

FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT

Course Outline

ROP

Computer Graphics

Date: November 2004

Proposed Grade Level(s): 11-12

Grading: A-F

Prerequisites: None

Subject Area: Technology

Course Length: 1 Year

Number of Credits: 5/Semester

COURSE DESCRIPTION:

This course is designed to provide students with a fundamental understanding of computerized graphic art design, illustration, and production techniques. Students will become knowledgeable in the use of software for publication design, production, illustration, and digital imaging. Major projects may be retained for inclusion in a student portfolio.

GENERAL GOALS/PURPOSES:

Students will:

- Develop a working knowledge of graphic software applications.
- Understand principles of design.
- Develop a working knowledge of desktop publishing software.
- Understand principles used in marketing and advertising.
- Develop an electronic digital portfolio demonstrating layout, design, illustration and image manipulation skills.
- Utilize web animation techniques.
- Design and implement a web site.

STUDENT READING COMPONENT:

Students will:

- Be required to read and understand technical manuals, internet-based learning activities, online resources, and textbooks, as they apply to this class.
- Locate information from written and electronic sources, and identify strategies for evaluating their reliability and validity.
- Edit all documents produced.

STUDENT WRITING COMPONENT:

Students will:

- Demonstrate writing/editing skills by writing, proofreading, and editing all documents.
- Use correct grammar, punctuation, capitalization, vocabulary and spelling.
- Write a resume and cover letter as part of the job application process.

STUDENT ORAL COMPONENT:

Students will:

- Research, compose, and orally present information for a variety of business situations utilizing appropriate technology.
- Demonstrate and teach to the class graphic design concepts learned from researching tutorials on the Internet.

DETAILED UNITS OF INSTRUCTION:

Please see Appendix I.

THIS COURSE WILL PREPARE STUDENTS FOR THE CAHSEE AND/OR FCUSD EXIT EXAM IN:

Language Arts and Math

LAB FEE, IF REQUIRED:

None

SUBJECT AREA CONTENT STANDARDS TO BE ADDRESSED:

1.0 Business Core

1.1 Business Communications: Students will understand communications as applied to personal and professional situations. They will demonstrate competency by selecting and using appropriate forms of communications in a variety of situations.

1.2 Business Environment: Students will understand the development and structure of business environments. They will demonstrate competency by identifying the dynamic components of business structure and its relationship to the global business environment.

1.3 Career Preparation, Job Acquisition and Retention: 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.

1.5 Employability Skills: 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.

1.6 Information Technologies: Students will understand technology used in business. They will demonstrate competency by utilizing technology to access, manipulate, and produce information.

DISTRICT ESLRs TO BE ADDRESSED:

- **Self-Directed Learners:** Students will independently monitor their progress in a variety of projects and determine the next steps needed to complete the assignment. Students will work independently to use technology to find information, research subjects, and complete class assignments.

- **Effective Communicators:** Written and oral projects will help develop the necessary skills to enhance the students' abilities to communicate effectively and regularly practice those skills, both independently and in a group setting.

- **Quality Producers/Performers:** Students will select and use the appropriate technology and edit all work to ensure all work is to the best of their abilities.

- **Constructive Thinkers:** Students will be required to research information from the Internet, texts or manuals, and analyze and synthesize that information into a usable format.

- **Collaborative Workers:** Through the study of group dynamics, students will learn how to implement those dynamics in a functional group and during group projects, and will become better collaborative workers.
- **Responsible Citizens:** Through the course work and units of study, students will develop a better understanding of themselves, the world around them, and the impact they have on their environment. They will also have a better understanding of the ethical and societal issues related to technology and practice responsible use of technology systems, information, and software.

Appendix I

DETAILED UNITS OF INSTRUCTION

I - GENERAL WORKPLACE SKILLS

- A. Basic requirements of the program.
- B. Personal skill development.
- C. Interpersonal skills, group dynamics, conflict resolution, and negotiation.
- D. Academic skills, critical thinking, and problem solving skills in the workplace.
- E. Principles of effective communication.
- F. Occupational safety issues.

II - CAREER INFORMATION

- A. Career paths and strategies for obtaining employment.

III - CHANGING TECHNOLOGY

- A. Changing technology in computer graphics.

IV - ETHICS IN TECHNOLOGY

- A. The importance of ethics in the industry.

V - UNDERSTANDING THE COMPUTER AS A GRAPHIC ARTS TOOL

- A. Common personal computer operating systems.
- B. Store and retrieve files on the computer system.
- C. Customize operating system to incorporate specialized graphic art tools.

VI - GRAPHIC COMMUNICATIONS AND ART PRODUCTION

- A. Historical development of graphic communications.
- B. Rules of design, type and art, and publication development.

VII - COMPUTERIZED GRAPHIC ART GENERATION UNIT

- A. Computerized publications incorporating grid systems, white space, text and graphics.

VIII - COMPUTERIZED ILLUSTRATION TECHNIQUES

- A. Illustrations from concept to completion using graphic software applications.

IX - COMPUTERIZED IMAGE SCANNING AND PREPARATION

- A. Scanning hardware and software to digitize images.
- B. RGB and CMYK color models.
- C. High-end drum scanner technology versus flatbed scanner technology.
- D. Image editing software.

X - THEORY OF LIGHT AND COLOR

- A. Light affects color.
- B. Reflection, refraction, and absorption.
- C. Spot color versus process color.

XI - THE INTERNET AND WORLD WIDE WEB

- A. Hosts, clients, and addresses in a network.
- B. Browsers, search engines, and email.

XII - WEB PAGE DEVELOPMENT

- A. Graphic files and the World Wide Web.
- B. HTML.
- C. FrontPage.
- D. DreamWeaver.

XIII - ANIMATION TOOLS AND TECHNOLOGY

- A. Flash animation tools.

XIV - CD ROM AUTHORIZING

- A. Combining multi-media elements in the CD ROM authoring process.