**Course Description:**

This competency-based course is the last in a sequence of four designed for graphic design. It provides students with technical instruction and practical experience in workplace safety, scanning, graphic formats, color applications, utilizing graphics software, composition and writing for the Internet, proofreading and editing techniques, electronic publishing, using Dreamweaver, web page creation and designing accessible websites. Instruction also includes resource management and employability skills. The competencies in this course are aligned with the California High School Academic Content Standards and the California Career Technical Education Model Curriculum Standards.

**Job Title:** Web Designer

**Career Pathway:** Design, Visual, and Media Arts

**Industry Sector:** Arts, Media, and Entertainment

**O*NET-SOC CODE:** 27-1024.00

**CBEDS Title:** Intermediate Graphics Technology

**CBEDS No.:** 5622

**70-65-65**

**Graphic Design: Web Design**

**Credits:** 15

**Hours:** 180

**Prerequisites:**

Enrollment requires completion of the Graphic Design: Advertising Design (70-65-60) course and portfolio.

**NOTE:** For Perkins purposes this course has been designated as a capstone course.

This course cannot be repeated once a student receives a Certificate of Completion.
COURSE OUTLINE COMPETENCY-BASED COMPONENTS

A course outline reflects the essential intent and content of the course described. Acceptable course outlines have six components. (Education Code Section 52506). Course outlines for all apportionment classes, including those in jails, state hospitals, and convalescent hospitals, contain the six required elements:

(EC 52504; SCCR 10508 [b]; Adult Education Handbook for California [1977], Section 100)

Course Outline Components

GOALS AND PURPOSES

The educational goals or purposes of every course are clearly stated and the class periods are devoted to instruction. The course should be broad enough in scope and should have sufficient educational worth to justify the expenditure of public funds.

The goals and purpose of a course are stated in the COURSE DESCRIPTION. Course descriptions state the major emphasis and content of a course, and are written to be understandable by a prospective student.

PERFORMANCE OBJECTIVES OR COMPETENCIES

Objectives should be delineated and described in terms of measurable results for the student and include the possible ways in which the objectives contribute to the student’s acquisition of skills and competencies.

Performance Objectives are sequentially listed in the COMPETENCY-BASED COMPONENTS section of the course outline. Competency Areas are units of instruction based on related competencies. Competency Statements are competency area goals that together define the framework and purpose of a course. Competencies fall on a continuum between goals and performance objectives and denote the outcome of instruction.

Competency-based instruction tells a student before instruction what skills or knowledge they will demonstrate after instruction. Competency-based education provides instruction which enables each student to attain individual goals as measured against pre-stated standards.

Competency-based instruction provides immediate and continual repetition and in competency-based education the curriculum, instruction, and assessment share common characteristics based on clearly stated competencies. Curriculum, instruction and assessment in competency-based education are: explicit, known, agreed upon, integrated, performance oriented, and adaptive.
Course Outline Components

INSTRUCTIONAL STRATEGIES

Instructional techniques or methods could include laboratory techniques, lecture method, small-group discussion, grouping plans, and other strategies used in the classroom.

Instructional strategies for this course are listed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructional strategies and activities for a course should be selected so that the overall teaching approach takes into account the instructional standards of a particular program, i.e., English as a Second Language, Programs for Older Adults, Programs for Adults with Disabilities.

UNITS OF STUDY, WITH APPROXIMATE HOURS ALLOCATED FOR EACH UNIT

The approximate time devoted to each instructional unit within the course, as well as the total hours for the course, is indicated. The time in class is consistent with the needs of the student, and the length of the class should be that it ensures the student will learn at an optimum level.

Units of study, with approximate hours allotted for each unit are listed in the COMPETENCY AREA STATEMENT(S) of the course outline. The total hours of the course, including work-based learning hours (community classroom and cooperative vocational education) is listed on the cover of every CBE course outline. Each Competency Area listed within a CBE outline is assigned hours of instruction per unit.

EVALUATION PROCEDURES

The evaluation describes measurable evaluation criteria clearly within the reach of the student. The evaluation indicates anticipated improvement in performances as well as anticipated skills and competencies to be achieved.

Evaluation procedures are detailed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructors monitor students’ progress on a continuing basis, assessing students on attainment of objectives identified in the course outline through a variety of formal and informal tests (applied performance procedures, observations, and simulations), paper and pencil exams, and standardized tests.

REPETITION POLICY THAT PREVENTS PERPETUATION OF STUDENT ENROLLMENT

After a student has completed all the objectives of the course, he or she should not be allowed to reenroll in the course. There is, therefore, a need for a statement about the conditions for possible repetition of a course to prevent perpetuation of students in a particular program for an indefinite period of time.
ACKNOWLEDGMENTS

Thanks to TESSIE CASTILLO and FRED PRINZ for developing and editing this curriculum. Acknowledgment is also given to DARLENE NEILSEN for editing this course outline, and to ERICA ROSARIO for designing the original artwork for the course covers. Thanks to ISABEL VÁZQUEZ for the leadership she provided in implementing course sequences.

JUDY DE LA TORRE
Specialist
Career Technical Education

APPROVED:

DONNA BRASHEAR
Executive Director
Division of Adult and Career Education

(70-65-65)
1.0 Academics
Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the Arts, Media, and Entertainment academic alignment matrix for identification of standards.

2.0 Communications
Acquire and accurately use Arts, Media, and Entertainment sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats. (Direct alignment with LS 9-10, 11-12.6)

3.0 Career Planning and Management
Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans. (Direct alignment with SLS 11-12.2)

4.0 Technology
Use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the Arts, Media, and Entertainment sector workplace environment.

5.0 Problem Solving and Critical Thinking
Conduct short as well as more sustained research to create alternative solutions to answer a question or solve a problem unique to the Arts, Media, and Entertainment sector, using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.

6.0 Health and Safety
Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Arts, Media, and Entertainment sector workplace environment.

7.0 Responsibility and Flexibility
Initiate, and participate in, a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the Arts, Media, and Entertainment sector workplace environment and community settings.

8.0 Ethics and Legal Responsibilities
Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms.

9.0 Leadership and Teamwork
Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution as practiced in the SkillsUSA career technical student organizations.

10.0 Technical Knowledge and Skills
Apply essential technical knowledge and skills common to all pathways in the Arts, Media, and Entertainment sector, following procedures when carrying out experiments or performing technical tasks.

11.0 Demonstration and Application
Demonstrate and apply the knowledge and skills contained in the Arts, Media, and Entertainment anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through the SkillsUSA career technical student organizations.
Arts, Media, and Entertainment
Pathway Standards

A. Design, Visual, and Media Arts Pathway
The Design, Visual, and Media Arts pathway includes those occupations that use visual art, digital media, and Web-based tools and materials as the primary means of communication and expression. In addition to an understanding of current workplace practice, this career pathway requires the development of knowledge and skills in both visual art concepts as well as new and emerging digital processes by which individuals are able to create and communicate complex concepts in a broad range of occupations and professions.

Sample occupations associated with this pathway:
♦ Digital Animator
♦ Artistic Director
♦ Commercial Artist
♦ Web Designer
♦ Museum Curator

A1.0 Demonstrate ability to reorganize and integrate visual art elements across digital media and design applications.

A2.0 Apply artistic skills and processes to solve a variety of industry-relevant problems in a variety of traditional and electronic media.

A3.0 Analyze and assess the impact of history and culture on the development of professional arts and media products.

A4.0 Analyze, assess and identify effectiveness of artistic products based on elements of art, the principles of design, and professional industry standards.

A5.0 Identify essential industry competencies, explore commercial applications and develop a career specific personal plan.

A6.0 Analyze characteristics of subgenres (e.g., satire, parody, allegory, pastoral) that are used in poetry, prose, plays, novels, short stories, essays, and other basic genres.

A7.0 Demonstrate an understanding of the elements of discourse (e.g., purpose, speaker, audience, form) when completing narrative, expository, persuasive, or descriptive writing assignments.

A8.0 Understand the key technical and technological requirements applicable to various segments of the Media and Design Arts Pathway.
# CBE

**Competency-Based Education**

**COMPETENCY-BASED COMPONENTS**

*for the Graphic Design: Web Design Course*

<table>
<thead>
<tr>
<th>COMPETENCY AREAS AND STATEMENTS</th>
<th>MINIMAL COMPETENCIES</th>
</tr>
</thead>
</table>
| **A. WORKPLACE SAFETY**          | 1. Define workplace safety.  
                                 | 2. Describe the state and federal requirements for workplace safety in the graphic design industry.  
                                 | 3. Describe the safety procedures in the graphic design industry.  
                                 | 4. Pass the safety test with 100% rate. |
| Understand safety requirements in the graphic design industry. (2 hours) |                         |
| **B. FUNDAMENTALS OF GRAPHICS FOR THE WEB** | 1. Review scanning basics.  
                                 | 2. Describe the use and purpose of the following popular image formats:  
                                 | a. .TIF  
                                 | b. .JPG  
                                 | c. .GIF  
                                 | d. .PNG  
                                 | e. .EPS  
                                 | 3. Review the differences between vector and bitmap graphic files.  
                                 | 4. Review the purpose of vector graphic files.  
                                 | 5. Review the purpose of bitmap graphic files.  
                                 | 6. Describe appropriate file resolution (DPI) for the internet.  
                                 | 7. Describe copyright ownership of graphic images on the web.  
                                 | 8. Describe the use of the following:  
                                 | a. grayscale  
                                 | b. RGB color  
                                 | c. Web safe color |
| Understand the elements of scanning, graphic formats, and color in graphic design. (8 hours) |                         |
| **C. GRAPHICS SOFTWARE**         | 1. Review the use of the following tools and techniques in Adobe Photoshop:  
                                 | a. drawing tools  
                                 | b. formatting tools  
                                 | c. image manipulating tools  
                                 | d. layers  
                                 | e. saving files as source/raw files  
                                 | f. shading  
                                 | g. gradients  
                                 | h. airbrushing  
                                 | i. smudging |
| Understand and apply the basic components of professional graphics software programs. |                         |
j. filters  
k. color fill  
l. masks clipping masks  
m. channels  
n. pen tool  
o. paths  
p. selections  

2. Review the proper procedures in Adobe Photoshop to:  
a. save graphic images  
b. print graphic images  

3. Review the use of the following tools in Adobe Illustrator:  
a. drawing tools  
b. formatting tools  
c. image manipulating tools  
d. layers  
e. fill color  
f. line color  
g. manipulating type  

4. Review the proper procedures in Adobe Illustrator to:  
a. create graphic images  
b. save graphic images  
c. print graphic images  

5. Cut, copy, paste and save in a portfolio graphic elements that occur:  
a. within images  
b. between images  
c. between software programs  

(30 hours)  

D. WRITING AND COMPOSITION FOR THE WEB  
Understand, apply, and evaluate the characteristics of writing for the web.  

1. Describe the criteria for effective written communication.  
2. Differentiate between writing styles for the web and writing styles for print media.  
3. Write a persuasive composition for the web by:  
a. structuring ideas and arguments in a sustained and logical fashion  
b. using specific rhetorical devices to support assertions  
c. clarifying and defending positions with precise and relevant evidence  
d. addressing the following:  
i. readers’ concerns  
ii. readers’ counterclaims  
iii. readers’ biases  
iv. readers’ expectations  

4. Write a persuasive composition for print media by:  
a. structuring ideas and arguments in a sustained and logical fashion  
b. using specific rhetorical devices to support assertions  
c. clarifying and defending positions with precise and relevant evidence  
d. addressing the following:  
i. readers’ concerns  
ii. readers’ counterclaims  
iii. readers’ biases  
iv. readers’ expectations  

(6 hours)  

5. Save both persuasive compositions in a portfolio.
### E. PROOFREADING AND EDITING

Understand and apply fundamentals of the layout process.

1. Review editing marks and techniques used in correcting copy.
2. Review the importance of checking the proof against the original copy.
3. Demonstrate how to check for the following:
   - type size
   - type alignment
   - aesthetic use of typography
   - correct wording
   - correct spelling
   - correct punctuation
4. Review general principles of writing and editing for the web.
5. Review how to develop a solid naming convention for the following:
   - files
   - directories
   - data management
6. Describe how to use elements of text in the context of digital media.
7. Review media limitations:
   - on file names on the web
   - on local files
8. Review the following to ensure accessibility:
   - headings
   - document structure

(6 hours)

### F. ELECTRONIC PUBLISHING

Understand and apply the internet as a medium in the creation of web text and graphics using desktop publishing skills.

1. Define electronic publishing.
3. Describe and demonstrate electronic publishing process using FTP.
4. Describe the following components of general internet technology:
   - e-mail
   - web page browsers
   - newsgroups
5. Identify the tools used in downloading and uploading files.
6. Describe the relationship between file size and downloading/uploading files.
7. Describe and demonstrate the following:
   - downloading files
   - uploading files
   - zipping (compressing) files using Shareware/freeware software
   - unzipping (decompressing) files using Shareware/freeware software
9. Describe industry standards for basic HTML.
10. Convert word processing or desktop publishing files to HTML coded files and save in the portfolio.
11. Describe various popular shareware/freeware:
    - HTML editors
    - FTP programs
12. Identify emerging industry standards in electronic publishing.
13. Demonstrate how to access the following research sources in electronic publishing:
    - various popular internet search engines
    - research sites
    - online tutorials
    - discussion forums
    - expert documentation

(40 hours)
| G. INTRODUCTION TO DREAMWEVER | 1. Identify the attributes of Dreamweaver software.  
2. Define interface.  
3. Describe the Dreamweaver interface.  
4. Demonstrate working with Dreamweaver.  
5. Describe the HTML structure of Dreamweaver. |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Understand and apply the basics of Dreamweaver.</td>
<td>(22 hours)</td>
</tr>
</tbody>
</table>

| H. WEB PAGE CREATION | 1. Describe the history of web page creation and the HTML programming language.  
2. Review and present basic and valid HTML structure.  
3. Create code using modern web development applications to display text and graphics on a web page.  
4. Demonstrate the ability to work with backgrounds and graphic elements.  
5. Ensure proper image, link “tagging” (Alt tags) for accessibility.  
6. Create hyperlinks to linking text, graphics, and image maps.  
7. Demonstrate the ability to work with tables and frames.  
8. Create forms that include input boxes.  
9. Be able to send subsequent information to an e-mail address.  
10. Demonstrate the ability to work with JavaScript variables and data including:  
   a. functions  
   b. array  
   c. loops  
   d. coding for information gathering  
11. Add multimedia and sounds to a web page.  
12. Create a web page and save to the portfolio. |
<table>
<thead>
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<tbody>
<tr>
<td>Understand and apply text and graphics to create a profession-looking web page.</td>
<td>(40 hours)</td>
</tr>
</tbody>
</table>

| I. DESIGNING ACCESSIBLE WEBSITES | 1. Define web site accessibility.  
2. Describe the needs that web site accessibility aims to address.  
3. Describe the assistive technologies that are used for web browsing.  
4. Describe the emerging standards for web site accessibility.  
5. Describe and demonstrate the accessible construction of HTML.  
6. Describe and demonstrate the accessible construction of other file formats available for download. |
<table>
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<tbody>
<tr>
<td>Understand and apply the basics of designing accessible websites</td>
<td>(12 hours)</td>
</tr>
</tbody>
</table>

| J. RESOURCE MANAGEMENT | 1. Define the following:  
   a. resources  
   b. management  
   c. sustainability  
2. Describe the management of the following resources in graphic design:  
   a. time  
   b. materials  
   c. personnel |
<table>
<thead>
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<tbody>
<tr>
<td>Understand resource management principles and techniques in graphic design.</td>
<td></td>
</tr>
</tbody>
</table>
3. List specific examples of effective management of the following in graphic design:
   a. time
   b. materials
   c. personnel
4. Describe the benefits of effective resource management in graphic design in terms of:
   a. profitability
   b. sustainability
   c. company growth
5. Describe the economic benefits and liabilities of managing resources in an environmentally responsible way.

### K. EMPLOYABILITY SKILLS

Understand and apply job-seeking procedures.

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Describe employment requirements in the web design field.</td>
</tr>
<tr>
<td>2.</td>
<td>Apply learned technical skills when seeking employment.</td>
</tr>
<tr>
<td>3.</td>
<td>Review and upgrade résumé.</td>
</tr>
<tr>
<td>4.</td>
<td>Develop a professional portfolio of web design projects.</td>
</tr>
<tr>
<td>5.</td>
<td>Describe job specifics for various positions in the web design field.</td>
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<tr>
<td>6.</td>
<td>Describe qualifications needed for employment in the web design field.</td>
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<tr>
<td>7.</td>
<td>Identify potential employers.</td>
</tr>
<tr>
<td>8.</td>
<td>Complete sample job application forms correctly.</td>
</tr>
<tr>
<td>9.</td>
<td>Describe the importance of punctuality on a job.</td>
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<tr>
<td>10.</td>
<td>Describe the importance of a positive attitude on a job.</td>
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<tr>
<td>11.</td>
<td>Describe the importance of enthusiasm on a job.</td>
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<tr>
<td>12.</td>
<td>Describe the importance of appropriate appearance at a job.</td>
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<tr>
<td>13.</td>
<td>Describe the importance of continuous upgrading of job skills.</td>
</tr>
<tr>
<td>14.</td>
<td>Describe the optimal effects of customer service.</td>
</tr>
<tr>
<td>15.</td>
<td>Describe contracting and selling your services.</td>
</tr>
<tr>
<td>17.</td>
<td>Describe the importance of self-promotion.</td>
</tr>
</tbody>
</table>

(2 hour)

*(12 hours)*
SUGGESTED INSTRUCTIONAL MATERIALS and OTHER RESOURCES

TEXTS AND SUPPLEMENTAL BOOKS


SOFTWARE

Adobe Photoshop
Adobe Illustrator
Macromedia Flash
Adobe In-Design
Macromedia Freehand
Corel Draw
Macromedia Director

MULTI-MEDIA

Mac and Windows Academy instructional multimedia interactive CDs or videos

RESOURCES

Employer Advisory Board members


http://www.skillsnet.com/
(Jobseekers Guide Employment Resources, etc.)

http://www.onetcenter.org/
(Occupational Information Network)

COMPETENCY CHECKLIST
TEACHING STRATEGIES and EVALUATION

METHODS AND PROCEDURES

A. Lecture and discussion
B. Multimedia presentations
C. Visual aids
D. Demonstrations
E. Student projects
F. Individualized instruction

EVALUATION

SECTION A – Workplace Safety - Pass the safety test with 100% accuracy.

SECTION B – Fundamentals of Graphics for the Web - Pass all assignments and exams on fundamentals of graphics for the web with a minimum score of 80% or higher.

SECTION C – Graphics Software – Pass all assignments and exams on graphics software with a minimum score of 80% or higher.

SECTION D – Writing and Composition for the Web – Pass all assignments and exams on writing and composition for the web with a minimum score of 80% or higher.

SECTION E – Proofreading and Editing – Pass all assignments and exams on proofreading and editing with a minimum score of 80% or higher.

SECTION F – Electronic Publishing – Pass all assignments and exams on electronic publishing with a minimum score of 80% or higher.

SECTION G – Introduction to Dreamweaver – Pass all assignments and exams on introduction to Dreamweaver with a minimum score of 80% or higher.

SECTION H – Web Page Creation – Pass all assignments and exams on web page creation with a minimum score of 80% or higher.

SECTION I – Designing Accessible Websites – Pass all assignments and exams on designing website accessibility with a minimum score of 80% or higher.

SECTION J – Resource Management – Pass all assignments and exams on resource management with a minimum score of 80% or higher.

SECTION K – Employability Skills – Pass all assignments and exams on employability skills with a minimum score of 80% or higher.
Statement for Civil Rights

All educational and vocational opportunities are offered without regard to race, color, national origin, gender, or physical disability.