Introduction to Business and Marketing

Primary Career Cluster:	Business Management & Administration
Consultant:	Joy Smith, (615) 532-6248, Joy.Smith@tn.gov
Course Code(s):	TBD
Prerequisite(s):	None
Credit:	1
Grade Level:	9-10
Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Business, Marketing, or Finance courses.
Programs of Study and Sequence:	This is the first course in the *Business Management, Health Services Administration, Accounting, Banking & Finance, Marketing Management,* and *Entrepreneurship* programs of study.
Necessary Equipment:	Computer laboratory
Aligned Student Organization(s):	DECA: http://www.decatn.org FBLA: http://www.fblatn.org Sarah Williams, (615) 532-2829, Sarah.G.Williams@tn.gov
Coordinating Work-Based Learning	Teachers who hold an active work-based learning (WBL) Certificate issued by the Tennessee Department of Education may offer appropriate student placement. For more information, please visit http://www.tn.gov/education/cte/work_based_learning.shtml.
Available Industry Certifications	None
Dual Credit or Dual Enrollment	There are no known dual credit/dual enrollment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
Teacher Endorsements	030, 035, 052, 054, 202, 204, 311, 430, 435, 436, 471, 472, 474, 475, 476
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.tn.gov/education/cte/BusinessManagementAdministration.shtml

Course Description

Introduction to Business and Marketing is an introductory course designed to give students an overview of the Business Management and Administration, Marketing, and Finance career clusters. The course helps students prepare for the growing complexities of the business world by examining basic principles of business, marketing, and finance in addition to exploring key aspects of leadership, ethical and social responsibilities, and careers. Students' academic skills in communications, mathematics, and economics are reinforced with activities modeled in the context of business topics. Upon completion of this course, proficient students will be equipped with the foundational skills to succeed in any of the Business, Marketing, or Finance programs of study and will be prepared to make an informed decision regarding which pathways they would like to pursue in high school. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects, Tennessee State Standards in Mathematics, and Tennessee Economics standards.*

Program of Study Application

This is the foundational course for all Business Management & Administration, Marketing, and Finance programs of study. For more information on the benefits and requirements of implementing these programs in full, please visit the Business Management & Administration, Marketing, and Finance career cluster websites available here: http://www.tn.gov/education/cte/clusters.shtml.

Course Standards

Career Exploration of Business Management, Finance, and Marketing Careers

1) Explore careers in each of the Business Management & Administration, Finance, and Marketing pathways. For each of these career clusters, research the job descriptions and typical activities of major professions such as chief executive officer, accountant, real estate agent, advertising specialist, branch manager, wealth management/trust officer, and more. Produce a career pathways chart or other graphic detailing the aptitudes and training required for careers of interest. For example, outline the typical skills and training required to become a human relations manager, including personal aptitudes, postsecondary credentials, and licensing. Upon completion of the chart, conduct a self-assessment of aptitudes, interests, and personality aligned to careers; then devise a tentative career plan to reach employment goals based on the research conducted. (TN Reading 1, 2, 3, 4, 7; TN Writing 2, 9)

2) Conduct a job market search for one of the careers selected in the preceding standard by browsing print and online job boards and vacancy announcements. Consider factors such as local industry needs, projected annual openings, and prospects for growth when researching specific occupations. Synthesize findings to create a report comparing three or more job openings within the selected career, based on the following criteria: (1) education/certification requirements, (2) recommended years of experience, (3) salary and benefits, and (4) expected roles and responsibilities outlined in the vacancy announcement. (TN Reading 1, 4, 9; TN Writing 4, 7)

Business Concepts and Operations

3) Define the term *business,* and research the four major functions of business: (1) production and procurement, (2) marketing, (3) management, and (4) finance and accounting. As part of a short research project and presentation, select a product and trace its development through each of the four functions, detailing who is involved at each stage. For example, deliver a presentation explaining how Google Glass goes from raw materials to final packaged product available for sale. (TN Reading 2, 4; TN Writing 8)

4) Identify the factors of production (i.e., natural, labor, capital, and entrepreneurial) and relate how businesses must consider these factors when deciding what goods to produce, how to produce, and how to distribute. Drawing on case studies, textbooks, or similar resources, discuss the concept of opportunity cost in the context of business operations, and explain how businesses make decisions based on scarcity of resources. (TN Reading 1, 2, 4)

5) Summarize the foundational economic principles of supply and demand. Distinguish between an economic good and an economic service, and draw conclusions about how the law of supply and demand influences what goods and services businesses will produce using limited resources. Using a range of goods and services as evidence, write a brief informative text illustrating this relationship and the implications for consumers and the economy at large. (TN Reading 1, 2, 4; TN Writing 2, 4)

6) Research and describe the four stages of a business cycle, and explain how economic indicators such as unemployment rates, inflation rates, interest rates, gross domestic product (GDP), cost of living indices, and others are used to measure economic performance. Using a graphic organizer, label each stage of the business cycle and plot the generally accepted economic activities occurring at each stage. (TN Reading 1, 2, 4; TN Writing 4, 6)

7) Compare and contrast the three primary types of business ownership: sole proprietorship, partnership, and corporation. Research a local business in the community and compile a profile detailing the type of ownership, history and background of founding, and description of products or services offered. In an informative narrative, highlight any changes the business has made to its operations in response to market and population shifts, infrastructure development (i.e., interstates, public transportation), inventions, expansion opportunities, and other market factors. (TN Reading 2; TN Writing 2, 7)

8) Drawing on resources such as the Tennessee Department of Labor and Workforce Development and the Tennessee Department of Economic and Community Development, investigate the current economic situation in the county and compare it to the economic situation of the state. Write a report on the findings, citing evidence from sources researched. Findings can include the unemployment rate, business growth/decline, occupation growth/decline, population changes, government operating budget, etc. Include an analysis on how economic conditions affect employment and product consumption, and draw conclusions about the implications of such conditions on the creation, expansion, and relocation of businesses. (TN Reading 4, 7; TN Writing 2, 4, 7; TN Math N-Q, S-ID)

9) Draw on a range of print and digital sources, such as articles, videos, and textbooks, to create a timeline or similar narrative detailing the evolution of business in the U.S. Annotate the timeline to explain the impact that various technological innovations (e.g., the steam engine, sewing machine, assembly line, telephone, automobile, computer, internet) have had on consumer buying behavior over time. For example, the invention of the sewing machine created mass production and surplus of goods requiring advertising. Formulate a written argument concerning how emerging technologies continue to transform business and present new challenges and opportunities to business owners. (TN Reading 1, 2, 7; TN Writing 1; TN Economics 5)

10) Cite the advantages and disadvantages of a market economy, a command economy, and a mixed economy. Discuss the relationships between consumers, business, and government in various economic systems, and analyze differences in the rights and responsibilities of these actors in countries where these distinctive systems exist. (TN Reading 1, 2; TN Writing 2; TN Economics 1)

11) Explain the purpose of a business plan, and list the four major parts typically included (business description, management plan, marketing plan, and financial plan). Describe the importance of developing a business plan when seeking out potential investors or lenders. In preparation for a future career as an owner or entrepreneur, develop an original business philosophy detailing one's beliefs for how a business should be run. (TN Reading 1, 4; TN Writing 4, 9)

Financial Concepts

12) Define and furnish examples of foundational financial concepts and terminology, including but not limited to financial statements, revenue, expenses, assets, liabilities, equity, net worth, profit, and net loss. Demonstrate financial literacy and quantitative reasoning when discussing these concepts in the context of business operations (for example, when interpreting a business's financial plan). Apply basic numeracy skills to understand financial phenomena such as interest and savings. (TN Reading 1, 4, 5, 7; TN Math N-Q)

13) Differentiate between fixed and variable expenses on a business's balance sheet. Select three of the expenses listed, draw conclusions as to their importance to the business, and analyze cost-cutting strategies a company might take to minimize expenses in each of the chosen categories. (TN Reading 1, 4, 5; TN Writing 4; TN Math N-Q)

14) Prepare a mock purchase order, invoice, and/or sales receipt (including shipping and taxes) for a sample product/package. Explain the elements that comprise the financial document and be able to identify any mistakes and miscalculations in order to assist a mock client. (TN Reading 1, 3, 4, 7; TN Writing 4, 6; TN Math N-Q)

15) Plan a budget for an upcoming community service project or career and technical student organization (CTSO) event. Create a comprehensive budget narrative to accompany the budget, including both a written statement and a summary worksheet listing all expenses, justifying each cost with evidence for why it is needed to successfully complete the project. Detail estimated and actual costs as well as differences in cost in terms of dollars and percentages. (TN Reading 1; TN Writing 4; TN Math N-Q)

Marketing Concepts

16) Define the term *marketing*, and describe the seven functions of marketing (distribution, financing, marketing information management, pricing, product/service management, promotion, and selling). Determine the type of utility (form, time, place, possession) generated by each. Citing examples of prominent or local companies' marketing campaigns, argue for the importance of marketing as part of a business's strategy to increase revenue. (TN Reading 1, 4; TN Writing 1)

17) Describe the components of the marketing mix (i.e., price, product, promotion, and place). Investigate the launch of a new product or service; research how the company employed the marketing mix to aid in the launch; then create a presentation highlighting successes, challenges, and lessons learned. Additionally, critique the company's strategies and suggest alternative ideas for future campaigns, following the principles of the marketing mix. (TN Reading 1, 9; TN Writing 2, 4, 9)

18) Define what constitutes an advertisement. Analyze sample advertisements against a variety of factors contributing to the effectiveness of the ad. Define the target market using demographic, geographic, and psychographic information. Describe the purpose of the ad, determine the projected life of the ad, and evaluate the decision regarding which medium (TV, radio, social media, billboard, magazine, newspaper, or other) was chosen in terms of market reach. (TN Reading 4, 5, 6; TN Writing 4, 9)

19) Role-play the position of a sales associate communicating the value of a new product to a prospective customer. For a selected product, compile a list of questions to ask when determining customer needs and wants, predict possible objections to the sale, and investigate strategies that effective sales associates use to overcome objections and promote benefits about the products they are selling. Provide constructive feedback to classmates in order to improve communications skills in product promotion contexts. (TN Reading 3; TN Writing 4)

20) Define marketing research and explain the importance of marketing research in making business decisions. Conduct a short research project following the basic marketing research process: (1) define the problem to be researched, (2) design a survey instrument, (3) collect and tabulate data, (4) interpret findings, and (5) make recommendations for solving the identified problem. Draw on data generated from the survey to supply evidence for the proposed recommendations; demonstrate the ability to use and manipulate pivot tables to illustrate different ways of presenting and grouping data. Prepare a chart to be utilized in a mock marketing management meeting, displaying data in a graphic format based on one or more of the tables, and present as evidence alongside recommendations. Example projects include determining the demand for an expanded school lunch menu, or gauging interest in the development of a new neighborhood park. (TN Reading 2; TN Writing 4, 7; TN Math N-Q, S-ID)

Social Responsibility

21) Research the concept of social responsibility as an important component of business. Develop a hypothesis for why businesses must increasingly consider their impact on society when making decisions. Then, attend a local business-sponsored community event or explore case studies illustrating the social responsibilities of today's businesses. Write a reflection paper summarizing observations; specifically, evaluate how businesses benefit from engaging in responsible business

practices, including benefits to the community, the environment, the marketplace, and the business/workplace itself. (TN Reading 8; TN Writing 2, 4, 8)

Standards Alignment Notes

*References to other standards include:
- TN Reading: [Tennessee State Standards for English Language Arts & Literacy](in History/Social Studies, Science, and Technical Subjects); Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 9-10 Students (page 62).
  - o Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standard 10 at the conclusion of the course.
- TN Writing: [Tennessee State Standards for English Language Arts & Literacy](in History/Social Studies, Science, and Technical Subjects); Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 9-10 Students (pages 64-66).
  - o Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3 and 10 at the conclusion of the course.
- TN Math: [Tennessee State Standards for Mathematics](); Math Standards for High School: Number and Quantity, Statistics and Probability.
  - o Note: The standards in this course are not meant to teach mathematical concepts. However, the concepts referenced above may provide teachers with opportunities to collaborate on lesson planning. Students who are engaging in activities listed above should be able to demonstrate quantitative and statistical reasoning as applied to specific technical concepts. In addition, students will have the opportunity to practice the habits of mind as described in the eight Standards for Mathematical Practice.
- TN Economics: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, [Economics 9-12]().
  - o Note: The standards in this course are not meant to teach economics concepts. However, the concepts referenced above may provide teachers with opportunities to collaborate with economics educators to design project based activities or collaborate on lesson planning.
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning]()
  - o Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Business Management

Primary Career Cluster:	Business Management & Administration
Consultant:	Joy Smith, (615)532-6248, Joy.Smith@tn.gov
Course Code(s):	5889
Prerequisite(s):	*Introduction to Business and Marketing*
Credit:	1
Grade Level:	11-12
Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Business courses.
Programs of Study and Sequence:	This is the third course in the *Business Management & Administration* program of study.
Necessary Equipment:	Computer laboratory
Aligned Student Organization(s):	DECA: http://www.decatn.org FBLA: http://www.fblatn.org Sarah Williams, (615) 532-2829, Sarah.G.Williams@tn.gov
Coordinating Work-Based Learning	Teachers who hold an active work-based learning (WBL) Certificate issued by the Tennessee Department of Education may offer appropriate student placement. For more information, please visit http://www.tn.gov/education/cte/work_based_learning.shtml.
Available Industry Certifications	None
Dual Credit or Dual Enrollment	There are currently dual credit opportunities available for this course at specific community colleges. Reach out to your local postsecondary institution(s) for more information.
Teacher Endorsements	030, 035, 052, 054, 202, 204, 311, 430, 435, 436, 471, 472, 474, 475, 476
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.tn.gov/education/cte/BusinessManagementAdministration.shtml

Course Description

Business Management focuses on the development of the planning, organizing, leading, and controlling functions required for the production and delivery of goods and services. This applied knowledge course addresses the management role of utilizing the businesses' resources of employees, equipment, and capital to achieve an organization's goals. Students will participate in a continuing project throughout the course in which, individually or in teams, will present recommendations to improve an existing business. Local business partnerships are encouraged to provide resources for faculty and students. Proficient students will be able to complete a full review of an existing business and offer recommendations for improvement as would a management consultant. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects, Tennessee State Standards for Mathematics, as well as Tennessee Economic standards.*

Program of Study Application

This is a capstone course in the *Business Management and Administration* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Business Management and Administration website at http://www.tn.gov/education/cte/BusinessManagementAdministration.shtml.

Course Standards

Role of Management

1) Describe the management process and examine the functions of management (planning, organizing, leading, and controlling). Through review of case studies or news media, illustrate how concerns for the environment, an increasingly diverse workforce, globalization of the marketplace, and rapidly changing technology have impacted how businesses apply these functions. (TN Reading 1, 2, 4; TN Economics 1)

2) Summarize characteristics of, and distinguish between, different management theories (such as scientific management, Total Quality Management (TQM), Ouchi's Theory Z, Six Sigma, etc.). Drawing on information from research, illustrate how economic, political, or cultural decisions influence management theories that have been applied in the business environment. For example, hypothesize how Maslow's Hierarchy of Needs affects theories of management. (TN Reading 1, 2, 4, 6; TN Writing 2, 4, 7, 9; TN Economics 2)

3) Research the management skills needed in today's business environment (such as goal setting, decision making, communications, delegation, technical skills, motivational and leadership skills). Through the analysis of case studies, discuss the role of business leaders who have been recognized for their influence on modern managerial approaches (such as Theory Z's William Ouchi, General Electric's Jack Welch, Hewlett-Packard's Carleton Fiorina, or Facebook's Sheryl Sandberg). Synthesize research to produce a profile of a strong candidate for a business manager, citing specific evidence from text. (TN Reading 1, 2; TN Writing 2, 4, 7, 9)

Planning and Strategic Management

4) Analyze the elements of sample business plans or business plan templates found in informational text, identifying and describing the purpose of common elements. Discriminate between elements that govern culture (such as vision, mission, core priorities and social responsibility) and those that may govern operational goals (such as market share, profitability, and product development). (TN Reading 1, 6, 9; TN Writing 7)

5) Investigate and choose an existing business to research (individually or in teams) throughout the duration of the course. Describe the business' current target market, primary products or services offered, unique characteristics, current market position, and customer volume by summarizing available public documents about the business. (TN Reading 2, 7, 9; TN Writing 2, 4, 7, 8, 9)

6) Study benchmark indicators included in a SWOT (Strength, Weaknesses, Opportunities, and Threats) analysis and conduct a SWOT analysis of the selected business using data and evidence collected from personal interviews, observations, print articles, and internet searches. Citing specific data and evidence, make a claim about the business' most significant weakness(es), or area(s) of opportunity, to address throughout the duration of the course. (TN Reading 1, 9; TN Writing 1, 4, 7, 9)

Business Process Considerations

7) Create a new, or recommend updates to an existing, mission statement for the selected business by summarizing information gleaned from personal interviews, observations, print articles, and internet searches about the specific aspirations, beliefs, and values of the company. (TN Reading 6; TN Writing 4)

8) Conduct a PEST analysis (Political issues, Economic factors, Socia-cultural factors, Technology) of the selected business, including available geographic, demographic and economic data gathered from multiple authoritative sources. Based on the analysis, make a prediction about necessary factors which need to be considered in order to accurately address the businesses' most significant weakness(es) or area(s) of opportunity selected in standards 6. (TN Reading 1, 4, 6; TN Writing 4, 7, 9)

Marketing Considerations

9) Identify up to five businesses that could be considered competitors of the selected business. Gather and summarize information about the competition succinctly in a chart, table, or graphic. Information may include variety of products available, location, prices, services, and other unique characteristics. (TN Reading 1, 2, 7, 9; TN Writing 6, 7)

10) Make a claim about the current target market of the selected business, developing and supporting the claim and counterclaim(s) with data and evidence provided by the business and from research on potential competitors. Develop a detailed customer profile to summarize characteristics, including the BPI (Buying Power Index), for the target market. (TN Reading 1, 4; TN Writing 1, 4, 6, 7)

11) Using previous research on the selected business and its competitors, describe typical prices in the industry for similar products or services, noting how the prices of the selected business compare to others. Summarize how businesses make and review pricing decisions based on four key market factors: cost and expenses, supply and demand, consumer perception, and competition. Analyze each factor for the selected business and summarize how each relates to typical organizational goals of earning a profit, gaining market share, and being competitive, noting where there are chances to address weakness(es) or capitalize on area(s) of opportunity identified in standard 6. (TN Reading 2, 4, 5, 9; TN Writing 2, 4; TN Economics 1, 2; TN Math N-Q)

Organizational Considerations

12) Describe advantages and disadvantages of the basic forms of business ownership (sole proprietorship, partnership, and corporation) and identify variations of basic forms of business ownership (franchise, limited partnership, cooperative, limited liability company, and S corporation). Determine which ownership structure is employed by the selected business and hypothesize why it was selected. Review copies of available partnership agreements, articles of incorporation or franchise contracts, noting characteristics important for successful operation of a given business. (TN Reading 1, 4; TN Writing 4, 9)

13) Document existing operations plan of the selected business, describing location, hours of operation, customer accessibility, equipment, storage, and inventory needs, and current supply chain elements. Reviewing the most significant weakness(es), or largest area(s) of opportunity for the selected business determined in standards 6, make recommendations about changes to current plan to improve business operations. For example, recommending a new location to improve customer foot traffic. (TN Reading 1, 2, 4; TN Writing 4; TN Economics 3)

14) Diagram and describe the organizational structure of the business by creating an organizational chart of existing positions and/or department in the business, paying close attention to documentation of job descriptions (including reporting structures), accurate number of employees, and any outsourced labor. (TN Writing 4, 5, 6)

15) Identify applicable risks to the selected business (such as fire or flood damage or significant theft of inventory) and research available options for risk management, such as insurance. Make a claim about appropriate risk management strategies to employ to address the businesses' weakness(es) or area(s) of opportunity identified in standard 6, justifying claim with data and evidence from research. (TN Writing 1, 4, 9)

16) Identify and list appropriate national, state, and local bodies governing the operations of the selected business. Review documentation to summarize federal, state, and local regulations and laws (such as environmental regulations, zoning or licensing requirements, and legal stipulations) that are necessary for the continued operations of the selected business. (TN Reading 2, 4; TN Economics 3)

17) Analyze the essential parts of a contract by reviewing sample contracts and researching the Uniform Commercial Code for basic commercial law. Request a copy of a contract in use at the

selected business and review it to recommend potential areas for refinement or improvement. (TN Reading 1, 5)

Human Relations Considerations

18) Create a new, or recommend updates to an existing, employee manual for the selected business by summarizing information gleaned from personal interviews, observations, print articles, and internet searches about the human resource policies and employee expectations of the company. Include the following:
   a. procedures for employee hiring and release
   b. orientation of new employees
   c. performance assessments
   d. handling grievances
   e. compensation packages

   (TN Reading 9; TN Writing 2, 4, 7, 9)

19) Describe legal strategies used by labor and management (strikes, boycotts, layoffs, and lockouts) and illegal strategies used by labor and management (wildcat strikes, secondary boycotts, and preventing workers from forming unions). Conduct current event research highlighting recent activities involving labor and management disputes, drawing conclusions about the potential impacts of a labor and management strategy on the selected business, if any. (TN Reading 4; TN Writing 7)

Financial Considerations

20) Interpret the data shown on financial statements (income statement, balance sheet, cash flow statement, and statement of net worth) of the selected business. Benchmark the business' financial position against others in the industry, by reviewing available public filing documents such as financial statements, annual reports, and statements to shareholders of national firms. (TN Reading 1, 4, 7; TN Writing 4, 7; TN Math N-Q)

21) Evaluate various financial control tools such as budgets, audits, and financial ratios. Construct a TQM operations cost controlling matrix that includes costs, inventory tracking levels, and turnover rates of the selected business. Identify potential areas of improvement, especially as they relate to the identified weakness(es) and area(s) of opportunities outlined in standard 6. (TN Reading 3; TN Writing 4, 6; TN Math N-Q)

22) Assess the short-term and long-term financial needs of the selected business, attending to details about the current ownership structure. Evaluate advantages and disadvantages of additional funding through equity capital versus debt capital, noting where potential influx of funding may impact current ownership structure. (TN Reading 4; TN Writing 1, 4, 7; TN Math N-Q)

Final Project

23) As would a management consultant, compile a set of recommendations for the selected business based on the research completed in standards 7-22 to address one or more of the

following: streamlining operations, increasing profitability and competitiveness, meeting long-term funding needs, or addressing employee concerns in order to ultimately attend to the weakness(es) and/or area(s) of opportunity identified in standard 6. Plan, revise, edit, and rewrite recommendations throughout the course to ensure focus on what is most significant for a given audience. Present recommendations through both a formal, written report and an oral presentation, including appropriate financial calculations, charts and graphs, and citations for relevant sources. (TN Reading 1, 2, 5, 6, 7, 8, 9; TN Writing 1, 4, 5, 6, 7, 8, 9)

Standards Alignment Notes

*References to other standards include:
- TN Reading: Tennessee State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 11-12 Students (page 62).
  - o Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standard 10 at the conclusion of the course.
- TN Writing: Tennessee State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 11-12 Students (pages 64-66).
  - o Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3 and 10 at the conclusion of the course.
- TN Economics: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, Economics 9-12.
  - o Note: The standards in this course are not meant to teach economics concepts. However, the concepts referenced above may provide teachers with opportunities to collaborate with economics educators to design project based activities or collaborate on lesson planning.
- TN Math: Tennessee State Standards for Mathematics; Math Standards for High School: Number, Quantity, Functions.
  - o Note: The standards in this course are not meant to teach mathematical concepts. However, the concepts referenced above may provide teachers with opportunities to collaborate on lesson planning. Students who are engaging in activities listed above should be able to demonstrate quantitative and functional reasoning as applied to specific technical concepts. In addition, students will have the opportunity to practice the habits of mind as described in the eight Standards for Mathematical Practice.
- P21: Partnership for 21st Century Skills Framework for 21st Century Learning
  - o Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Business & Entrepreneurship Practicum

Primary Career Cluster:	Business Management & Administration
Consultant:	Joy Smith, (615) 532-6248, Joy.Smith@tn.gov
Course Code(s):	TBD
Prerequisite(s):	Minimum of two credits in a Business or Marketing program of study.
Credit:	1
Grade Level:	11-12
Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Business or Marketing courses.
Programs of Study and Sequence:	This is a capstone course in the *Business Management, Health Services Administration,* and *Entrepreneurship* programs of study.
Necessary Equipment:	Computer laboratory
Aligned Student Organization(s):	DECA: http://www.decatn.org FBLA: http://www.fblatn.org Sarah Williams, (615) 532-2829, Sarah.G.Williams@tn.gov
Coordinating Work-Based Learning:	Teachers who hold an active work-based learning (WBL) Certificate issued by the Tennessee Department of Education may offer internships, cooperative education, service learning, and job shadowing through this course. To learn more, visit http://tn.gov/education/cte/work_based_learning.shtml.
Available Student Industry Certifications:	TBD
Dual Credit or Dual Enrollment Opportunities:	There are no known dual credit/dual enrollment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
Teacher Endorsement(s):	030, 035, 052, 054, 202, 204, 311, 430, 435, 436, 471, 472, 474, 475, 476
Required Teacher Certifications/Training:	If students are assigned in work-based learning settings, teachers must attend WBL training and earn the WBL Certificate provided by the Tennessee Department of Education.
Teacher Resources:	http://www.tn.gov/education/cte/BusinessManagementAdministration.shtml

Course Description

Business & Entrepreneurship Practicum is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous Business and Marketing courses within a simulated startup environment or authentic business setting. The course is structured to allow students the creativity to develop, launch, and market original business ideas. It is ideal for students who wish to pursue careers as future business owners or entrepreneurs. Practicum activities can take place around student-led startups under the supervision of the instructor, or in collaboration with a local business incubator. The standards in this course can also be used to promote student participation in a Work-Based Learning (WBL) experience through an internship or other off-campus arrangement. Upon completion of the practicum, proficient students will be prepared to further develop their business ideas into viable ventures, or continue their study at the postsecondary level. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee State Standards in Mathematics.*****

Work-Based Learning Framework

Practicum activities may take the form of work-based learning (WBL) opportunities (such as internships, cooperative education, service learning, and job shadowing) or industry-driven project-based learning. These experiences must comply with the Work-Based Learning Framework guidelines established in SBE High School Policy 2.103. As such, this course must be taught by a teacher with an active WBL Certificate issued by the Tennessee Department of Education and follow policies outlined in the Work-Based Learning Policy Guide available online at http://www.tn.gov/education/cte/work_based_learning.shtml. The Tennessee Department of Education provides a *Personalized Learning Plan* template to ensure compliance with the Work-Based Learning Framework, state and federal Child Labor Law, and Tennessee Department of Education policies, which must be used for students participating in WBL opportunities.

Program of Study Application

This is the capstone course in the *Business Management, Health Services Administration,* and *Entrepreneurship* programs of study. For more information on the benefits and requirements of implementing these programs in full, please visit the please visit the Business Management & Administration, Marketing, and Finance career cluster websites available at http://www.tn.gov/education/cte/clusters.shtml.

Course Standards

Launching a Career in Business

1) Research a small business or business venture in an industry/market/location of choice, including but not limited to the local region. Produce an in-depth profile, case study, or similar analysis of the chosen company. Companies could range from local businesses to web startups to expansions of existing businesses into new products or markets. Cite specific textual evidence from the company's literature, conduct interviews, and/or analyze press coverage (if available) to summarize the following:
   a. The mission and history of the organization
   b. Headquarters and organizational structure
   c. Products or services provided
   d. Marketing/branding strategy

e. Profit model
    f. Website and contact information
(TN Reading 1, 2; TN Writing 7)

2) Chart the career paths of successful entrepreneurs and business owners. Gather information from multiple sources, such as sample resumes, interviews with professionals, and job boards, to determine effective strategies for realizing career goals. Create or update a personal resume modeled after elements based on the findings above, then complete an authentic job application as part of a career search or work-based learning experience. (TN Reading 4, 9; TN Writing 4, 7, 8)

3) Participate in a mock interview. Prior to the interview, research tips on dress and grooming, most commonly asked interview questions, appropriate conduct during an interview, and recommended follow-up procedure. Upon completion of the interview, write a thank you letter to the interviewer in a written or email format. (TN Reading 2; TN Writing 2, 4, 7, 9)

4) Investigate the current climate for entrepreneurship in the U.S. and abroad. Synthesizing the most recent information on interest rates, consumer spending, market competition, regulation, investment activity, and other economic data, identify the potential constraints and opportunities for starting a business in a selected market of interest. Draw conclusions based on the research and compile into a memo, executive summary, or mock proposal highlighting where to compete, how much to invest, and which consumers to target. (TN Reading 9; TN Writing 2, 4, 7, 8, 9)

Market Research

5) Independently or in teams, conduct a market research project to inform the development of an original business idea. Demonstrate the ability to design simple surveys, retrieve secondary data from print and online sources, tabulate results, write analyses, and make decisions based on evidence. If possible, consult or collaborate with local area professionals to determine the viability of original business ideas. Compile findings and future directions in a professional print or online document. (TN Reading 7, 8, 9; TN Writing 2, 4, 6, 7)

Business Proposal

6) Individually or in teams, develop a comprehensive business plan for the proposed startup/business venture. Include at minimum the following components:
    a. Executive summary
    b. Business description
    c. Plan of operations, including human capital considerations
    d. Industry analysis
    e. Competitor analysis
    f. Marketing plan
    g. Financial plan
    h. Any relevant appendices, cover sheets, letters of support, or references
Compile the business plan in a print or online format that could be shared with potential funders, partners, or other stakeholders. (TN Writing 2, 4, 6)

7) In preparation for the launch of the new business/venture, identify potential sources of support in the community (both financial and in-kind services), such as clients, customers, funders, grant-making entities, or community organizations, and practice pitching the business idea to various audiences. Seek feedback and recommendations on presentation and proposal details. Analyze the feedback and recommendations to justify any changes to the business plan, citing evidence from the initial presentation. Upon revision, revise the business plan, documenting all changes made. (TN Writing 5, 6, 9)

8) Based on the research and revisions conducted in the previous standard, develop and deliver a formal presentation as part of a bid for startup capital, customers, or public backing. The presentation could be delivered in a variety of formats depending on capacity and constraints: for example, as an in-person pitch before an audience of potential funders; or as a video recording uploaded to a website such as Kickstarter. Self-reflect on initial success based on feedback from the audience or pledges of support, depending on approach. (TN Writing 4)

9) As a supplement to the formal presentation, conduct a preliminary break-even / profit-loss analysis for the first year of the startup's operations. Determine the long-term financial goals of the company; make projections for 1, 5, and 10 years ahead. Drawing on knowledge and skills learned in previous courses, design metrics for tracking financial goals and develop an internal reporting system for monitoring progress.

10) Expanding on the marketing strategy drafted in the revised business plan, conduct the necessary analysis (i.e., produce a target customer profile, release a survey, etc.) and implement the marketing strategy in line with plan goals. Seek avenues for increasing product/service visibility, such as promoting the company on social media or producing fliers to hand out at local community events.

11) Critique the business plan of another team or classmate, annotating the plan with recommendations and suggested edits. Cite specific examples in the text to support recommendations. (TN Reading 1, 2, 3, 4, 5, 6, 7, 8)

Professional Ethics and Legal Responsibilities

12) Reflect on potential ethical and legal challenges associated with the proposed business idea. For example, for a hypothetical clothing line startup that intends to source materials from overseas, determine how the company will ensure that labor laws are followed at all points along the supply chain. Examine a variety of perspectives surrounding the issue(s), then develop an original analysis explaining the impact of the issue on those involved, using persuasive language and citing evidence from the research. Other potential issues include copyright infringement, customer privacy and data usage concerns, and safety of employees and consumers. (TN Reading 1, 2, 6; TN Writing 1, 4, 7, 8)

Portfolio

13) Create a portfolio, or similar collection of work, that illustrates mastery of skills and knowledge outlined in the previous courses and applied in the practicum. The portfolio should reflect thoughtful assessment and evaluation of the progression of work involving the application of

steps of the entrepreneurial process. The following documents will reside in the student's portfolio:

    a. Career and professional development plan

    b. Resume

    c. List of responsibilities undertaken through the course

    d. Examples of business plan and supporting materials developed and used during the course

    e. Description of technology used, with examples if appropriate

    f. Periodic journal entries reflecting on tasks and activities

    g. Feedback from instructor and/or supervisor based on observations

(TN Reading 7; TN Writing 4)

Communication of Project Results

14) Upon completion of the practicum, develop a technology-enhanced presentation showcasing highlights, challenges, and lessons learned from the experience. The presentation should be delivered orally, but supported by relevant graphic illustrations, such as sample survey results, excerpts from the business plan or market data on the target users. Prepare the presentation in a format that could be presented to both a business and a lay audience. Seek opportunities to submit the business plan and/or presentation to local or national contests, career and technical student organization (CTSO) competitive events, or other opportunities to increase the potential for success of the business idea. (TN Reading 1, 3, 7, 9; TN Writing 2, 4, 5, 6, 9)

Standards Alignment Notes

*References to other standards include:

- TN Reading: [Tennessee State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects](); Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 11-12 Students (page 62).
  - Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standard 10 at the conclusion of the course.
- TN Writing: [Tennessee State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects](); Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 11-12 Students (pages 64-66).
  - Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3 and 10 at the conclusion of the course.
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning]()
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Advanced Computer Applications

Primary Career Cluster:	Business Management & Administration
Consultant:	Joy Smith, (615) 532-6248, Joy.Smith@tn.gov
Course Code(s):	5904
Prerequisite(s):	*Computer Applications*
Credit:	1
Grade Level:	11-12
Graduation Requirements:	This course satisfies one or two of three credits required for an elective focus when taken in conjunction with other Business Management & Administration courses.
Programs of Study and Sequence:	This is the fourth, and final, course in the *Office Management* program of study.
Necessary Equipment:	Refer to the Teacher Resources page.
Aligned Student Organization(s):	DECA: http://www.decatn.org FBLA: http://www.fblatn.org Sarah Williams, (615) 532-2829, Sarah.G.Williams@tn.gov
Coordinating Work-Based Learning:	Teachers who hold an active work-based learning (WBL) Certificate issued by the Tennessee Department of Education may offer appropriate student placement. To learn more, please visit http://www.tn.gov/education/cte/work_based_learning.shtml.
Available Student Industry Certifications:	Students enrolled in this course will pursue Microsoft Office Specialist (MOS) certification.
Dual Credit or Dual Enrollment Opportunities:	There are no known dual credit/dual enrollment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
Teacher Endorsement(s):	030, 037, 041, 052, 054, 055, 056, 057, 201, 203, 204, 311, 430, 434, 435, 436, 471, 472, 474, 475, 476
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.tn.gov/education/cte/BusinessManagementAdministration.shtml

Course Description

Advanced Computer Applications provides advanced training for students pursuing a career in administrative and information support, prepares students to continue postsecondary training in business-related programs, and is encouraged to support obtaining an industry certification in specific software applications (such as the Microsoft Office Suite). Course content and projects are meant to simulate workplace scenarios and draw on skills related to communications, operations, management, and teamwork in order to accomplish information management goals. Proficient students will be fluent in a variety of information management software applications and will be prepared to sit for the Microsoft Office Specialist certification. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee State Standards in Mathematics.**

Program of Study Application

This is the fourth, and final, course in the *Office Management* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Business Management & Administration career cluster website at http://www.tn.gov/education/cte/BusinessManagementAdministration.shtml.

Course Standards

Secure Technology Operations

1) Correctly and safely execute basic file management operations on a typical personal computer and shared storage media, including the opening, creating, copying, moving, deleting, and renaming of files and folders, as well as searching for a specified file or folder on local hard drives, removable storage, or networked storage media. Build upon this knowledge to effectively use cloud storage and/or online digital collaboration platforms and file sharing applications. Appraise file storage needs for a given project, recommend and effectively employ the appropriate file storage and sharing solution given project characteristics. (TN Reading 3)

2) Correctly and safely import and export digital files (such as text, audio, video, and picture files in a variety of formats) from local and networked devices, choosing and employing the correct cables, removable storage media, and/or hardwired or wireless network connections. Perform basic troubleshooting as needed for enhancing productivity and optimizing performance of devices such as cameras, scanners, printers, and tablets. Perform basic operations to change file types for effective use in typical software applications. For example, connect an iPad via a wireless network, download photos from the device, and change the format of the photos from .jpg to .png format for use in a presentation application. (TN Reading 3)

Word Processing and Publishing

3) Building on standards from *Computer Applications*, create and manage professional documents of business activities to communicate with internal and external stakeholders. Fluently navigate word processing software to complete the following:
    a. Create a document from a blank document, template, imported file, or non-native document imported into word processing software

     b.   Search for text within a document, insert hyperlinks, create bookmarks and use "Go To" functionality efficiently

     c.   Modify page setup, select and employ appropriate document themes and style set(s) for a given project and insert headers, footers, page numbers, and watermarks

     d.   Customize viewing options to effectively navigate a projecting using application tools such as zoom, toolbars, ribbons, macros, and shortcut keys

     e.   Configure documents to scale, print, and save effectively, including maintaining backwards compatibility with previous software versions and password protecting if necessary

     (TN Reading 3; TN Writing 4, 6)

4) Effectively review, revise, and format text, paragraphs, and sections for a specific type of word processing file (such as a company report, memo, or invoice) by completing the following skills fluently:

     a.   Revise documents using find and replace, copy and paste, AutoCorrect, and inserting special characters where needed

     b.   Edit documents by changing font attributes, using format painter tools, highlighting where needed, and using WordArt

     c.   Effectively determine and update paragraph, line, and character spacing

     d.   Discriminate between appropriate and inappropriate ordering and grouping of text, objects, and sections, creating a professional document by preventing paragraph "widows" and "orphans," inserting breaks in pages and sections, utilizing columns where appropriate, and modifying object formatting for smooth flow of text

     (TN Reading 3, 4, 5; TN Writing 4, 5, 6)

5) Choose, employ, and manipulate text structure tools such as tables and lists to convey specific information accurately, demonstrating understanding of categories or hierarchies in the information, by completing the following skills fluently:

     a.   Create a table by converting text, importing data from another application, defining table dimensions and labeling appropriately

     b.   Review and modify existing tables using styles, fonts, sorting and formula capabilities, and cell margin and table dimension configurations

     c.   Create and modify lists by employing bullets, numbering, and outlines and editing indention, spacing, and levels

     (TN Reading 3, 5; TN Writing 4)

6) Gather relevant information from multiple authoritative print and digital sources, assessing the strengths and limitations of each source, and integrate the source accurately into the documenting using citations, references, and footnotes. Select appropriate notation formatting for a given style, such as Modern Language Association (MLA), American Psychological Association (APA), or the Chicago Manual of Style.

     a.   Integrate information into the text selectively to maintain the flow of ideas, avoid plagiarism, and over-reliance on any one source

     b.   Insert, manage the locations, and auto-update endnotes, footnotes, citations, and bibliographies following a standard format

     c.   Add and modify the font, format, location, and position of captions

     (TN Reading 1, 3, 8; TN Writing 4, 8, 9)

7) Integrate multiple sources of information presented in diverse formats and media in order to address a question or solve a problem.
   a. Insert quick parts, textboxes, and customizable building blocks
   b. Insert and format simple shapes and SmartArt, formatting their properties (color, size, shape) and text wrapping to seamlessly integrate into document
   c. Insert and format image files, including modifying with effects and updating properties to ensure effective integration with text and other objects
   (TN Reading 3, 5, 7, 9; TN Writing 4, 7)

Spreadsheet Applications

8) Building on standards from *Computer Applications*, use a spreadsheet application to create and manage worksheets and workbooks for business functions such as invoices, financial statements, data review and summarization, and statistical analysis.
   a. Create new workbooks from blank worksheets, templates, imported and non-native files
   b. Navigate through existing workbooks by searching for specific data, inserting hyperlinks, changing worksheet order and using "Go To" and "Name Box" functions
   c. Format worksheets and workbooks using colors, page setup options, columns and rows, themes, watermarks, headers and footers, and setting data validation
   d. Customize options and views for workbooks, including hiding columns, rows, and worksheets, editing toolbars, ribbons, and macros, freezing panes and utilizing short cut keys
   e. Configure worksheets and workbooks for effective printing and saving, including setting print area, changing file formats, setting print scaling, and maintaining backwards compatibility if needed
   (TN Reading 3)

9) Given a specific document purpose, accurately create cells and ranges to effectively manage data, draw conclusions from analysis, and structure for ease of readability.
   a. Insert, review, and append data in cells and ranges using find and replace, copy and paste, AutoFill, expanding data across cells, and inserting and deleting cells
   b. Format cells and ranges for a given purpose, including merging cells, modifying alignment, font, wrap-text, and indentation and employing WordArt and number formatting when appropriate
   c. Order and group cells and ranges by applying conditional formatting, inserting sparklines, transposing columns and rows, creating named ranges, inserting subtotals, and collapsing groups of data
   (TN Reading 3, 5)

10) Translate quantitative or technical information between text, visuals, data, and equations by accurately creating and using tables.
   a. Effectively navigate between tables and ranges, adding or removing cells and defining titles
   b. Modify styles and format of a table to convey meaning, including applying styles, banding rows and columns, and inserting totals or averages
   c. Filter and sort information effectively, including filtering records, sorting data on multiple columns, changing sort order to highlight specific information, and removing duplicates to enhance analysis (TN Reading 3, 5, 7, 9)

11) Accurately determine appropriate calculations (formulas and functions) for analysis to draw conclusions about sets of data, including:
   a. Utilize cell range and references (relative, mixed, absolute) to complete functions accurately based on specific question sought to address, including accurate understanding of order of operations
   b. Summarize data with functions such as sum, average, minimum, maximum, and count
   c. Utilize conditional logic in functions (if-then statements) to accurately discriminate data for analysis
   d. Format and modify text with functions
   (TN Reading 3; TN Math N-Q)

12) Analyze needed structure and objects (such as charts and graphs) to convey particular meaning or draw conclusions from a dataset.
   a. Create charts and graphs that summarize appropriate data series, including differentiating between rows and columns in source data
   b. Format charts and graphs by modifying legends, sizes, parameters, layouts and styles and positioning
   c. Insert and format an object (such as a textbox, SmartArt or image) and format its border, positioning, properties, styles and effects and colors
   (TN Reading 3, 4, 6, 7; TN Writing 4, 6)

Presentation Software

13) Building on standards from *Computer Applications*, use presentation software to create and manage clear and coherent multimedia presentation materials for a given audience, task, purpose, and length of presentation. Fluently navigate software to:
   a. Create new presentations from blank slides, templates, and important files and/or file content (such as outlines or text from word processing files)
   b. Format a presentation to achieve a style appropriate to a given audience and industry by applying slide masters, layouts, background images, page numbers, headers and footers, and presentation themes
   c. Customize presentation options and views to ensure accurate page setup, printing (color/grayscale), and navigation
   d. Configure presentations to print for handouts or notes and save to maintain appropriate settings by determining most applicable handout print options, package presentations for CD, save presentations as webpages, and maintain backwards compatibility where needed
   e. Configure and present slideshows in a public speaking setting, paying close attention to slide timing, resolution, annotations, options, and appropriate views for a given presentation venue
   (TN Reading 3; TN Writing 4)

14) For a given content, select and employ appropriate structure to convey meaning and organize information into categories and hierarchies appropriately, including:
   a. Add slide layouts, duplicate, hide, and delete slides, and modify slide backgrounds and styles

     b.   Insert and format shapes, including applying borders, resizing, and applying styles to both custom and template shapes
     c.   Order and group shapes and slides by inserting section headers, modifying slide order, aligning and grouping shapes, and displaying gridlines
(TN Reading 3, 5)

15) Create slide content that is clear and coherent, in which the development, organization, and style are appropriate to a given task, purpose, and audience, including:
     a.   Insert and format text such as WordArt, columns, hyperlinks, and bulleted and numbered lists
     b.   Insert and format tables and charts, including modifying rows, columns, and legends, applying styles, modifying parameters and importing from external sources
     c.   Insert and format SmartArt and images, including adding shapes, changing colors, adding and moving text, resize, crop, and apply styles
     d.   Insert and format appropriate media, including video and audio clips, by adjusting window size, setting start/stop times, setting options, and linking to external sources
(TN Reading 3, 7, 9; TN Writing 4, 8)

16) Effectively employ transitions and animations to convey meaning without distracting from slide content.
     a.   Insert transitions between slides, manage multiple transitions, and modify transition effect options
     b.   Animate slide content including applying animations to shapes and paths and modifying animation properties
     c.   Set timings for transitions and animations to ensure appropriate duration, order, and start/stop times for effects
(TN Reading 3, 6)

17) Develop, manage, and strengthen content by planning, revising, and editing presentations, including:
     a.   Merge content from multiple presentations and reuse appropriate slides with separate or similar formatting
     b.   Track changes and resolve differences (such as discarding changes or managing comments) to focus on what is most significant for a specific purpose and audience
     c.   Protect and share presentations using encryption, passwords, media compression, and permissions, while ensuring accessibility and compatibility are maintained for a given situation or scenario
(TN Reading 3; TN Writing 5)

Information Management & Integration

18) Throughout the course, conduct a sustained research project to answer a question or solve a problem. Synthesize research into an argument that is established, developed, and supported with multiple sources of data and evidence. Demonstrate authentic technical skills in word processing, presentations, and spreadsheet applications, effectively combining functionality of multiple software applications to present a coherent final project, including a report (with imported data, appendixes, etc.) and presentation with appropriate citations from text. Use

selected technology to produce, publish, and update final projects. (TN Reading 1, 2, 7, 8, 9; TN Writing 1, 4, 5, 6, 7, 8, 9)

19) Select a historical event, scientific procedure, or technical process to narrate in a comprehensive report and presentation, practicing effective word processing, spreadsheet, and presentation skills. Develop and strengthen writing and data organization through planning, revising, peer-review, editing, and rewriting throughout the course. (TN Reading 1, 2, 5, 7, 9; TN Writing 2, 4, 5, 6, 7, 8, 9)

Standards Alignment Notes

*References to other standards include:
- TN Reading: [Tennessee State Standards for English Language Arts & Literacy](#) [in History/Social Studies, Science, and Technical Subjects](#); Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 9-10 Students (page 62).
    - Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standard 10 at the conclusion of the course.
- TN Writing: [Tennessee State Standards for English Language Arts & Literacy](#) [in History/Social Studies, Science, and Technical Subjects](#); Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 9-10 Students (pages 64-66).
    - Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3 and 10 at the conclusion of the course.
- TN Math: [Tennessee State Standards for Mathematics](#); Math Standards for High School: Number and Quantity.
    - Note: The standards in this course are not meant to teach mathematical concepts. However, the concepts referenced above may provide teachers with opportunities to collaborate on lesson planning. Students who are engaging in activities listed above should be able to demonstrate quantitative reasoning as applied to specific technical concepts. In addition, students will have the opportunity to practice the habits of mind as described in the eight Standards for Mathematical Practice.
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
    - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.