GCIP 252  Digital Publishing/Illustrator II (4)
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GC 101 and GCIP 152
Note: May be taken 4 times; maximum of 4 completions in any combination of GCIP 152, 152A, 152B, 252
Transfer acceptability: CSU

GCIP 255  Electronic Package Design (4)
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCIP 140 and GCIP 152
Transfer acceptability: CSU
Packaging continues to be one of the fastest growing segments of the graphic communication industry. Learn the importance of packaging graphics and how to create digital files implementing computer and printing technology. In this course you will identify the issues in design strategies for a successful packaging campaign and the technical expertise to produce your designs. Explore the development of packaging through a series of case studies and real-life design and technical tips.

GCIP 260  Portfolio Development and Presentation (4)
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCIP 140 and GCIP 152
Note: May be taken 2 times
Transfer acceptability: CSU
Students will develop a personal portfolio to showcase their graphic skills and techniques. Various resources, including the Internet, will be used to conduct a job search, develop a resume and learn interviewing techniques. Guest speakers will share industry tips. Students will practice presentation and interviewing skills, with feedback from professionals working in graphics and related industries.

GCIP 270  Commercial Screen Printing (4)
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCIP 140 and GCIP 152
Note: May be taken 4 times
Transfer acceptability: CSU
Commercial screen printing applications. Preparation of mechanicals using close registration and printing on standard and unusual surfaces. Color, mechanical process, and quality control standards in screen printing.

GCIP 280  Digital Prepress and Press III (4)
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCIP 182
Note: May be taken 4 times; maximum of 4 completions in any combination of GCIP 180, 182, 280
Transfer acceptability: CSU
Advanced work on larger format offset equipment focusing on sheet control, register, ink and water control, and digital imposition.

GCIP 295  Directed Study in Graphic Communications (1, 2, 3)
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson/director
Note: Cross listed at GCMW 295, may be taken 4 times
Transfer acceptability: CSU
Independent study for students who have demonstrated skills and/or proficiencies in Graphic Communications subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

GCIP 296  Special Projects (1, 2, 3)
3, 6, or 9 hours laboratory
Recommended preparation: Advanced coursework or job-related experience
Note: Cross listed as GCMW 296, may be taken 4 times
Transfer acceptability: CSU
Independent work on a specified sustained project which does not fit into the context of regularly scheduled classes. Students work from a contract agreed upon by the student and the instructor.

Graphic Communications - Multimedia & Web (GCMW)
See also Graphic Communications and Graphic Communications - Imaging & Publishing
Contact the Graphic Communications Department for further information. (760) 744-1150, ext. 2452
Office: MD-114
For transfer information, consult a Palomar College Counselor.

Associate in Arts Degrees -
AA Degree requirements are listed in Section 6 (green pages).
• Digital Video
• Interactive Media Design - Emphasis in Multimedia Design
• Interactive Web Multimedia and Audio
• Internet - Emphasis in Graphic Communication
• New Media Compositing, Authoring, and Distribution

Associate in Science Degrees -
AS Degree requirements are listed in Section 6 (green pages).
• Interactive Media Design - Emphasis in 3D Modeling and Animation

Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Digital Video
• Interactive Media Design - Emphasis in 3D Modeling and Animation
• Interactive Media Design - Emphasis in Multimedia Design
• Interactive Web Multimedia and Audio
• Internet - Emphasis in Graphic Communication
• New Media Compositing, Authoring, and Distribution

Certificates of Proficiency -
Certificate of Proficiency requirements are listed in Section 6 (green pages).
• Digital Animation, Compositing, and Music
• Digital Media
• E-Commerce Design
• Video Game Artist
• Web Data Base Design

PROGRAMS OF STUDY

Digital Animation, Compositing, and Music
This program is directed at the digital design and implementation of 3D animations, graphic composing and music.

CERTIFICATE OF PROFICIENCY

Program Requirements
(Select five courses)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARTI 246</td>
<td>Digital 3D Design and Modeling</td>
<td>3</td>
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<tr>
<td>ARTI 247</td>
<td>Digital 3D Design and Animation</td>
<td>3</td>
</tr>
<tr>
<td>GCMW 204</td>
<td>Motion Graphics for Multimedia</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 206</td>
<td>Motion Graphics Production and Compositing</td>
<td>4</td>
</tr>
<tr>
<td>MUS 180</td>
<td>Computer Music I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 184</td>
<td>Electronic Ensemble</td>
<td>3</td>
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</tbody>
</table>

TOTAL UNITS 16-17

Digital Animation, Compositing, and Music Certificate of Proficiency is also listed in Art and in Music.

Digital Media
Digital Media encompasses digital video editing in both analog and digital media. The certificate prepares students for employment in the film, video, Internet, and television industries. Major growth in this industry is anticipated as Internet and television merge into one medium.
CERTIFICATE OF PROFICIENCY

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CINE/RTV 125</td>
<td>3</td>
</tr>
<tr>
<td>GCMW 204</td>
<td>4</td>
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<tr>
<td>GCMW 205</td>
<td>4</td>
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<tr>
<td>RTV 270</td>
<td>3</td>
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<tr>
<td>RTV 275</td>
<td>3</td>
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<tr>
<td>TOTAL UNITS</td>
<td>17</td>
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</tbody>
</table>

Digital Media Certificate of Proficiency is also listed under Radio and Television.

Digital Video

Digital Video encompasses editing and design in using both digital and analog media. This degree prepares students for employment in the film, video, Internet, and television industries.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ARTI 246</td>
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<tr>
<td>ARTI 247</td>
<td>3</td>
</tr>
<tr>
<td>DT 180</td>
<td>3</td>
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<tr>
<td>GCIP 152</td>
<td>4</td>
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<tr>
<td>GCIP 240</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 101</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 108</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 201</td>
<td>4</td>
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<tr>
<td>GCMW 203</td>
<td>4</td>
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<tr>
<td>GCMW 208</td>
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<tr>
<td>RTV 50</td>
<td>1</td>
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<tr>
<td>RTV 110</td>
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<td>ENT/T/RTV 120</td>
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<tr>
<td>RV 150</td>
<td>3</td>
</tr>
<tr>
<td>RTV/CINE 170</td>
<td>3</td>
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<tr>
<td>RV/CINE 225</td>
<td>3</td>
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<tr>
<td>TOTAL UNITS</td>
<td>34</td>
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</tbody>
</table>

E-Commerce Design

Provides students with a basis for understanding and participating in the design and production of e-business and e-commerce. Specific skills for the E-Commerce Design certificate include Web production, site accessibility, shopping carts, site and data management, security, privacy, and commercial site promotion. Teamwork, problem solving, production process, communication and creativity are core competencies. Upon completion of the certificate, the student may find a job as a graphic designer, Web author, or graphical user interface designer.

CERTIFICATE OF PROFICIENCY

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 157</td>
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<tr>
<td>GCIP/</td>
<td></td>
</tr>
<tr>
<td>GCMW 190 or Copyright for Graphic Designers &amp; Web Developers</td>
<td>1</td>
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<tr>
<td>TOTAL UNITS</td>
<td>4</td>
</tr>
</tbody>
</table>

To satisfy a prerequisite, the student must have earned a letter grade of A, B, C or CR in the prerequisite course, unless otherwise stated. See Catalog addendum at http://www.palomar.edu/catalog/2012/ for updates and new program approvals.
GCIP 140 Digital Imaging/Photoshop I 4
GCIP 152 Digital Publishing/Illustrator I 4
GCMW 100 History of Multimedia 3
GCMW 102 Web Page Layout I 4
GCMW 197B Topics in Multimedia 3
GCMW 203 Web Multimedia 4
MUS 180 Computer Music I 3
RTV/CINE 170 Introduction to Video Editing 3

TOTAL UNITS 34-36

Interactive Media Design A.A. Degree or Certificate of Achievement is also listed in Art and in Drafting Technology.

Interactive Web Multimedia and Audio

This program is directed at interactive methods of Web production that include creation of audio for the Internet. Students will learn techniques and software to create animated and interactive Web sites and audio production for the Internet.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements Units
GCMW 101 Multimedia I 4
GCMW 102 Web Page Layout I 4
GCMW 108 Web Motion Graphics I 4
GCMW 123 Audio for the Internet 4
GCMW 140 Web Graphics 4
GCMW 203 Web Multimedia 4
GCMW 208 Web Motion Graphics II 4
GCMW 229 Interactive Streaming Media 4
Electives (Select 1 course)
GCIP 140 Digital Imaging/Photoshop I 4
GCIP 141 Digital Imaging/Photoshop II 4
GCIP 240 Digital Imaging/Photoshop III 4
GCMW 100 History of Multimedia 3
GCMW 104 Motion and Sound 4
GCMW 165 Digital Video Design 4
GCMW 202 Web Page Layout II 4
GCMW 204 Motion Graphics for Multimedia 4
GCMW 205 Digital Video for Multimedia 4
GCMW 220 Designing for Web Standards 4
GCMW 221 Best Practices for Web Design 4
GCMW 226 Flash Game Design 4
MUS 180 Computer Music I 3
RTV 230 Digital Audio with Pro Tools 3

TOTAL UNITS 35-36

Internet

As the vast web of global and local information networks grow, several skills and forms of literacy are becoming essential for anyone who wants to obtain the full benefits of the Communications Age.

An individual's ability to capitalize on the opportunities offered by interactive communications requires mastery of these information and communication proveniences:

- Navigational skills - The ability to move smoothly among arrays of autonomous and globally interconnected information, contacts, forums, and discussion groups in order to locate and connect to information and expertise from relevant sources.

- Information literacy - An understanding of which information is most useful, relevant, and reliable, as well as the ability to analyze, dissect, integrate, compose, and classify information to create knowledge.

- Distribution skills - Frameworks for rethinking methods of packaging, presenting, providing access, and disseminating information and knowledge in this new medium.

- Communications literacy - Integrating new forms of information, knowledge, and message development into evolving patterns of organizational and interpersonal communication.

This certificate offers preparation skills for the above areas of emphasis involving the Internet.

Emphasis in Graphic Communication

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements Units
BUS 157 E-Commerce 3
or
GCMW 120 Designing for the Social Web 4
CSWB 110 Web Site Development with XHTML 3
GCMW 102 Web Page Layout I 4
or
GCMW 103 Interactive Publishing with PDF'S 4
GCMW 108 Web Motion Graphics I 4
GCMW 140 Web Graphics 4
GCMW 202 Web Page Layout II 4
GCMW 217 Online Store Design 4
or
GCMW 229 Interactive Streaming Media 4
GCMW 220 Designing for Web Standards 4

TOTAL UNITS 30-31

Internet - Emphasis in Business Education

See Business

New Media Compositing, Authoring and Distribution

This program is directed at alternative methods of digital video compilation and release. Students will learn techniques and software to compile and composite digital video for release on CD ROM, DVD, and the Internet.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements Units
GCIP 240 Digital Imaging/Photoshop III 4
GCMW 101 Multimedia I 4
GCMW 165 Digital Video Design 4
GCMW 201 Multimedia II 4
GCMW 204 Motion Graphics for Multimedia 4
GCMW 205 Digital Video for Multimedia 4
GCMW 206 Motion Graphics Production and Compositing 4
GCMW 229 Interactive Streaming Media 4
Electives (select 1 course)
ARTD 220 Motion Design 3
ARTI 246 Digital 3D Design and Modeling 3
ARTI 247 Digital 3D Design and Animation 3
GC 101 History of Graphic Communications 3
GCIP 140 Digital Imaging/Photoshop I 4
GCIP 141 Digital Imaging/Photoshop II 4
GCIP 152 Digital Publishing/Illustrator I 4
GCMW 102 Web Page Layout I 4

TOTAL UNITS 35-36
**Graphic Communications: Multimedia and Web**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>GCMW 105</td>
<td>Web Page Layout with CMS</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 108</td>
<td>Web Motion Graphics I</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 123</td>
<td>Audio for the Internet</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 201</td>
<td>Web Page Layout II</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 202</td>
<td>Web Multimedia</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 203</td>
<td>Web Multimedia I</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 208</td>
<td>Web Motion Graphics II</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 220</td>
<td>Designing for Web Standards</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 221</td>
<td>Best Practices for Web Design</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 236</td>
<td>Flash Game Design</td>
<td>4</td>
</tr>
<tr>
<td>GCIP/</td>
<td>Directed Study in Graphic Communications</td>
<td>3</td>
</tr>
<tr>
<td>GCMW 295</td>
<td>Special Projects</td>
<td>3</td>
</tr>
<tr>
<td>RTV/CINE 170</td>
<td>Introduction to Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>RTV 230</td>
<td>Digital Audio with Pro Tools</td>
<td>3</td>
</tr>
<tr>
<td>RTV 270</td>
<td>Digital Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>RTV 275</td>
<td>Avid Editing for Television and Film</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 35 - 36

### Video Game Artist

This certificate program introduces students to the video game industry, video game design, and the creation of both 2D and 3D artwork for video games.

**CERTIFICATE OF PROFICIENCY**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CSCI 160</td>
<td>Overview of the Video Game Industry</td>
<td>4</td>
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<tr>
<td>CSCI 161</td>
<td>Game Design</td>
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<tr>
<td>ARTI 246</td>
<td>Digital 3D Design and Modeling</td>
<td>3</td>
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<tr>
<td>DT 180</td>
<td>3D Studio Max – Intro 3D Modeling/Animation</td>
<td>3</td>
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<tr>
<td>DT 182</td>
<td>3D Studio Max – Adv 3D Modeling/Animation</td>
<td>3</td>
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<tr>
<td>ARTD 220</td>
<td>Motion Design</td>
<td>3</td>
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<tr>
<td>ARTI 247</td>
<td>Digital 3D Design and Animation</td>
<td>3</td>
</tr>
<tr>
<td>DT 184</td>
<td>Real Time 3D Technical/Game Animation</td>
<td>3</td>
</tr>
<tr>
<td>GCMW 204</td>
<td>Motion Graphics for Multimedia</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 15

### Web Data Base Design

The Web site developer must present the complexity and volume of information so that the site's visitor may make decisions quickly and accurately. Data-driven dynamic pages are also interactive, allowing the visitor to choose the information that they would like to see. The increasingly sophisticated site development for online stores and multimedia, for example, requires a range of diverse and multifaceted skills from database design, computer graphics, Web design, site design and architecture, graphical user interface design, to cross-platform competence. The World Wide Web, as a graphical user interface, offers new career opportunities to graphic designers who have the skills to maintain sites that contain large amounts of data that changes frequently. The ability to package, share, and manage data to consumers across the Internet is in high demand. The Web Data Base Design certificate prepares for employment in dynamic business environments that need large-scale as well as smaller sites.

**CERTIFICATE OF PROFICIENCY**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>GCMW 202</td>
<td>Web Page Layout II</td>
<td>4</td>
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<tr>
<td>GCMW 217</td>
<td>Online Store Design</td>
<td>4</td>
</tr>
<tr>
<td>GCMW 226</td>
<td>Web Data Base Design II</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th>Electives (Select at least one course, minimum 4 units total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 180</td>
</tr>
<tr>
<td>CSWB 210</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 16

### COURSE OFFERINGS

**GCMW 100 History of Multimedia**

3 hours lecture

*Transfer acceptability: CSU, UC*

*Multimedia embodies the convergence of technology with content to combine text, audio, photos, art, graphics, animation, and branching and linear video. It facilitates new ways of communicating, learning, entertaining, and self-expression; multimedia is reshaping the way we do business, practice medicine, and conduct scientific research. This course traces the emergence and development of “multimedia” as a digital technology medium within historical, global, social, cultural and aesthetic contexts.*

**GCMW 101 Multimedia I**

3 hours lecture - 3 hours laboratory

*Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 101, 201*

*Transfer acceptability: CSU*

*Introduction to multimedia authoring software combining text, graphics, sound, animation, video clips and user interface to produce effective visual presentations.*

**GCMW 102 Web Page Layout I**

3 hours lecture - 3 hours laboratory

*Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 102, 102A, 102B, 202*

*Transfer acceptability: CSU*

*A hands-on introduction to page layout for the Internet. Typographic considerations, screen layout, graphical interfaces, and structured page design for effective Internet communications.*

**GCMW 103 Interactive Publishing with PDFs**

3 hours lecture - 3 hours laboratory

*Note: May be taken 4 times*

*Transfer acceptability: CSU*

*This hands-on course looks at a comprehensive range of print, Web, and multimedia features in Adobe Acrobat for creating and distributing electronic documents reliably and securely. Topics and projects include e-books, forms, editing, prepress, accessibility, capture, and a variety of methods to convert and repurpose documents.*

**GCMW 104 Motion and Sound**

3 hours lecture - 3 hours laboratory

*Note: May be taken 4 times*

*Transfer acceptability: CSU*

*Introduction to combining motion with sound for multimedia. Includes an overview of motion graphics and sound design for the multimedia industry. Course will consider current trends in motion graphics and soundtracks for film titles, television programs and advertising, interactive media and experimental works. This is a hands-on course using digital tools for creating and editing audio and motion graphics.*
GCMW 105  Web Page Layout with CMS
3 hours lecture - 3 hours laboratory (4)
Note: May be taken 4 times
Transfer acceptability: CSU
Web page layout and design with a content management system (CMS) and “what you see is what you get” (wysiwyg) software. The CMS keeps track of the content such as text, photos, music, video, and documents. Learners will design sites with articles, blogs, links, news feeds, search components, and breadcrumbs. Designed for the non-technical user, and knowledge of programming and/or coding is not needed.

GCMW 106  Multimedia for Social Networking
3 hours lecture - 3 hours laboratory (4)
Note: May be taken 4 times
Transfer acceptability: CSU
Introduction to the language and practice of media production as it is implemented for social networking. Students will learn the moviemaking process: pre-production; capture footage; capture audio; import digital video and audio to the computer from the camera; edit; export; and distribute. In this hands-on course, students will organize and share their photo library; create polished video and soundtracks; and produce movies, photobooks, podcasts, Websites, blogs, and custom DVDs. By becoming media producers, students will cultivate their analytical abilities as students of communication and as critics and viewers of media and cultural products which are forms of communication technology.

GCMW 108  Web Motion Graphics I
3 hours lecture - 3 hours laboratory (4)
Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 108, 208, 228
Transfer acceptability: CSU
Introduction of core concepts: vectors, the Stage, Scenes, Timelines, Layers, Key-frames, Shapes, Symbols (Graphic, Button, Movie Clip), Tweening, native drawing tools and external editors, frame-by-frame animation, Actions and Actionscript. Development of basic skills in web motion graphics. Exporting and embedding SWF files in Web pages. Adobe Flash will be used to create dynamic visual presentations with auditory components to communicate more effectively on the Web.

GCMW 112  Mobile Devices/Web Page Layout
1 hour lecture - 3 hours laboratory (2)
Note: May be taken 4 times
Transfer acceptability: CSU
Hands-on course that explores important considerations for making Web pages attractive and usable for a wide variety of mobile devices. Explores a variety of development tools for creating and testing Web pages for mobile screens and different strategies for deployment.

GCMW 115  Web Page Layout/WordPress
1 hour lecture - 3 hours laboratory (2)
Note: May be taken 4 times
Transfer acceptability: CSU
A hands-on course on WordPress, a flexible software for blogging and content management. Students will learn WordPress installation, implementation, enhancements with add-ins, and customization of design and features.

GCMW 120  Designing for the Social Web
3 hours lecture - 3 hours laboratory (4)
Recommended preparation: GCP 152 and/or GCP 140
Transfer acceptability: CSU
Focuses on the understanding of graphical user interface design for the social Web environment (Web 2.0), such as wikis, blogs, and social networks. Covers fundamental "Social Web" principles in order to develop designs from a user perspective. Covers Web technologies, market research, usability and human factors, wireframe and sitemap documentation, Web design, cross browser functionality, Web typography, and search engine marketability. The development of marketable, original, and creative problem solving solutions will also be examined with an emphasis on Web branding. In this hands-on course, students will participate in social networks such as wikis and blogs.

GCMW 123  Audio for the Internet
3 hours lecture - 3 hours laboratory (4)
Note: May be taken 4 times
Transfer acceptability: CSU
Introduction to sound and audio on the World Wide Web. Topics covered include digitizing audio for the internet, audio formats, optimization techniques and bandwidth considerations. This is a hands-on class using audio editing, html, and graphics editing software. Upon completion of course, student will create and publish a website incorporating audio on the internet.

GCMW 140  Web Graphics
3 hours lecture - 3 hours laboratory (4)
Transfer acceptability: CSU
The Graphical User Interface is a major component of Web design and production; human factors and usability are major factors in designing for the Web. This course includes industry standard techniques for Web graphics and other display media. It covers the mechanics for image production as well as methodologies for asset management, file compression, scanning, animation, image maps, slices, interactive rollovers, navigation, integration with multiple applications, layouts for screens, GIF and JPEG file formats, image resolution, and color depth. The implementation of planning models to design comprehensives for Website development is a major component in this hands-on course.

GCMW 154  Preparing Web Graphics
3 hours laboratory (1)
Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 154, 164
Transfer acceptability: CSU
Hands-on course to produce optimized graphics for the Web with applications such as Adobe’s Fireworks, cross-platform production environments: edit bitmap and vector graphics; format text; select Web-safe color; simple animation; generate HTML and JavaScript automatically; integrate with other Web production applications.

GCMW 164  Interactive Web Graphics
3 hours laboratory (1)
Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 154, 164
Transfer acceptability: CSU
Explores project planning, setup, editing and output of Digital Video. Incorporates sound, graphics, 2D animation and text for full-screen, web, CD-ROM, or DVD playback. Projects and assignments utilize transitions, superimposing, transparency and keying along with video, audio and other special effects.

GCMW 165  Digital Video Design
3 hours lecture - 3 hours laboratory (4)
Note: May be taken 4 times
Transfer acceptability: CSU
Explores project planning, setup, editing and output of Digital Video. Incorporates sound, graphics, 2D animation and text for full-screen, web, CD-ROM, or DVD playback. Projects and assignments utilize transitions, superimposing, transparency and keying along with video, audio and other special effects.

GCMW 177  Search Engine Optimization (SEO) for Web Design
3 hours lecture - 3 hours laboratory (4)
Recommended preparation: GCMW 102
Note: May be taken 4 times
Transfer acceptability: CSU; UC (pending)
Integrate Search Engine Optimization (SEO) techniques to improve search engine traffic, visibility, conversion, and Return on Investment (ROI). This hands-on course presents guidelines and techniques for SEO strategy and implementation. Optimize Website design through complex design technologies such as wireframes, dynamic content, pay per click, keywords, copywriting, graphics, and multimedia. Incorporate blogs, forums, and chat. Measure traffic with analytics and metrics.
GCMW 190 Copyright for Graphic Designers & Web Developers (1)

1 hour lecture

Note: Cross listed as GCIP 190
Transfer acceptability: CSU

Copyright is an old and well codified area of law. The statutes and cases, however, have created complexities that are sometimes difficult to understand. This course covers the basics of copyright law, copyright registration, methods of informing viewers of copyright protections and liability, and the ways in which a graphic designer may enforce copyright. The damages and remedies of injunction and compensation are included. This course is not intended to offer legal advice. Consult with competent legal professionals for any questions regarding specific copyright issues.

GCMW 191 Contracts for Graphic Designers & Web Developers (1)

1 hour lecture

Note: Cross listed as GCIP 191
Transfer acceptability: CSU

Graphic designers, whether employed by business or freelance, need to understand contract terms, negotiation, conditions, and the statutory and case law uniquely applicable to graphic design. Understanding the terms of a contract is essential to protecting the rights to use of work product and obtaining compensation. Failing to do so usually results in abuse of rights and non-compensation. This course is not intended to offer legal advice. Consult with competent legal professionals for any questions regarding specific contractual issues.

GCMW 192 Legal Issues for Graphic Designers & Web Developers (3)

3 hours lecture

Note: Cross listed as GCIP 192
Transfer acceptability: CSU

This course will cover most legal issues that confront graphic designers and web developers in the day-to-day operation of the businesses. Specific legal issues will include business formation, contracts, copyright, licensing, deep linking, click wrap agreements, and the risks and benefits of self-employment versus employment by a business. This course is not intended to offer legal advice. Consult with competent legal professionals for any questions regarding specific legal issues.

GCMW 197A Topics in Internet (1-5)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.

Note: May be taken 4 times
Transfer acceptability: CSU

Graphic Communications topics in Internet. See Class Schedule for specific topic offered. Course title will designate subject covered.

GCMW 197B Topics in Multimedia (1-5)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.

Note: May be taken 4 times
Transfer acceptability: CSU

Graphic Communications topics in multimedia. See Class Schedule for specific topic offered. Course title will designate subject covered.

GCMW 201 Multimedia II (4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of C' in GCMW 101

Recommended preparation: GCMW 165 or GCMW 205

Transfer acceptability: CSU

Strategies and techniques for designing successful user multimedia interface. There will be emphasis on usability and design issues, incorporation of underlying metaphors, screen design, and navigational styles. Authoring systems, video compositing, digital imaging and audio editing applications will be explored.

GCMW 202 Web Page Layout II (4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of C' in GCMW 102 and GCMW 140

Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 102, 102A, 202B, 202

Transfer acceptability: CSU

Multimedia web site design and production using advanced WYSIWYG editor that permits editing hypertext markup language (HTML) as well as designing to current standards of CSS and interactivity. Includes mechanics for site production as well as methodologies for project planning and management.

GCMW 203 Web Multimedia (4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of C' in GCMW 102

Recommended preparation: GCIP 140

Note: May be taken 4 times
Transfer acceptability: CSU

Open discussion of current technologies, social issues, and design theory directly related to multimedia for the Internet and the World Wide Web. Experimental and practical application of multimedia in graphical user interface and user navigation design via assigned class projects.

GCMW 204 Motion Graphics for Multimedia (4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of C' in GCMW 165

Recommended preparation: GCIP 140

Note: May be taken 4 times
Transfer acceptability: CSU

Explores project planning, setup, execution, and output of motion-based graphics. Incorporates exploration and integration of sound, graphics, digital video, 2-D animation, and text for multimedia.

GCMW 205 Digital Video for Multimedia (4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of C' in GCMW 165 and 204

Note: May be taken 4 times
Transfer acceptability: CSU

Exploration of concepts, design and development of digital video production and editing skills as they relate to CD Rom/DVD, Internet, and Digital Video Tape.

GCMW 206 Motion Graphics Production and Compositing (4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of C' in GCMW 204 and 205

Note: May be taken 4 times
Transfer acceptability: CSU

This course will be a “cap course” in which the student combines skills learned in multiple disciplines. For example the student will combine video skills learned in Graphic Communications and RTV with skills learned in ART or CAD by compositing a video that incorporates 3D rendered characters with live video footage. The student will complete the work by preparing it for publication on tape, DVD, digital storage device or web based formats.

GCMW 208 Web Motion Graphics II (4)

3 hours lecture - 3 hours laboratory

Recommended preparation: GCMW 108

Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 108, 208, 228
Transfer acceptability: CSU

Development of intermediate skills in web motion graphics: introduction of object-oriented design as applied to dynamic animation presentations; communication between graphical elements and instances; use of scripting and variables; creation of sound objects; use of components to improve efficiency; using Dynamic Text and ActionScript. Integrating digital audio and video with Flash presentations. Macromedia’s Flash will be used to create dynamic visual presentations with audio and video assets to communicate more effectively on the Web.

To satisfy a prerequisite, the student must have earned a letter grade of A, B, C or CR in the prerequisite course, unless otherwise stated. See Catalog addendum at http://www.palomar.edu/catalog/2012/ for updates and new program approvals.
GCMW 216 Web Data Base Design I
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCMW 102
Transfer acceptability: CSU
Hands-on course for creating Web pages that draw dynamic content from databases. Design and create a simple database for use on the Web. Create Web forms that add, modify or delete records from a database. Plan and implement a Web application using modern Web design tools such as Dreamweaver.

GCMW 217 Online Store Design
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCMW 102 and GCMW 202
Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 217, 218
Transfer acceptability: CSU
Design of interactive commercial web sites with emphasis on online shopping cart and database creation and management. Hands-on production of an online store. Perspective through web store case studies and models. Evaluation of various e-commerce solutions, security/privacy and payment options, site promotion/advertising, analysis tools and trends in appropriate web graphics, multimedia and software. Project management methods for e-commerce site life cycle.

GCMW 220 Designing for Web Standards
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCMW 202
Recommended preparation: GCMW 102
Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 220, 221
Transfer acceptability: CSU
Web site design and production using the current standards of the hypertext mark up language (HTML) and other advanced tools (multimedia applications and Java Script, Java, etc.). Use of HTML editors for site authoring and mechanics as well as methodologies for project planning and management.

GCMW 221 Best Practices for Web Design
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCMW 202
Note: May be taken 4 times; maximum of 4 completions in any combination of GCMW 220, 221
Transfer acceptability: CSU
Current standards of Web design set forth by the W3C mandate changes in the way Web designers create their Web pages. This course teaches the use of XHTML and CSS to implement Web typography and advanced Web page layouts that comply with current Web standards.

GCMW 226 Web Data Base Design II
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCMW 202 and 216
Transfer acceptability: CSU
Modern Web sites frequently need to interact with Web database servers in order to manage content, take orders or reservations, receive information, and interact with their visitors. This is a hands-on course for creating Web pages with a modern Web design tool such as Dreamweaver that draw dynamic content from remote database server such as MySQL. Learners will design and manage a remote database on a remote database server using popular database management tools.

GCMW 229 Interactive Streaming Media
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCMW 102
Note: May be taken 4 times
Transfer acceptability: CSU
Explores the various aspects of interactive streaming for the web. Combines lecture, hands on lessons, exercises, projects, and group work to build skills in the interactive streaming process. Students evaluate and select streaming methods, develop and author various media, and deliver the content in appropriate formats. Particular attention is given to design, usability, and applicable uses of interactive streaming media on the web.

GCMW 232 Web Accessibility Design
3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCMW 202 and 220
Note: May be taken 4 times
Transfer acceptability: CSU
Evaluate screen and Web design techniques to maximize accessibility by people with physical disabilities. Implement tools to convert documents to accessible formats. Produce sites that are accessible. Use various resources from the World Wide Web Consortium and publishers such as checklists, examples of code, conversion tools, test tools, etc. Review legal requirements (Americans with Disabilities Act and the Web Accessibility Initiative) for various sectors to provide fully accessible Web sites.

GCMW 236 Flash Game Design
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of ‘C’ in GCMW 108 and 208
Note: May be taken 4 times
Transfer acceptability: CSU
A hands-on introduction to game design using Flash 5. ActionScript for game development, screen layout, game interfaces, and structured game layout for effective game design. The course is designed to introduce students to Flash game design and concepts. Projects apply ActionScript and game layout principles. (For beginning and intermediate levels).

GCMW 295 Directed Study in Graphic Communications
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson/ director
Note: Cross listed as GCIP 295; may be taken 4 times
Transfer acceptability: CSU
Independent study for students who have demonstrated skills and/or proficiencies in Graphic Communications subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

GCMW 296 Special Projects
3, 6, or 9 hours laboratory
Recommended preparation: Advanced coursework or job-related experience
Note: Cross listed as GCIP 296; may be taken 4 times
Transfer acceptability: CSU
Independent work on a specified sustained project which does not fit into the context of regularly scheduled classes. Students work from a contract agreed upon by the student and the instructor.

Health (HE)
Contact the Department of Health, Kinesiology and Recreation Management for further information.
(760) 744-1150, ext. 2462
Office: O-10

COURSE OFFERINGS

HE 100 Health Education and Fitness Dynamics
3 hours lecture
Transfer acceptability: CSU; UC
Individual well being will be developed through the study of the emotional, spiritual, intellectual, social, and physical qualities of health.

HE 100L Health Performance Lab
3, 4.5, or 6 hours laboratory
Note: May be taken 3 times
Transfer acceptability: CSU; UC
Fitness lab course designed to develop and encourage positive attitudes and habits with regards to health education and fitness dynamics. Lab participation will primarily utilize exercise equipment as it relates to cardiovascular efficiency, body composition, muscular strength and endurance and flexibility. An individual fitness profile will be established, including pre-post testing, to determine each student’s fitness accomplishments.