

GCIP 270 Commercial Screen Printing**(3)**

1½ hours lecture - 4½ hours laboratory

Prerequisite: A minimum grade of 'C' in GCIP 170 and GCIP 172 **Transfer acceptability:** CSU

An advanced study of various commercial screen-printing applications. Printing processes, business aspects, case studies, advanced color reproduction, close register with an emphasis on quality control.

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**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**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 Science Degrees -

AS Degree 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 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
- 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 compositing and music.

CERTIFICATE OF PROFICIENCY

Program Requirements (Select five courses)	Units
ARTI 246 Digital 3D Design and Modeling	3
ARTI 247 Digital 3D Design and Animation	3
GCMW 204 Motion Graphics for Multimedia	3
GCMW 206 Motion Graphics Production and Compositing	3
MUS 180 Computer Music I	3
MUS 184 Electronic Ensemble	1

TOTAL UNITS **13-15**

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

Digital Media

This program encompasses digital video editing in 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	Units
CINE/DBA 125 Beg Film/Video Field Production	3
or	
GCMW 165 Digital Video Design	3
DBA 270 Digital Video Editing	3
DBA 275 Avid Editing for Television & Film	3
GCMW 204 Motion Graphics for Multimedia	3
GCMW 205 Digital Video for Multimedia	3

TOTAL UNITS **15**

Digital Media Certificate of Proficiency is also listed under Digital Broadcast Arts.

Digital Video

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

**A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT**

Program Requirements	Units
GCIP 140 Digital Imaging/Photoshop I	3
GCMW 165 Digital Video Design	3
GCMW 204 Motion Graphics for Multimedia	3
GCMW 205 Digital Video for Multimedia	3
DBA/CINE 125 Beginning Film and Video Field Production	3
DBA 230 Digital Audio with Pro Tools	3
DBA 270 Digital Video Editing	3
DBA 275 Avid Editing for Television and Film	3

Electives (2 courses required, 6 units minimum)

ARTI 246 Digital 3D Design and Modeling	3
ARTI 247 Digital 3D Design and Animation	3
DBA 50 Basic Television Acting	1
DBA 110 Broadcast Writing and Producing	3
DBA 150 Performance and Acting for Broadcast and Film	3
DBA /CINE 170 Introduction to Video Editing	3
DT 180 3D Studio Max - Introduction to 3D Modeling and Animation	3

ENTT/RTV 120	Basic Television Production	3
GCMW 101	Multimedia I	3
GCMW 104	Intro to Audio and Video for Post Production	3
GCMW 201	Multimedia II	3
GCMW 203	Web Multimedia	3
GCMW 206	Motion Graphics Production and Compositing	3
GCIP 141	Digital Imaging/Photoshop II	3
GCMW 229	Content Publishing for Mobile, Web and Apps	3
GCIP 152	Digital Publishing/Illustrator I	3
GCIP 240	Digital Imaging/Photoshop III	3
DBA/CINE 225	Intermediate Film and Video Field Production	3
GCIP 168	Digital Imaging with Drones	3

TOTAL UNITS 30

Digital Video A.S. Degree Major or Certificate of Achievement is also listed under Digital Broadcast Arts.

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	Units
BUS 157 E-Commerce	3
GCIP/ GCMW 190 Copyright for Graphic Designers & Web Developers or	1
GCIP/ GCMW 191 Contracts for Graphic Designers & Web Developers or	1
GCMW 232 Web Accessibility Design	1
GCMW 202 Web Page Layout II	3
GCMW 216 Web Data Base Design I or	3
GCMW 220 Designing for Web Standards	3
GCMW 217 Online Store Design	3
TOTAL UNITS	13

Interactive Media Design

Prepares students with specific skills necessary for employment in the field of multimedia design and production. Students may choose an emphasis in either 3D modeling and animation, which emphasizes production skills and authoring systems, or multimedia design, which emphasizes content development and visual design of multimedia productions. Both areas of emphasis collaborate on an actual multimedia production.

Emphasis in 3D Modeling and Animation

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
ARTI 100 Introduction to Illustration	3
ARTI 246 Digital 3D Design and Modeling	3
ARTI 247 Digital 3D Design and Animation	3
DT 180 3D Studio Max-Intro to 3D Modeling/Animation	3
DT 182 3D Studio Max-Adv 3D Modeling/Animation	3
GCIP 141 Digital Imaging/Photoshop II	3
GCMW 204 Motion Graphics for Multimedia	3
GCMW 206 Motion Graphics Production and Compositing	3

Electives (Select two courses)

ARTD 150	Digital Concepts/Techniques in Art	3
ARTD 220	Motion Design	3
ARTI 248	Digital 3D Design and Sculpture	3
DT/ENGR 103	SolidWorks Intro 3D Design and Presentation	3
DT 184	Real Time 3D Technical/Game Animation	2
ENTT/DBA 120	Digital Television Production	3
GCIP 150	3D Product Development and Marketing	3
GCIP 240	Digital Imaging/Photoshop III	3
GCMW 100	History of Multimedia	3

TOTAL UNITS 29 – 30

Emphasis in Multimedia Design

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
ARTD 100 Graphic Design I	3
ARTD 220 Motion Design	3
ARTI 247 Digital 3D Design and Animation	3
GC/MCS 115 Graphics and Media: A Multicultural Perspective	3
GCIP 240 Digital Imaging/Photoshop III	3
GCMW 101 Multimedia I	3
GCMW 201 Multimedia II	3
GCMW 204 Motion Graphics/Multimedia	3

Electives (Select two courses)

ART 197G	Topics in Art – Computer Art	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 246	Digital 3D Design/Modeling	3
DT 180	3D Studio Max-Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max-Adv 3D Modeling/Animation	3
GC 100	Graphic Communications	3
GCIP 140	Digital Imaging/Photoshop I	3
GCIP 152	Digital Publishing/Illustrator I	3
GCMW 100	History of Multimedia	3
GCMW 102	Web Page Layout I	3
GCMW 203	Web Multimedia	3
MUS 180	Computer Music I	3

TOTAL UNITS 30

Interactive Media Design A.S. 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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
GCMW 101 Multimedia I	3
GCMW 102 Web Page Layout I	3
GCMW 104 Intro to Audio and Video for Post Production or	3
GCMW 123 Audio for the Internet	4
GCMW 112 Mobile Devices/Web Page Layout	2
GCMW 115 Web Page Layout/Wordpress	2
GCMW 140 Web Graphics	3
GCMW/ GCIP 190 Copyright for Graphic Designers & Web Developers	1
GCMW/ GCIP 191 Contracts for Graphic Designers & Web Developers	1
GCMW 201 Multimedia II	3
GCMW 203 Web Multimedia	3
GCMW 229 Content Publishing for Mobile, Web and Apps	3

Electives (Select 1 course)

DBA 230	Digital Audio with Pro Tools	3
GCIP 140	Digital Imaging/Photoshop I	3
GCIP 141	Digital Imaging/Photoshop II	3
GCIP 240	Digital Imaging/Photoshop III	3
GCMW 100	History of Multimedia	3
GCMW 165	Digital Video Design	3
GCMW 202	Web Page Layout II	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3
GCMW 220	Designing for Web Standards	3
GCMW 221	Best Practices for Web Design	3
MUS 180	Computer Music I	3

TOTAL UNITS 30 - 31

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, distill, 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.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
BUS 157	E-Commerce or	3
CSWB 110	Web Site Development with HTML5/CSS3	3
GCMW 102	Web Page Layout I	3
GCMW 120	Designing for the Social Web	3
GCMW 140	Web Graphics	3
GCMW 202	Web Page Layout II	3
GCMW 217	Online Store Design or	3
GCMW 220	Designing for Web Standards	3
GCMW 229	Content Publishing for Mobile, Web and Apps	3
TOTAL UNITS		21

**New Media Compositing,
Authoring and Distribution**

This program is directed at alternative methods of digital video compilation and distribution. Students will learn techniques and software to compile and composite digital video for release on mobile devices, screen media and Internet formats.

**A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
GCIP 240	Digital Imaging/Photoshop III	3
GCIP 249	Page Layout and Design II	3
GCMW 101	Multimedia I	3
GCMW 165	Digital Video Design	3
GCMW 201	Multimedia II	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3
GCMW 206	Motion Graphics Production and Compositing	3
GCMW 229	Content Publishing for Mobile, Web and Apps	3

Electives (select 3 units)

ARTD 220	Motion Design	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
DBA 230	Digital Audio with Pro Tools	3
DBA 270	Digital Video Editing	3
GCIP 141	Digital Imaging/Photoshop II	3
GCIP 150	3D Product Development and Marketing	3
GCIP 168	Digital Imaging with Drones	3
GCMW 105	Web Page Layout with CMS	3
GCMW 112	Mobile Devices/Web Page Layout	2
GCMW 115	Web Page Layout/WordPress	2
GCMW 123	Audio for the Internet	4
GCMW/		
GCIP 191	Contracts for Graphic Designers & Web Developers	1
GCMW 202	Web Page Layout II	3
GCMW 203	Web Multimedia	3

TOTAL UNITS 30

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

Program Requirements		Units
GCMW 202	Web Page Layout II	3
GCMW 217	Online Store Design	3
GCMW 226	Web Data Base Design II	3

Electives (Select at least one course, minimum 3 units total)

BUS 180	Access Basic	1
CSWB 210	Active Server Pages	3
GCIP/		
GCMW 190	Copyright for Graphic Designers & Web Developers	1
GCIP/		
GCMW 191	Contracts for Graphic Designers & Web Developers	1

GCMW/		
GCIIP 192	Legal Issues for Graphic Designers & Web Developers	3
GCMW 105	Web Page Layout with CMS	3
GCMW 120	Designing for the Social Web	3
GCMW 154	Preparing Web Graphics	1
GCMW 164	Interactive Web Graphics	1
GCMW 216	Web Data Base Design I	3
GCMW 220	Designing for Web Standards	3

TOTAL UNITS 12

COURSE OFFERINGS

GCMW 100 History of Multimedia (3)

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)

1½ hours lecture - 4½ hours laboratory

Transfer acceptability: CSU

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

GCMW 102 Web Page Layout I (3)

1½ hours lecture - 4½ hours laboratory

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 104 Color Correction and Sound for Multimedia (3)

1½ hours lecture - 4½ hours laboratory

Transfer acceptability: CSU

Introduction to finishing techniques using video and sound for post production. Includes an overview of color correction and sound design for the multimedia industry. Course will consider current practices in color grading and soundtracks for Internet, mobile devices, screen media, and physical delivery formats. This is a hands-on course using digital tools for creating and/or manipulating audio and video for multimedia projects.

GCMW 105 Web Page Layout with CMS (3)

1½ hours lecture - 4½ hours laboratory

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)

1½ hours lecture - 4½ hours laboratory

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 112 Mobile Devices/Web Page Layout (2)

1 hour lecture - 3 hours laboratory

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 (2)

1 hour lecture - 3 hours laboratory

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)

1½ hours lecture - 4½ hours laboratory

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 class, students will participate in social networks such as wikis and blogs.

GCMW 123 Audio for the Internet (4)

3 hours lecture - 3 hours laboratory

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)

1½ hours lecture - 4½ hours laboratory

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 150 User Experience (UX) Design (3)

3 hours lecture

Transfer acceptability: CSU; UC

Examines the fundamental concepts, techniques, practices, workflows, and tools associated with the practice of user experience design in web and mobile devices. Intended for anyone interested in learning more about creating interactive designs to ensure a quality user experience, including graphic designers, web developers, software engineers, and programmers.

GCMW 154 Preparing Web Graphics (1)

3 hours laboratory

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 (1)
 3 hours laboratory
Transfer acceptability: CSU
 Hands-on course to produce optimized graphics for the Web with applications such as Adobe's Fireworks, cross-platform production environments: design complex buttons and navigation bars, image maps, slicing complex graphics, animation, batch processing, and scripting; generate HTML and JavaScript automatically; integrate with other Web Production applications.

GCMW 165 Digital Video Design (3)
 1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
 Explores project planning, set-up, editing, and output of digital video. Incorporates sound, graphics, 2D animation, video, and text for full-screen, web, and DVD playback. Projects and assignments utilize transitions, superimposing, transparency and keying, video, audio, and other special effects.

GCMW 177 Search Engine Optimization (SEO) for Web Design (3)
 1½ hours lecture - 4½ hours laboratory
Recommended preparation: GCMW 102
Transfer acceptability: CSU
 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 and 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.
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.
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 (3)
 1½ hours lecture - 4½ hours laboratory
Recommended preparation: GCMW 101 or GCMW 205
Transfer acceptability: CSU
 Strategies and techniques for designing successful multimedia projects in Apple Logic Pro X with emphasis on audio for Internet, video, composites and motion graphics.

GCMW 202 Web Page Layout II (3)
 1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in GCMW 102 and GCMW 140
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 (3)
 1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in GCMW 102
Recommended preparation: GCIP 140
Transfer acceptability: CSU
 Discussion of current technologies, social issues, and design theory related to multimedia for the Internet. Practical application of text, graphics, audio, video and animation for web, mobile devices and screen media formats.

GCMW 204 Motion Graphics for Multimedia (3)
 1½ hours lecture - 4½ hours laboratory
Recommended preparation: GCIP 140
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 (3)
 1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
 Concepts, design and development of digital video production and editing skills as they relate to Internet, mobile devices, screen media, and physical delivery formats. Students will incorporate typography, graphics, animation and video into real-world projects.

GCMW 206 Motion Graphics Production and Compositing (3)
 1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in GCMW 204 and 205
Transfer acceptability: CSU
 Combines skills learned in multiple disciplines to create visual and special effects. Students may use knowledge from GCMW and/or DBA courses with that learned in ARTI or DT to composite scenes incorporating 3D rendered characters with live video and matte paintings.

GCMW 216 Web Database Design I (3)

1½ hours lecture - 4½ 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)

1½ hours lecture - 4½ hours laboratory

Recommended Preparation: Ability to use a WYSIWYG Web page editor, or text editor, to create a simple Web page and upload it to the Web. A course such as GCMW 102 would be appropriate and can be completed at the same time as this course

Transfer acceptability: CSU

Design of interactive commercial web sites with emphasis on online shopping carts. Hands-on production of various types of online stores. Evaluation of various e-commerce solutions, security/privacy concerns, payment options, user experience, backend tools, front end design and site promotion. Criterion for choosing the best e-commerce solution for specific e-commerce projects.

GCMW 220 Designing for Web Standards (3)

1½ hours lecture - 4½ hours laboratory

Recommended preparation: GCMW 102**Transfer acceptability:** CSU

Web site design and production using the current standards of the hypertext markup language (HTML) CSS, Cascading Style Sheets. Hands on course will emphasize creation of Web pages, basic styling for Web Page Layout and publishing them on the Web. Heavy emphasis on page layout using Cascading Style Sheets.

GCMW 221 Best Practices for Web Design (3)

1½ hours lecture - 4½ hours laboratory

Recommended preparation: Knowledge of basic CSS for Web page layout. Experience publishing a multi-page Web site to the Web. GCMW 220 or equivalent knowledge/experience is recommended.

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 builds on the skills of basic CSS Web page layout and adds more advanced skills, as well as newer techniques defined in CSS3 and HTML 5.

GCMW 226 Web Database Design II (3)

1½ hours lecture - 4½ hours laboratory

Prerequisite: A minimum grade of 'C' in GCMW 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 servers such as MySQL. Learners will design and manage a remote database on a remote database server using popular database management tools. More advanced Web database applications will be emphasized. Students will develop an advanced Web database project.

GCMW 229 Content Publishing for Mobile, Web and Apps (3)

1½ hours lecture - 4½ hours laboratory

Prerequisite: A minimum grade of 'C' in GCIP 149, GCMW 205**Transfer acceptability:** CSU

Explores various aspects of multimedia content creation for interactive publishing and the web. Utilizes group work and project management skills in content creation and publishing. Students evaluate and select viable projects, create and author various content, and deliver to appropriate mobile device, screen media and Internet formats.

GCMW 232 Web Accessibility Design (1)

3 hours laboratory

Prerequisite: A minimum grade of 'C' in GCMW 202 and 220**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 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 as GCIP 295**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 (1, 2, 3)

3, 6, or 9 hours laboratory

Recommended preparation: Advanced coursework or job-related experience**Note:** Cross listed as GCIP 296**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)

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 (1,1,5,2)

3, 4.5, or 6 hours laboratory

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.

HE 104 Emergency Medical Responder (3)

3 hours lecture

Note: Cross listed as EME 100**Transfer acceptability:** CSU; UC

C-ID KINE 101

Covers national curriculum for Emergency Medical Responder (EMR) training. Includes the study and application of emergency medical skills and procedures, basic anatomy and physiology, terminology, and prevention of disease transmission. CPR certification from the American Heart Association.