

**CALIFORNIA ACADEMIC CONTENT STANDARDS****Course 3: Managing and Marketing with Data****Module 7—*Planning for Business Success*****Module 8—*Ensuring Quality*****Module 9—*From Data to Knowledge*****ENGLISH 9/10****Reading**

- 1.1 Identify and use the literal and figurative meanings of words and understand word derivations.
- 2.0 Read and understand grade-level appropriate material.
- 2.6 Demonstrate use of sophisticated learning tools by following technical directions (e.g., those found with graphic calculators and specialized software).

**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.
- 1.4 Develop the main ideas within the body of the composition through supporting evidence (e.g., scenarios, commonly held beliefs, hypotheses, definitions).
- 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).
- 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.
- 2.3 Write expository compositions, including analytical essays and research reports.
- 2.4 Write persuasive compositions
- 2.6 Write technical documents.

**Listening and Speaking**

- 1.1 Formulate judgments about the ideas under discussion and support those judgments with convincing evidence.
- 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 the audiences behind a common belief or cause.
- 1.4 Choose appropriate techniques for developing the introduction and conclusion (e.g., by using literary quotations, anecdotes, references to authoritative sources).
- 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.
- 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.
- 1.7 Use props, visual aides, graphs, and electronic media to enhance the appeal and accuracy of presentations.
- 1.8 Produce concise notes for extemporaneous delivery.
- 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.
- 1.12 Evaluate the clarity, quality, effectiveness, and general coherence of a speaker's important points, arguments, evidence, organization of ideas, delivery, diction, and syntax.

- 1.13 Analyze the types of arguments used by the speaker, including argument by causation, analogy, authority, emotion, and logic.
- 2.3 Apply appropriate interviewing techniques.
- 2.5 Deliver persuasive arguments (including evaluation and analysis of problems and solutions and causes and effects).

## **ENGLISH 11/12**

### **Reading**

- 2.0 Read and understand grade-level appropriate material.

### **Writing**

- 2.6 Deliver multimedia presentations.

### **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).
- 1.6 Use logical, ethical, and emotional appeals that enhance a specific tone and purpose.
- 1.8 Use effective and interesting language.
- 1.10 Evaluate when to use different kinds of effects (e.g., visual, music, sound, graphics) to create effective productions.
- 2.4 Deliver multimedia presentations.

## **HISTORY/SOCIAL SCIENCES ANALYSIS SKILLS**

### **Historical Research, Evidence, and Point of View**

- 4. Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.

## **ECONOMICS**

- 12.2.1 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.
- 12.2.2 Discuss the effects of changes in supply and/or demand on the relative scarcity, price, and quantity of particular products.
- 12.2.4 Explain how prices reflect the relative scarcity of goods and services and perform the allocative function in a market economy.
- 12.2.5 Understand the process by which competition among buyers and sellers determines a market price.

## **SCIENCE: INVESTIGATION & EXPERIMENTATION**

- 1.a. Select and use appropriate tools and technology (such as computer-linked probes, spreadsheets, and graphing calculators) to perform tests, collect data, analyze relationships, and display data.
- 1.b. Identify and communicate sources of unavoidable experimental error.
- 1.c. Identify possible reasons for inconsistent results, such as sources of error or uncontrolled conditions.
- 1.d. Formulate explanations by using logic and evidence.
- 1.h. Read and interpret topographic and geologic maps.
- 1.j. Recognize the issues of statistical variability and the need for controlled tests.
- 1.n. Know that when an observation does not agree with an accepted scientific theory, the observation is sometimes mistaken or fraudulent and that the theory is sometimes wrong.

**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.

6.0 Students know the definitions of the mean, median, and mode of a distribution of data and can compute each in particular situations.

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, scatterplots, and box-and-whisker plots.