PROGRAM CONCENTRATION: **Business & Computer Science**
CAREER PATHWAY: **Administrative Information/Support**
COURSE TITLE: **Computer Applications I**

Course Description: The goal of this course is to provide an understanding and application of social, ethical, and human issues related to technology. The course will also provide an introduction to computer technology, decision-making, productivity, communications, and problem-solving skills. Areas of instruction include computer applications and integration of word processing, desktop publishing, spreadsheet, database, and presentation software as well as use of emerging technologies.

In this course, high school students can acquire skills required to create, edit, and publish industry appropriate documents. Areas of study will also include oral and written communications and information research for reporting purposes. Competencies for the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the core employability skills standards and technical skill standards.

SOCIAL, ETHICAL, AND HUMAN ISSUES
Students will analyze, develop, and follow policies for managing social, ethical, and legal issues in organizations in a technology-based society.

BCS-CA1-1. Students will understand and apply the social, legal, and ethical issues related to technology used in personal and professional endeavors.

     a.   Practice respectful and responsible use of technology through abiding by the school technology and internet use policy.
     b.   Model the ability to work independently and as a team member (includes efficient use of time and organization of work).
     c.   Demonstrate an understanding of plagiarism and fair use; respect copyright laws of information producers such as authors and artists, including website developers.
     d.   Explain the interaction and interdependence between humans and technology.
     e.   State how changes in technology affect the workplace and society.
     f.   Demonstrate ethical behaviors in what is written, spoken, or presented.
     g.   Develop a presentation on ethical and legal issues.

Academic Standards:
SSCG21 The student will demonstrate knowledge of criminal activity.

SSEF6 The student will explain how productivity, economic growth, and future standards of living are influenced by investment in factories, machinery, new technology, and the health, education, and training of people.

GeorgiaStandards.Org
GATEWAY TO EDUCATION & PROFESSIONAL RESOURCES
One Stop Shop For Teachers

PRODUCTIVITY

Students will become productive with the use of a variety of input technologies including word processing and/or desktop publishing, spreadsheet, database, and presentation software to create, edit, and publish industry appropriate software.

BCS-CA1-2. Students will use technology as a tool to increase productivity in completing a variety of input technologies to create, edit, and publish industry appropriate documents.

a. Become familiar with a variety of input technology tools, e.g. speech recognition, hand-writing recognition, and keying.
b. Demonstrate appropriate handling and use of supplies and equipment.
c. Apply appropriate use of editing tools, e.g. spell check, thesaurus, find and replace, grammar, and hyphenation.
d. Identify and demonstrate the use, movement, and display of a variety of icons, toolbars, and the task pane.
e. Demonstrate time-management to complete tasks in allotted time.
f. Preview and print using print options.
g. Understand operating system and internet terminology and the basic functions of each.

Academic Standards:

ELA10W2 The student demonstrates competence in a variety of genres.

ELA10RC3 The student acquires new vocabulary in each content area and uses it correctly.

BCS-CA1-3. Students will use word processing and/or desktop publishing software through a variety of input technologies to create, edit, and publish industry appropriate documents.

a. Create a variety of business and technical documents, e.g. newsletters, flyers, and multi-page reports using wizards, templates, or composition.
b. Apply formatting skills, e.g. fonts, paragraphing, text flow options (widow/orphan), margins, indentations, page orientation, tabulation, breaks, enumeration, bulleting, borders/shading, columns.
c. Access and edit documents, including the effective use of editing commands, e.g. delete, cut/copy/paste, format painter, undo/redo, repeat, and paste special.
d. Create tables.
e. Apply skills and style manual usage to cite reference documentation, e.g. bibliography, works cited, footnotes, and endnotes.
f. Apply graphic object skills such as scale, insert, crop, borders, wrap text, autoshapes, fill and line options, shading, text boxes, and WordArt.
g. Apply the appropriate format to a variety of documents that meet employability standards.

Academic Standards:
ELA9W1 The student produces writing that establishes an appropriate organizational structure, sets a context and engages the reader, maintains a coherent focus throughout, and signals closure.

ELA9W3 The student uses research and technology to support writing.

BCS-CA1-4. Students will use spreadsheet software to create, edit, and publish industry appropriate files.

a. Identify components of the spreadsheet window using industry terminology and efficiently navigate throughout the worksheets and workbook.
b. Demonstrate creating, opening, saving, renaming, inserting, deleting, retrieving, and closing a worksheet and workbooks.
c. Differentiate among and enter text, numbers, formulas, and functions.
d. Apply editing and enhancement features to cell contents, e.g. edit, fill, rotate, move, merge, size, number formats, styles, borders, and colors.
e. Apply page setup features, e.g. margins, headers/footers, page order, grid lines, repeating row/column titles, comments, shrink-to-fit, page orientation, and center horizontally/vertically.
f. Create, insert, modify, and position appropriate graphics.
g. Apply freeze rows and columns and window tile.
h. Create, enter, and edit formulas using arithmetic expressions and math order of operations.
i. Apply and edit functions, e.g. SUM, MIN, MAX, AVE, COUNT.
j. Apply relative, absolute, and mixed cell references in formulas.
k. Copy, move, and verify accuracy of formulas.
l. Create effective charts or graphs which represent relevant data most effectively.
m. Edit and label chart components such as axis, legends, titles, etc.
n. Print charts and graphs in industry standard format on separate sheet or embedded with data.

Academic Standards:
MM1G2 Students will understand and use the language of mathematical argument and justification.

MM1P1 Students will solve problems (using appropriate technology).

MM1P2 Students will reason and evaluate mathematical arguments.

MM1P3 Students will communicate mathematically.

MM1P4 Students will make connections among mathematical ideas and to other disciplines.

MM1P5 Students will represent mathematics in multiple ways.

BCS-CA1-5. Students will use database software to create, edit, and publish industry appropriate files.

   a.   Define and apply basic terminology associated with database design, creation, and use.
   b.   Plan, create, and modify a database table structure using design view.
   c.   Input, edit, and delete data in tables.
   d.   Differentiate between and use multiple views.
   e.   Demonstrate database skills by planning/creating a table that includes field properties with or without a primary key, accessing/retrieving, saving, and printing.
   f.   Create a database using multiple tables to establish relationships between tables.
   g.   Demonstrate report creation that involves group, sort, wizards, labels, and calculated fields and format to industry standards.
   h.   Organize and analyze data, e.g. sorting, identifying, finding, filtering, and viewing.
   i.   Create and use queries.

Academic Standard:
MM2P3 Students will communicate mathematically.

BCS-CA1-6. Students will use presentation software to create, edit, and publish industry appropriate files.

   a.   Apply industry standards in creating and presenting all presentations.
   b.   Apply presentation software skills by creating, accessing/retrieving, saving, and printing files.
   c.   Use views appropriately to create and manipulate presentation---normal, outline, notes, slide sorter view.
   d.   Use appropriate slide layouts and design templates to create presentations.
   e.   Analyze situations and select the appropriate printing output: handouts, slides, notes, page, or outline.
   f.   Use basic design guidelines to enhance visual presentations.
   g.   Create a presentation with graphics, sound, transitions, embedded objects, and specialized features (charts, organizational charts, hyperlinks).
   h.   Create an autorun looping presentation with message and proper timing.
   i.   Demonstrate presentation skills by creating well-organized, audience-appropriate presentations such as informative, entertaining, instructional, etc., using proper public speaking techniques.
   j.   Navigate an on-screen presentation using keyboard, mouse, pointer operations, and other navigational tools.

Academic Standard:
ELA9LSV2 The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

COMMUNICATIONS
Students will use appropriate technology to communicate effectively with peers, teachers, experts, and other audiences.

BCS-CA1-7. Students will understand how telecommunications can be used to collaborate, publish, and interact with peers, teachers, experts, and other audiences.

a. Describe telecommunications skills needed to communicate effectively with peers, experts, teachers, and other audiences, e.g. using e-mail, e-learning, video conferencing, instant messaging, chat and blogs, newsgroups, net meetings.
b. Use appropriate technology to plan, develop, edit, and present material to different types of audiences, e.g. paper, web page, multimedia presentation, publications, speech, hypermedia.
c. Use technology to enhance the effectiveness of communication, identifying appropriate and non-biased resources.

Academic Standards:
ELA9LSV1 The student participates in student-to teacher, student-to-student, and group verbal interactions.

ELA9LSV2 The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

ELA9W2 The student demonstrates competence in a variety of genres.

BCS-CA1-8. Students will use a variety of forms of communication in the successful pursuit of employment.

a. Compose and produce an effective application letter and resume.
b. Utilize the proper format for a thank you letter for a job interview.
c. Differentiate among suitable business attire, e.g. casual, business-casual, professional business, and formal attire.

Academic Standards:
ELA9LSV1 The student participates in student-to teacher, student-to-student, and group verbal interactions.

ELA9LSV2 The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

ELA9W2 The student demonstrates competence in a variety of genres.

INFORMATION RESEARCH
Students will use technology to access, review, evaluate, and select information from multiple resources.

BCS-CA1-9. Students will use technology to access, review, evaluate, and select information from multiple resources for reporting purposes.

   a.   Evaluate and select various job search strategies.
   b.   Research emerging trends in the field of computer technology, related applications, and potential employment opportunities.
   c.   Evaluate and select appropriate sources of information (e.g. print, video, electronic, and human) for a specific research problem or question.
   d.   Demonstrate the ability to use bookmarks and internet search engines to access information by identifying and conducting basic and advanced searches using internet/intranet search engines, directories, biographical dictionaries and thesauri.
   e.   Validate the accuracy of information during a research topic by reviewing each author's credentials, perspective, or bias.

Academic Standards:
ELA9W2 The student demonstrates competence in a variety of genres.

ELA9W3 The student uses research and technology to support writing.

PROBLEM SOLVING
Students will be able to solve real-world and/or business-related problems by developing problem-solving strategies.

BCS-CA1-10. Students will develop strategies for solving problems.

   a.   Identify, prevent, or solve problems using technical or electronic equipment.
   b.   Identify, evaluate, and use resources such as hardware, software, and online support for problem identification and solution.

    c.   Work in a team to solve problems and share knowledge.

Academic Standards:
MM1P1 Students will solve problems (using appropriate technology).

SCSh3 Students will identify and investigate problems scientifically.

ELA10LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

Reading Across the Curriculum

Reading Standard Comment
After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal learning. Students encounter a variety of informational as well as fictional texts, and they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in *context*.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

CTAE-RC-1 Students will enhance reading in all curriculum areas by:
Reading in All Curriculum Areas
    -Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
    -Read both informational and fictional texts in a variety of genres and modes of discourse.
    -Read technical texts related to various subject areas.
Discussing Books

-Discuss messages and themes from books in all subject areas.
-Respond to a variety of texts in multiple modes of discourse.
-Relate messages and themes from one subject area to messages and themes in another area.
-Evaluate the merit of texts in every subject discipline.
-Examine author's purpose in writing.
-Recognize the features of disciplinary texts.

Building Vocabulary Knowledge
-Demonstrate an understanding of contextual vocabulary in various subjects.
-Use content vocabulary in writing and speaking.
-Explore understanding of new words found in subject area texts.

Establishing Context
-Explore life experiences related to subject area content.
-Discuss in both writing and speaking how certain words are subject area related.
-Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and post secondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.