
Strand		A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i>	
Grade Level bands	Content Statement Students will:	Indicator	Indicator
9-12	Understand and use technology systems.	8.1.12.A.1	Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
	Select and use applications effectively and productively.	8.1.12.A.2	Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review.
		8.1.12.A.3	Collaborate in online courses, learning communities, social networks or virtual worlds to discuss a resolution to a problem or issue.
		8.1.12.A.4	Construct a spreadsheet workbook with multiple worksheets, rename tabs to reflect the data on the worksheet, and use mathematical or logical functions, charts and data from all worksheets to convey the results.
		8.1.12.A.5	Create a report from a relational database consisting of at least two tables and describe the process, and explain the report results.
Content Area		Technology	
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and	

	synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	B. Creativity and Innovation: <i>Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.</i>		
Grade Level bands	Content Statement Students will:	Indicator	Indicator
9-12		8.1.12.B.2	Apply previous content knowledge by creating and piloting a digital learning game or tutorial.
Content Area	Technology		
Standard	8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	C. Communication and Collaboration: <i>Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.</i>		
Grade Level bands	Content Statement	Indicator	Indicator
9-12		8.1.12.C.1	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.
Content Area	Technology		
Standard	8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	D. Digital Citizenship: <i>Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</i>		
Grade	Content Statement	Indicator	Indicator

Level bands			
9-12	Advocate and practice safe, legal, and responsible use of information and technology.	8.1.12.D.1	Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.
	Demonstrate personal responsibility for lifelong learning.	8.1.12.D.2	Evaluate consequences of unauthorized electronic access (e.g., hacking) and disclosure, and on dissemination of personal information.
		8.1.12.D.3	Compare and contrast policies on filtering and censorship both locally and globally.
	Exhibit leadership for digital citizenship.	8.1.12.D.4	Research and understand the positive and negative impact of one's digital footprint.
		8.1.12.D.5	Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs.
Content Area	Technology		
Standard	8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	E: Research and Information Fluency: <i>Students apply digital tools to gather, evaluate, and use information.</i>		
Grade Level bands	Content Statement	Indicator	Indicator
9-12	Students will: Plan strategies to guide inquiry. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.	8.1.12.E.1	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.
		8.1.12.E.2	Research and evaluate the impact on society of the unethical use of

	Evaluate and select information sources and digital tools based on the appropriateness for specific tasks. Process data and report results.		digital tools and present your research to peers.
Content Area	Technology		
Standard	8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	F: Critical thinking, problem solving, and decision making: <i>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</i>		
Grade Level bands	Content Statement Students will:	Indicator	Indicator
9-12	Identify and define authentic problems and significant questions for investigation. Plan and manage activities to develop a solution or complete a project. Collect and analyze data to identify solutions and/or make informed decisions. Use multiple processes and diverse perspectives to explore alternative solutions.	8.1.12.F.1	Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.

2014 New Jersey Core Curriculum Content Standards - Technology

Content Area	Technology
Standard	8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming:

		All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.	
Strand		A. The Nature of Technology: Creativity and Innovation <i>Technology systems impact every aspect of the world in which we live.</i>	
Grade Level bands	Content Statement Students will be able to understand:	Indicator	Indicator
9-12	The characteristics and scope of technology.	8.2.12.A.1	Propose an innovation to meet future demands supported by an analysis of the potential full costs, benefits, trade-offs and risks, related to the use of the innovation.
	The core concepts of technology.	8.2.12.A.2	Analyze a current technology and the resources used, to identify the trade-offs in terms of availability, cost, desirability and waste.
	The relationships among technologies and the connections between technology and other fields of study.	8.2.12.A.3	Research and present information on an existing technological product that has been repurposed for a different function.
Content Area		Technology	
Standard		8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.	
Strand		B. Technology and Society: <i>Knowledge and understanding of human, cultural and societal values are fundamental when designing technological systems and products in the global society.</i>	
Grade Level bands	Content Statement Students will be able to understand:	Indicator	Indicator

9-12	The cultural, social, economic and political effects of technology.	8.2.12.B.1	Research and analyze the impact of the design constraints (specifications and limits) for a product or technology driven by a cultural, social, economic or political need and publish for review.
	The effects of technology on the environment.	8.2.12.B.2	Evaluate ethical considerations regarding the sustainability of environmental resources that are used for the design, creation and maintenance of a chosen product.
	The role of society in the development and use of technology.	8.2.12.B.3	Analyze ethical and unethical practices around intellectual property rights as influenced by human wants and/or needs.
	The influence of technology on history.	8.2.12.B.4	Investigate a technology used in a given period of history, e.g., stone age, industrial revolution or information age, and identify their impact and how they may have changed to meet human needs and wants.
		8.2.12.B.5	Research the historical tensions between environmental and economic considerations as driven by human needs and wants in the development of a technological product, and present the competing viewpoints to peers for review.
Content Area	Technology		
Standard	8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.		
Strand	C. Design: <i>The design process is a systematic approach to solving problems.</i>		
Grade Level bands	Content Statement Students will be able to understand:	Indicator	Indicator
9-12	The attributes of design.	8.2.12.C.1	Explain how open source technologies follow the design process.
		8.2.12.C.2	Analyze a product and how it has changed or might change over time to meet human needs and wants.

	The application of engineering design.	8.2.12.C.3	Analyze a product or system for factors such as safety, reliability, economic considerations, quality control, environmental concerns, manufacturability, maintenance and repair, and human factors engineering (ergonomics).
		8.2.12.C.4	Explain and identify interdependent systems and their functions.
		8.2.12.C.5	Create scaled engineering drawings of products both manually and digitally with materials and measurements labeled.
	The role of troubleshooting, research and development, invention and innovation and experimentation in problem solving.	8.2.12.C.6	Research an existing product, reverse engineer and redesign it to improve form and function.
		8.2.12.C.7	Use a design process to devise a technological product or system that addresses a global problem, provide research, identify trade-offs and constraints, and document the process through drawings that include data and materials.
Content Area		Technology	
Standard		8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.	
Strand		D. Abilities for a Technological World: <i>The designed world is the product of a design process that provides the means to convert resources into products and systems.</i>	
Grade Level bands	Content Statement Students will understand how to:	Indicator	Indicator
9-12	Apply the design process.	8.2.12.D.1	Design and create a prototype to solve a real world problem using a design process, identify constraints addressed during the creation of the prototype, identify trade-offs made, and present the solution for peer review.
		8.2.12.D.2	Write a feasibility study of a product to include: economic, market, technical, financial, and management factors, and provide recommendations for implementation.
	Use and maintain	8.2.12.D.3	Determine and use the appropriate resources (e.g., CNC (Computer Numerical

	technological products and systems.		Control) equipment, 3D printers, CAD software) in the design, development and creation of a technological product or system.
	Assess the impact of products and systems.	8.2.12.D.4	Assess the impacts of emerging technologies on developing countries.
		8.2.12.D.5	Explain how material processing impacts the quality of engineered and fabricated products.
		8.2.12.D.6	Synthesize data, analyze trends and draw conclusions regarding the effect of a technology on the individual, society, or the environment and publish conclusions.
Content Area	Technology		
Standard	8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.		
Strand	E. Computational Thinking: Programming: <i>Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to creating knowledge.</i>		
Grade Level bands	Content Statement Students will be able to understand:	Indicator	Indicator
9-12	Computational thinking and computer programming as tools used in design and engineering.	8.2.12.E.1	Demonstrate an understanding of the problem-solving capacity of computers in our world.
		8.2.12.E.2	Analyze the relationships between internal and external computer components.
		8.2.12.E.3	Use a programming language to solve problems or accomplish a task (e.g., robotic functions, website designs, applications, and games).
		8.2.12.E.4	Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).

Suggested Activities/Modifications

Below are a list of suggested activities, modifications, accommodations, and enrichment opportunities. This includes, but is not limited to:

1. Activities:

- www.C21accounting.com
- www.accountingcoach.com

2. English Language Learners:

- a. Read written instructions
- b. Students may be provided with note organizers/study guides to reinforce key topics.
- c. Model and provide examples
- d. Extended time on assessments when needed.
- e. Establish a non-verbal cue to redirect student when not on task.
- f. Students may use a bilingual dictionary.
- g. Pair Visual Prompts with Verbal Presentations
- h. Highlight Key Words & Phrases

3. Special Education/504 Students:

- a. Students may be provided with note organizers / study guides to reinforce key topics.
- b. Extended time on assessments when needed.
- c. Preferred seating to be determined by student and teacher.
- d. Provide modified assessments when necessary.
- e. Student may complete assessments in alternate setting when requested.
- f. Establish a non-verbal cue to redirect student when not on task.

- g. Maintain strong teacher / parent communication.
- h. Repetition and practice
- i. Pair Visual Prompts with Verbal Presentations
- j. Check Use of Agenda

4. Gifted and Talented Students:

- a. Use of Higher Level Questioning Techniques
- b. Extension/Challenge Questions
- c. Provide Assessments at a Higher Level of Thinking

Interdisciplinary Connections/Global Perspective:

Content Workplace Readiness Skills/Standards as directed by the Core Curriculum Content Standards are infused into the curriculum.

English: Written reports & projects