

SONOMA COUNTY OFFICE OF EDUCATION

ROP COURSE OUTLINE

Computerized Accounting

Course Description

The Computerized Accounting course is designed for the high school (or equivalent) accounting student who wishes to study accounting and utilize computer applications through business simulations, practice sets, and problem solving. The course addresses and meets the seven (601-607) Accounting Clerk competencies as identified in the "Strategies for Implementing Computer Instruction in Business Education."

The course includes accounting principles associated with merchandising and service-type businesses, supplemented with projects, simulations and applications as well as career preparatory units to provide training for students, 1) seeking training for employment in the banking, data processing/data entry or account clerk fields, and 2) those seeking pre-college preparation in the accounting field.

Students will be enrolled in a five-day-a-week, one-year course, which will combine a lecture and lab approach to their learning process. Because of the "hands on" requirements of computer application to the coursework, students are expected to attend regularly. High school students can earn 10 credits per semester.

CBEDS Title: Accounting/computer accounting

CBEDS Number: 4600

Career Development / Workforce Preparation

Course Created:

County Board Approval: _____
(Date)

Course Revised:

California Department of Education Approval: _____
(Date)

Financial Industry

As the economy in Sonoma County improves and remains strong, so to does the financial industry. Accounting is an occupation that is needed in all facets of the economy and therefore, to a certain degree, benefits or suffers from the performance of all industry sectors. According to the Economic Development Board's Fall 2004 Local Economic Report employment in the financial industry decreased over the past year. Nevertheless, professional & business services, an industry in which accountants are prevalent, experienced the highest job growth in Sonoma County over the last year.

Businesses are slowly recovering from the recession and the job market is beginning to improve (Press Democrat, June 15, 2004). Given this tentative business climate, the job growth outlook for accounting related occupations is expected to be slow. However, these occupations such as accountants, bookkeepers, billing clerks, bank tellers and cashiers represent a great deal of jobs. The financial and professional business sector combined, represent 16% of the total employment in Sonoma County. Employment trends for accountants are projected to be slower in the future. This large size occupation employs approximately 3,200 accountants in the North Bay Counties (North Bay Counties Occupational Outlook, 2003 – 2004). Employers report that it is not difficult to find applicants who meet their hiring standards, which indicates a competitive job market for qualified job seekers. Other related occupations such as bookkeepers also expect slower growth in the future. However, financial related occupations are among the largest in the North Bay Counties and job opportunities should be plentiful (North Bay Counties Occupational Outlook, 2003 – 2004). As the economy improves in the next year, more businesses will open or expand thus improving the overall job market for the financial industry.

Computerized Accounting

This course is linked directly to occupations in the following industries:

Automotive	Manufacturing
Construction	Retail
Real Estate	Government

**This course is a part of the following Career Pathway
Pathway**

Recommended Sequence	Courses
Introductory	Computer Foundations
Skill Building	Accounting 1
Advanced Skill	Computerized Accounting

Core Academic Standards

This course addresses the following Core Academic Standards

Instructional Unit: Career Preparation:

English Language Arts Standards:

Grade 8: Reading – 1.3: Use the word meanings within the appropriate context and show ability to verify those meanings by definition, restatement, example, comparison, or contrast.

Grade 8: Reading – 2.1: Compare and contrast the features and elements of consumer material to gain meaning from documents (e.g., warranties, contracts, product information, instructional materials).

Grade 8: Reading – 2.6: Use information from a variety of consumer, workplace, and public documents to explain a situation or decision and to solve a problem.

Grade 8 Writing – 1.3: Support theses or conclusions with analogies, paraphrases, quotations, opinions from authorities, comparisons, and similar devices.

Grade 8 Writing – 2.5: Write documents related to career development, including simple business letters and job applications:

- a. Present information purposefully and succinctly and meet the needs of the intended audience.
- b. Follow the conventional format for the type of document (e.g., letter of inquiry, memorandum).

Grade 8 Language Conventions -- 1.4: *Grammar:* Edit written manuscripts to ensure that correct grammar is used.

Grade 8 Language Conventions -- 1.5: *Punctuation and Capitalization:* Use correct punctuation and capitalization.

Grade 8 Language Conventions -- 1.6: *Spelling:* Use correct spelling conventions.

Grade 8 Listening and Speaking -- 1.2: *Comprehension:* Paraphrase a speaker's purpose and point of view and ask relevant questions concerning the speaker's content, delivery, and purpose.

Grade 8 Listening and Speaking -- 1.3: *Organization and Delivery of Oral Communication:* Organize information to achieve particular purposes by matching the message, vocabulary, voice modulation, expression, and tone to the audience and purpose.

Grade 9/10 Reading -- 2.1: *Structural Features of Informational Materials:* Analyze the structure and format of functional workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes.

Grade 9/10 Reading-- 2.3: *Comprehension and Analysis of grade-Level-Appropriate Text:* Generate relevant questions about readings on issues that can be researched.

Grade 9/10 Reading – 2.6: Demonstrate use of sophisticated learning tools by following technical directions (e.g., those found with graphic calculators and specialized software programs and in access guides to World Wide Web sites on the Internet).

Grade 9/10 Writing – 2.5: Write business letters:

- a. Provide clear and purposeful information and address the intended audience appropriately.
- b. Use appropriate vocabulary, tone, and style to take into account the nature of the relationship with, and the knowledge and interests of, the recipients.
- c. Highlight central ideas or images.
- d. Follow a conventional style with page formats, fonts, and spacing that contribute to the documents' readability and impact.

Grade 9/10 Language Conventions –1.4: *Manuscript Form:* Produce legible work that shows accurate spelling and correct use of the conventions of punctuation and capitalization.

Grade 9/10 Listening and Speaking – 1.1: *Comprehension:* Formulate judgments about the ideas under discussion and support those judgments with convincing evidence.

Grade 9/10 Listening and Speaking – 2.3: Apply appropriate interviewing techniques:

- a. Prepare and ask relevant questions.
- b. Make notes of responses.
- c. Use language that conveys maturity, sensitivity, and respect.
- d. Respond correctly and effectively to questions.
- e. Demonstrate knowledge of the subject or organization.
- f. Compile and report responses.
- g. Evaluate the effectiveness of the interview.

Grade 11/12 Reading –2.3: *Comprehension and Analysis of Grade-Level-Appropriate Text:* Verify and clarify facts presented in other types of expository texts by using a variety of consumer, workplace, and public documents.

Grade 11/12 Writing – 2.5: Write job applications and resumés:

- a. Provide clear and purposeful information and address the intended audience appropriately.
- b. Use varied levels, patterns, and types of language to achieve intended effects and aid comprehension.
- c. Modify the tone to fit the purpose and audience.
- d. Follow the conventional style for that type of document (e.g., resumé, memorandum) and use page formats, fonts, and spacing that contribute to the readability and impact of the document.

Grade 11/12 Language Conventions – 1.2: Produce legible work that shows accurate spelling and correct punctuation and capitalization.

Math Standards:

Grade 7: Number Sense – 1.2: Add, subtract, multiply, and divide rational numbers to whole-number powers.

Grade 7: Number Sense – 1.3: Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.

Grade 7: Number Sense – 1.7: Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest.

Grade 7: Mathematical Reasoning – 1.1: Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns.

Grade 7: Mathematical Reasoning – 1.3: Determine when and how to break a problem into simpler parts.

Grade 7: Mathematical Reasoning – 2.1: Use estimation to verify the reasonableness of calculated results.

Grade 7: Mathematical Reasoning – 2.7: Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.

Grade 7: Mathematical Reasoning – 2.8: Make precise calculations and check the validity of the results from the context of the problem.

Grade 7: Mathematical Reasoning – 3.1: Evaluate the reasonableness of the solution in the context of the original situation.

Instructional Unit: Computerized Accounting

English Language Arts Standards:

Grade 9-10: Writing – 1.7: Use appropriate conventions for documentation in the text, notes, and bibliographies by adhering to those in style manuals (e.g., *Modern language Association Handbook*, *The Chicago Manual of Style*).

Grade 9-10: Writing – 1.8: Design and publish documents by using advanced publishing software and graphic programs.

Grade 9-10: Listening and Speaking – 1.3: Choose logical patterns of organization (e.g., chronological, topical, cause and effect) to inform and to persuade, by soliciting agreement or action, or to unite audiences behind a common belief or cause.

Grade 9-10: Listening and Speaking – 1.4: Choose appropriate techniques for developing the introduction and conclusion (e.g., by using literary quotations, anecdotes, references to authoritative sources).

Grade 9-10: Listening and Speaking – 1.5: Recognize and use elements of classical speech forms (e.g., introduction, first and second transitions, body, conclusion) in formulating rational arguments and applying the art of persuasion and debate.

Grade 9-10: Listening and Speaking – 1.6: Present and advance a clear thesis statement and choose appropriate types of proof (e.g., statistics, testimony, specific instances) that meet standard tests for evidence, including credibility, validity, and relevance.

Grade 9-10: Listening and Speaking – 1.7: Use props, visual aids, graphs, and electronic media to enhance the appeal and accuracy of presentations.

Grade 9-10: Listening and Speaking – 1.8: Produce concise notes for extemporaneous delivery.

Grade 9-10: Listening and Speaking – 1.9: Analyze the occasion and the interests of the audience and choose effective verbal and nonverbal techniques (e.g., voice, gestures, eye contact) for presentations.

Grade 9-10: Listening and Speaking – 2.2: Deliver expository presentations:

- a. Marshal evidence in support of a thesis and related claims, including information on all relevant perspectives.
- b. Convey information and ideas from primary and secondary sources accurately and coherently.
- c. Make distinctions between the relative value and significance of specific data, facts, and ideas.

- d. Include visual aids by employing appropriate technology to organize and display information on charts, maps, and graphs.
- e. Anticipate and address the listener’s potential misunderstandings, biases, and expectations.
- f. Use technical terms and notations accurately.

Grade 11-12: Reading – 2.3: Verify and clarify facts presented in other types of expository texts by using a variety of consumer, workplace, and public documents.

Grade 11-12: Writing – 1.3: Structure ideas and arguments in a sustained, persuasive, and sophisticated way and support them with precise and relevant examples.

Grade 11-12: Writing – 1.6: Develop presentations by using clear research questions and creative and critical research strategies (e.g., field studies, oral histories, interviews, experiments, electronic sources).

Grade 11-12: Writing – 1.7: Use systematic strategies to organize and record information (e.g., anecdotal scripting, annotated bibliographies).

Grade 11-12: Writing – 1.8: Integrate databases, graphics, and spreadsheets into word-processed documents.

Grade 11-12: Writing – 2.1: Write fictional, autobiographical, or biographical narratives:

- a. Narrate a sequence of events and communicate their significance to the audience.
- b. Locate scenes and incidents in specific places.
- c. Describe with concrete sensory details the sights, sounds, and smells of a scene and the specific actions, movements, gestures, and feelings of the characters; use interior monologue to depict the characters’ feelings.
- d. Pace the presentation of actions to accommodate temporal, spatial, and dramatic mood changes.
- e. Make effective use of descriptions of appearance, images, shifting perspectives, and sensory details.

Grade 11-12: Writing – 2.3: Write reflective compositions:

- a. Explore the significance of personal experiences, events, conditions, or concerns by using rhetorical strategies (e.g., narration, description, exposition, persuasion).
- b. Draw comparisons between specific incidents and broader themes that illustrate the writer’s important beliefs or generalizations about life.
- c. Maintain a balance in describing individual incidents and relate those incidents to more general and abstract ideas.

Grade 9-10: Writing – 2.3: Write expository compositions, including analytical essays and research reports:

- d. Include visual aids by employing appropriate technology to organize and record information on charts, maps, and graphs.

Grade 9-10: Writing – 2.6: Write technical documents (e.g., a manual on rules of behavior for conflict resolution, procedures for conducting a meeting, minutes of a meeting):

- a. Report information and convey ideas logically and correctly.
- b. Offer detailed and accurate specifications.
- c. Include scenarios, definitions, and examples to aid comprehension (e.g., troubleshooting guide).
- d. Anticipate readers' problems, mistakes, and misunderstandings.

Grade 11-12: Writing – 2.6: Deliver multimedia presentations:

- a. Combine text, images, and sound and draw information from many sources (e.g., television broadcasts, videos, films, newspapers, magazines, CD-ROMs, the Internet, electronic media-generated images).
- b. Select an appropriate medium for each element of the presentation.
- c. Use the selected media skillfully, editing appropriately and monitoring for quality.
- d. Test the audience's response and revise the presentation accordingly.

Grade 11-12: Written and Oral – 1.2: Produce legible work that shows accurate spelling and correct punctuation and capitalization.

Grade 11-12: Written and Oral – 1.3: Reflect appropriate manuscript requirements in writing.

Grade 9-10: Reading – 2.6: Demonstrate use of sophisticated learning tools by following technical directions (e.g., those found with graphic calculators and specialized software programs and in access guides to World Wide Web sites on the Internet).

Grade 9-10: Listening and Speaking – 1.1: Formulate judgments about the ideas under discussion and support those judgments with convincing evidence.

Grade 9-10: Listening and Speaking – 1.2: Compare and contrast the ways in which media genres (e.g., televised news, news magazines, documentaries, online information) cover the same event.

Grade 9-10: Listening and Speaking – 1.3: Choose logical patterns of organization (e.g., chronological, topical, cause and effect) to inform and to persuade, by soliciting agreement or action, or to unite audiences behind a common belief or cause.

Grade 9-10: Listening and Speaking – 1.4: Choose appropriate techniques for developing the introduction and conclusion (e.g., by using literary quotations, anecdotes, references to authoritative sources).

Grade 9-10: Listening and Speaking – 1.5: Recognize and use elements of classical speech forms (e.g., introduction, first and second transitions, body, conclusion) in formulating rational arguments and applying the art of persuasion and debate.

Grade 9-10: Listening and Speaking – 1.6: Present and advance a clear thesis statement and choose appropriate types of proof (e.g., statistics, testimony, specific instances) that meet standard tests for evidence, including credibility, validity, and relevance.

Grade 9-10: Listening and Speaking – 1.7: Use props, visual aids, graphs, and electronic media to enhance the appeal and accuracy of presentations.

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- h. Convey information and ideas from primary and secondary sources accurately and coherently.
- i. Make distinctions between the relative value and significance of specific data, facts, and ideas.
- j. Include visual aids by employing appropriate technology to organize and display information on charts, maps, and graphs.
- k. Anticipate and address the listener's potential misunderstandings, biases, and expectations.
- l. Use technical terms and notations accurately.

Grade 11-12: Listening and Speaking – 1.1: Recognize strategies used by the media to inform, persuade, entertain, and transmit culture (e.g., advertisements; perpetuation of stereotypes; use of visual representations, special effects, language).

Grade 11-12: Listening and Speaking – 1.2: Analyze the impact of the media on the democratic process (e.g., exerting influence on elections, creating images of leaders, shaping attitudes) at the local, state, and national levels.

Grade 11-12: Listening and Speaking – 1.3: Interpret and evaluate the various ways in which events are presented and information is communicated by visual image-makers (e.g., graphic artists, documentary filmmakers, illustrators, news photographers).

Math Standards:

Grade 7: Mathematical Reasoning – 3.1: Evaluate the reasonableness of the solution in the context of the original situation.

Grade 8-12: Algebra – 13.0: Students add, subtract, multiply, and divide rational expressions and functions. Students solve both computationally and conceptually challenging problems by using these techniques.

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Grade 8-12: Algebra – 17.0: Students determine the domain of independent variables and the range of dependent variables defined by a graph, a set of ordered pairs, or a symbolic expression.

Grade 8-12: Algebra I – 25.0: Students use properties of the number system to judge the validity of results, to justify each step of a procedure, and to prove or disprove statements:

Grade 8-12: Algebra I – 25.1: Students use properties of numbers to construct simple, valid arguments (direct and indirect) for, or formulate counterexamples to, claimed assertions.

Grade 8-12: Algebra I – 25.2: Students judge the validity of an argument according to whether the properties of the real number system and the order of operations have been applied correctly at each step.

Grade 8-12: Algebra I – 25.3: Given a specific algebraic statement involving linear, quadratic, or absolute value expressions or equations or inequalities, students determine whether the statement is true sometimes, always, or never.

Grade 8-12: Probability and Statistics – 4.0: Students are familiar with the standard distributions (normal, binomial, and exponential) and can use them to solve for events in problems in which the distribution belongs to those families.

Grade 8-12: Probability and Statistics – 5.0: Students determine the mean and the standard deviation of a normally distributed random variable.

Grade 8-12: Probability and Statistics – 6.0: Students know the definitions of the *mean*, *median*, and *mode* of a distribution of data and can compute each in particular situations.

Grade 8-12: Probability and Statistics – 7.0: Students compute the variance and the standard deviation of a distribution of data.

Grade 8-12: Probability and Statistics – 8.0: Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line and bar graphs, stem-and-leaf displays, scatter plots, and box-and-whisker plots.

Science Standards:

Grade 9-12: Investigation and Experimentation – 1.0: Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other four strands, students should develop their own questions and perform investigations. Students will:

- a. Select and uses appropriate tools and technology (such as computer-linked probes, spreadsheets, and graphing calculators) to perform tests, collect data, analyze relationships, and display data.

Grade 9-12: Investigation and Experimentation – 1.0: Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other four strands, students should develop their own questions and perform investigations. Students will:

- a. Select and uses appropriate tools and technology (such as computer-linked probes, spreadsheets, and graphing calculators) to perform tests, collect data, analyze relationships, and display data.

Grade 9-12: Investigation and Experimentation – 1.0: Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other four strands, students should develop their own questions and perform investigations. Students will:

- d. Formulate explanations by using logic and evidence.

History/Social Science Standards:

Grade 12: Economics – 12.2: Students analyze the elements of America's market economy in a global setting.

1. Understand the relationship of the concept of incentives to the law of supply and the relationship of the concept of incentives and substitutes to the law of demand.
2. Discuss the effects of changes in supply and/or demand on the relative scarcity, price, and quantity of particular products.

3. Explain the roles of property rights, competition, and profit in a market economy.
4. Explain how prices reflect the relative scarcity of goods and services and perform the allocative function in a market economy.
5. Understand the process by which competition among buyers and sellers determines a market price.
6. Describe the effect of price controls on buyers and sellers.
7. Analyze how domestic and international competition in a market economy affects goods and services produced and the quality, quantity, and price of those products.
8. Explain the role of profit as the incentive to entrepreneurs in a market economy.

Grade 12: Economics – 12.4: Students analyze the elements of the U.S. labor market in a global setting.

1. Understand the operations of the labor market, including the circumstances surrounding the establishment of principal American labor unions, procedures that unions use to gain benefits for their members, the effects of unionization, the minimum wage, and unemployment insurance.
2. Describe the current economy and labor market, including the types of goods and services produced, the types of skills workers need, the effects of rapid technological change, and the impact of international competition.
3. Discuss wage differences among jobs and professions, using the laws of demand and supply and the concept of productivity.
4. Explain the effects of international mobility of capital and labor on the U.S. economy.

Grade 12: Economics – 12.6: Students analyze issues of international trade and explain how the U.S. economy affects, and is affected by, economic forces beyond the United State's borders.

1. Identify the gains in consumption and production efficiency from trade, with emphasis on the main products and changing geographic patterns of twentieth-century trade among countries in the Western Hemisphere.
2. Compare the reasons for and the effects of trade restrictions during the Great depression compared with present-day arguments among labor, business, and political leaders over the effects of free trade on the economic and social interests of various groups of Americans.
3. Understand the changing role of international political borders and territorial sovereignty in a global economy.
4. Explain foreign exchange, the manner in which exchange rates are determined, and the effects of the dollar's gaining (or losing) value relative to other currencies.

CAHSEE**English Language Arts Standards:**

Grade 9-10: Reading -2.3: Generate relevant questions about readings on issues that can be researched.

Grade 9-10: Reading -2.4: Synthesize the content from several sources or works by a single author dealing with a single issue; paraphrase the ideas and connect them to other sources and related topics to demonstrate comprehension.

Grade 9-10: Reading -2.5: Extend ideas presented in primary or secondary sources through original analysis, evaluation, and elaboration.

Grade 9-10: Writing – 1.3: Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources.

Grade 9-10: Writing – 1.4: Develop the main ideas within the body of the composition through supporting evidence (e.g., scenarios, commonly held beliefs, hypotheses, definitions).

Grade 9-10: Writing – 1.5: Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium (e.g., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, technical documents).

Grade 9-10: Writing – 1.6: Integrate quotations and citations into a written text while maintaining the flow of ideas.

Grade 9-10: Writing – 2.3: Write expository compositions, including analytical essays and research reports:

- a. Marshal evidence in support of a thesis and related claims, including information on all relevant perspectives.
- b. Convey information and ideas from primary and secondary sources accurately and coherently.
- c. Make distinctions between the relative value and significance of specific data, facts, and ideas.
- d. Include visual aids by employing appropriate technology to organize and record information on charts, maps, and graphs.
- e. Anticipate and address readers' potential misunderstandings, biases, and expectations.
- f. Use technical terms and notations accurately.

Grade 8: Reading – 2.1: Compare and contrast the features and elements of consumer materials to gain meaning from documents (e.g., warranties, contracts, product information, instruction manuals).

Grade 9-10: Reading – 2.1: Analyze the structure and format of functional workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes.

Grade 9-10: Reading – 1.9: Revise writing to improve the logic and coherence of the organization and controlling perspective, the precision of word choice, and the tone by taking into consideration the audience, purpose and formality of the context.

Math Standards:

Grade 7: Number Sense – 1.6: Calculate the percentage of increases and decreases of a quantity.

Grade 7: Number Sense – 1.7: Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest.

Grade 7: Number Sense – 2.2: Add and subtract fractions by using factoring to find common denominators.

Grade 7: Algebra and Functions – 1.1: Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three less than a number, half as large as area A).

Grade 7: Algebra and Functions – 1.2: Use the correct order of operations to evaluate algebraic expressions such as $3(2x + 5)$.

Grade 7: Mathematical Reasoning – 1.1: Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns.

Grade 7: Mathematical Reasoning – 1.2: Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed.

Grade 7: Mathematical Reasoning – 2.1: Use estimation to verify the reasonableness of calculated results.

Grade 7: Mathematical Reasoning – 2.3: Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques.

- Grade 7: Mathematical Reasoning – 2.4: Make and test conjectures by using both inductive and deductive reasoning.
- Grade 7: Mathematical Reasoning – 3.3: Develop generalizations of the results obtained and the strategies used and apply them to new problem situations.
- Grade 8-12: Algebra I – 5.0: Students solve multi step problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step.
- Grade 8-12: Algebra I – 10.0: Students add, subtract, multiply, and divide monomials and polynomials. Students solve multi step problems, including word problems, by using these techniques.
- Grade 8-12: Algebra I – 15.0: Students apply algebraic techniques to solve rate problems, work problems, and percent mixture problems.
- Grade 7: Algebra and Functions – 1.5: Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph.
- Grade 6: Statistics, Data Analysis, and Probability – 1.1: Compute the range, mean, median, and mode of data sets.
- Grade 6: Statistics, Data Analysis, and Probability – 2.5: Identify claims based on statistical data and, in simple cases, evaluate the validity of the claims.
- Grade 6: Statistics, Data Analysis, and Probability – 3.1: Represent all possible outcomes for compound events in an organized way (e.g., tables, grids, tree diagrams) and express the theoretical probability of each outcome.
- Grade 7: Measurement and Geometry – 1.3: Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.

Model Curriculum Standards for Computerized Accounting

This course addresses the following Business Education Model Curriculum Standards

Business Core 1.0

1.3 Career Preparation, Job Acquisition and Retention (C):

Students will understand the career preparation and job acquisition skills required for employment, professional growth, and employment transitions in the field of business occupations. They will demonstrate competency by researching career options, applying job acquisition skills,

preparing job search documentation, and modeling appropriate workplace demeanor.

- 1.3.1 Career Exploration—explore career opportunities and projected trends; investigate required education, training and experience; and develop an individual education plan for life long learning
- 1.3.2 Employment Transitions—analyze the effects of job changes, including the impact of unemployment
- 1.3.3 Goal Setting—identify steps for setting goals and write personal goals and objectives
- 1.3.4 Interest Assessment—examine aptitudes related to career options; relate personal characteristics and interests to educational and occupational opportunities
- 1.3.5 Job Acquisition—develop job acquisition documents and interview skills
- 1.3.6 Job Retention—identify appropriate work attitudes and behaviors

1.5 Employability Skills (C):

Students will understand the factors essential to a productive workforce in a culturally diverse global environment. They will demonstrate competency by identifying the skills, which positively affect productivity.

- 1.5.1 Adapting to Change—provide a workplace example of a constantly changing environment and discuss how employees should incorporate lifelong learning as a career goal
- 1.5.2 Conflict Resolution—demonstrate skills necessary to resolve disagreements in a professional manner
- 1.5.3 Diversity—describe and compare cultural differences as related to work styles
- 1.5.4 Occupational Safety—discuss safety practices and develop a plan to maintain a work environment in a safe and secure manner
- 1.5.5 Positive Attitude—role play a work situation to demonstrate positive working relationships with customers, employers and employees
- 1.5.6 Teamwork—develop the ability to work in teams by participating in group activities
- 1.5.7 Time Management—prioritize work to fulfill responsibilities, meet deadlines, and achieve personal satisfaction
- 1.5.8 Work Ethics—define ethics and explain how standards and scruples affect human relations

Accounting & Finance 2.0:**2.1 Accounting Procedures And Financial Analysis (CL):**

Students will understand basic principles and procedures of accounting and finance. They will demonstrate competency by preparing and maintaining accounting records and interpreting financial information.

- 2.1.1 Accounting Cycle—describe the accounting cycle for a service and a merchandising business; examine transactions and complete the accounting cycle for a sole proprietorship, a partnership, and a corporation
- 2.1.2 Accounting Principles—apply accounting principles and concepts including an understanding of the fundamental accounting equation; classify items as assets, liabilities and equity
- 2.1.3 Cash Management—utilize cash management techniques including bank reconciliations and cash controls
- 2.1.4 Computer Accounting Systems—use a computer accounting system to input and process data and to generate financial statements and other reports relevant to the financial position and profitability of a business
- 2.1.5 Decision Making—describe the role of managerial accounting and the use of planning and control principles to evaluate performance of an organization
- 2.1.10 Payroll—describe and apply payroll procedures including compensation, withholding and employee benefits

Course Outline

Sonoma County Office of Education
Career Development / Workforce Preparation

This course outline is presented in the state approved format - 2004

Computerized Accounting

COURSE OUTLINE

1. Course Title: Introduction to Computer Accounting

2. CBEDS Title: Accounting/computer accounting

3. CBEDS Number: 4600

4. Job Titles:

Bill & Account Collectors	Financial Clerks
Billing and Posting Clerks	Office and Administrative Support Worker
Bookkeeping, Accounting & Auditing Clerks	Office Clerks
Brokerage Clerks	Payroll & Timekeeping Clerks
Cashiers	Procurement Clerks
Counter and Rental Clerks	Shipping and Receiving Clerks
Credit Authorizers, Checkers & Clerks	Tellers

5. Course Description:

The Computerized Accounting course is designed for the high school (or equivalent) accounting student who wishes to study accounting and utilize computer applications through business simulations, practice sets, and problem solving. The course addresses and meets the seven (601-607) Accounting Clerk competencies as identified in the “Strategies for Implementing Computer Instruction in Business Education.”

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Students will be enrolled in a five-day-a-week, one-year course, which will combine a lecture and lab approach to their learning process. Because of the “hands on” requirements of computer application to the coursework, students are expected to attend regularly. High school students can earn 10 credits per semester.

Student Outcomes and Objectives:

The course objectives are as follows:

1. Students will review basic math computations.
2. Students will improve their alpha/numeric keyboarding skills (607).
3. Students will become aware of how computers affect our lives (117).
4. Students will learn be able to use and describe the components of a computer system and its peripheral devices (117).
5. Students will have hands-on experience using a computer for the following business applications:
 - a. Computerized accounting skills – general ledger functions (601), accounts receivable trans. (601), accounts payable trans., (601) payroll procedures (603), depreciation methods (604), cash accounting (602), and automated accounting (605).
6. Students will practice good work habits and attitudes (102).
7. Students will improve their job-seeking techniques.

Pathway

Recommended Sequence	Courses
Introductory	Computer Foundations
Skill Building	Computer Applications
Advanced Skill	Computerized Accounting

6. Hours: *Students receive up to 180 hours of classroom instruction and up to 8 hours of work-based learning through job shadowing experiences.*

7. Prerequisites: None

8. Date (of creation/revision): December 2004

9. Course Outline

COURSE OUTLINE				
Upon successful completion of this course, students will be able to demonstrate the following skills necessary for entry-level employment.				
Instructional Units and Competencies	Course Hours	Model Curr. Standards	CA Academic Content Standards	CAHSEE
<p>I. CAREER PREPARATION STANDARDS</p> <p>A. Understand how personal skill development (including positive attitude, honesty, self-confidence, work ethic, time management, and other positive traits) affects employability.</p> <ol style="list-style-type: none"> 1. Demonstrate an understanding of classroom policies and procedures. 2. Define workplace ethics and explain the importance of ethical standards and confidentiality in the business environment. 3. Discuss importance of the following personal skills in the work environment: <ol style="list-style-type: none"> a. positive attitude b. self-confidence c. honesty d. perseverance e. self-discipline 4. Define personal hygiene and identify acceptable workplace attire. 5. Prioritize tasks and meet deadlines. 6. Discuss the importance of lifelong learning. <p>B. Understand principles of effective interpersonal skills, including group dynamics, conflict resolution, and negotiation.</p> <ol style="list-style-type: none"> 1. Identify and discuss the key concepts of group dynamics. 2. Identify strategies for solving conflict in the workplace. <ol style="list-style-type: none"> a. setting limits that build mutual respect b. using key words and phrases that establish a spirit of cooperation c. building win/win relationships d. avoiding manipulation, stereotyping, harassment, and intimidation e. resolving conflicting job assignments 3. Discuss negotiation and its importance within the business environment. 4. Work cooperatively, share responsibilities, accept supervision, and assume leadership roles. 5. Demonstrate cooperative working relationships and proper etiquette across gender and cultural groups. <p>C. Understand the importance of good academic skills, critical thinking and problem-solving skills in the workplace.</p> <ol style="list-style-type: none"> 1. Recognize the importance of good reading, writing, math and computer skills in the work environment and implement a plan for self-improvement as needed. 2. Read, write, and give directions. 3. Exhibit critical and creative thinking skills. 4. Recognize problem situations; identify, locate and organize needed information or data; and propose, evaluate, and select from alternative solutions. 5. Use appropriate reference materials. 	<p>10</p> <p>Additional hours are integrated throughout the course.</p>	<p>Business Core; 1.3 & 1.5</p>	<p><u>Language Arts</u> (8) R 1.3, 2.6 W1.3, 2.5, LC 1.4,1.5 1.6 LS1.2, 1.3, (9/10) R2.1,2.3,2 W2.5 LC1.4 LS 1.1, 2.3 (11/12) R2.3 W2.5 LC1.2 <u>Math</u> (7) NS1.2, 1.7 MR 1.1,1.3 2.7,2.8, 3.1</p>	<p>Lang. Arts R 8.2.1 (9/10) R 2.1, 2.3 W2.5 Math (7) NS 1.2, 1.3, 1.7 MR 1.1, 2.1, 3.1</p>

Instructional Units and Competencies	Hours	Model Curr. Standards.	CA Academic Standards	CAHSEE
<p>I. CAREER PREPARATION STANDARDS (Cont.)</p> <p>D. Understand principles of effective communication.</p> <ol style="list-style-type: none"> 1. Read and implement written instructions, technical manuals, written communication, and reference books. 2. Present a positive image through verbal and nonverbal communication through use of appropriate methods. 3. Demonstrate active listening through oral and written feedback. 4. Demonstrate proper etiquette in workplace communications. 5. Demonstrate writing/editing skills as follows: <ol style="list-style-type: none"> a. Write, proofread, and edit workplace documents. b. Use correct grammar, punctuation, capitalization, vocabulary, and spelling. c. Select and use appropriate forms of technology for communication. 6. Exhibit a proficiency in the use of commonly used reference books. <p>E. Understand occupational safety issues, including avoidance of physical hazards.</p> <ol style="list-style-type: none"> 1. Discuss and implement good safety practices, including: <ol style="list-style-type: none"> a. avoidance and reporting of physical hazards in the work environment b. safe operation of equipment 2. Apply sound ergonomic principles in organizing one's work space. <ol style="list-style-type: none"> a. Health & safety issues for computer users. <p>F. Understand career paths and strategies for obtaining employment.</p> <ol style="list-style-type: none"> 1. Identify career opportunities, projected trends, and required education, training, and experience. 2. Identify individual student interests & abilities as the relate to career areas.. 3. Explain the role of professional organizations and their benefits. 4. Explain industry certifications and the employment benefits associated with attaining certification. 5. Identify further recommended training. 7. Identify related career pathways and their requirements. 8. Develop job acquisition documents, including the following: <ol style="list-style-type: none"> a. job application b. resume c. appropriate cover and follow-up correspondence d. portfolio 9. Identify and demonstrate effective interviewing techniques. <p>G. Understand and adapt to changing technology.</p> <ol style="list-style-type: none"> 1. Identify and demonstrate use of computer hardware and peripherals. 2. Identify common computer software used in accounting & business. 3. Understand the importance of lifelong learning in adapting to changing technology. 				

Instructional Units and Competencies	Hours	Model Curr. Standards.	CA Academic Standards	CAHSEE
A Introduction to Computer Accounting <ol style="list-style-type: none"> 1. Class Rules and Policy 2. Accounting Careers and Concepts 3. Review of Computer Systems and Operation 	4			
B. Accounting Cycle <ol style="list-style-type: none"> 1. Terms Review 2. Review Recording Methods 3. General Ledger/Trial Balance 4. Worksheets 5. Adjusting/Closing Entries 6. Financial Statements 7. Post-Closing Trial Balance 8. Financial Statement <ol style="list-style-type: none"> a. Assets b. Liabilities c. Equity d. Profit and Loss Statements 9. Interpret Data 10. Vendor Files <ol style="list-style-type: none"> a. Invoices b. Statements c. Purchase orders 	100	Accounting & Finance; 2.1.1, 2.1.2, 2.1.3	ELA 9-10; W; 1.7, 1.8 LS; 1.3-1.9; 2.2 ELA 11-12; R; 2.3 W; 1.3, 1.6-1.8, 2.1, 2.3 M. 7; MR; 3.1 A1; 13.0 S. 9-12; IE; 1a	ELA 9-10; R; 2.3-2.5 W; 1.3-1.6 & 2.3 M. 7; NS; 1.3, 1.6, 1.7, & 2.2 AF; 1.1, 1.2, MR; 1.1, 1.2, 2.1, 2.3, 2.4 & 3.3 M. 8-12; A1; 5.0, 10.0 & 15.0
C. Microcomputer Augmented Accounting <ol style="list-style-type: none"> 1. Terminology 2. Automated Accounting Cycle 3. Accounting Applications <ol style="list-style-type: none"> a. General Ledger b. Accounts Payable c. Accounts Receivable d. Payroll Procedures 4. Integrated Accounting 5. Data Entry Procedures 6. Spreadsheets 7. Integrating Spreadsheets & Word Processing Documents 	31	Accounting & Finance; 2.1.4	ELA 9-10; W; 1.7, 1.8, 2.3d, 2.6 ELA 11-12; W; 1.8, 2.6 WO; 1.2, 1.3 M. 7; MR; 3.1 S. 9-12; IE; 1a	ELA 8; R; 2.1 9-10; R; 2.1 W; 1.3-1.6 M. 7; NS; 1.3, 1.6, 1.7, 2.2 AF; 1.1, 1.2; MR; 1.1, 1.2, 2.1, 2.3, 2.4, 3.3
D. Banking & Finance <ol style="list-style-type: none"> 1. Terminology 2. Checking Accounts 3. Savings Accounts & Investments 4. Credit & Loans 5. Budgets & Financial Planning 	15			

Instructional Units and Competencies	Hours	Model Curr. Standards.	CA Academic Standards	CAHSEE
<p>E. Practical Application (Simulated Packages)</p> <ol style="list-style-type: none"> 1. Merchandising Simulation/Payroll 2. Merchandising Business/Sole Proprietorship 3. Merchandising Business/Partnership 4. Merchandising Business/Purchases and Sales on Account 5. Process and Reporting cost Accounting Data for Corporation 6. Decision-Making Skills with Accounting Practices 	20	Accounting & Finance; 2.1.5, 2.1.10	ELA 9-10; R; 2.6 LS; 1.1-1.9, 2.2 ELA 11-12; R; 2.3 W; 1.3, 1.6-1.8 LS; 1.1-1.3 M. 8-12; A1; 13.0, 17.0, 25.0 P&S; 4.0-8.0 S. 9-12; IE; 1a & d Econ. 12; 12.2, 12.4, 12.6	ELA 9-10; R: 2.3-2.5 W; 1.3-1.6, 1.9,2.3 M. 6; SDP; 1.1, 2.5, 3.1 M. 7; NS; 1,6, 1.7, 2.2 AF; 1.1, 1.2, 1.5 MG; 1.3

10. Additional recommended/optional items

a. Articulation: None

b. Academic credit: None

c. Instructional strategies:

Methods of Instruction:

1. Lecture
2. Audio Visual Materials
3. Readings and Written Presentations
4. Homework Assignments
5. Group & Individual Activities
6. Discussion & Group Dynamics
7. Quizzes, Tests & Final Exam
8. Guest Speakers
9. Internet Exploration

d. Instructional materials: Century 21 Accounting, South-Western Publishing, 2000

Automated Accounting 6.0, South-Western Publishing, 1994

e. Certificates: ROP Certificate of Competency