

Cerro Coso College
Course Outline of Record Report
10/14/2021

DMAC102 : Digital Imaging

General Information

Author:	<ul style="list-style-type: none">• Suzanne Ama• Taton, Vickie• Stallings, Michelle
Course Code (CB01) :	DMAC102
Course Title (CB02) :	Digital Imaging
Department:	Business Information Technolog
Proposal Start:	Spring 2022
TOP Code (CB03) :	(0614.30) Website Design and Development
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000547072
Curriculum Committee Approval Date:	11/01/2019
Board of Trustees Approval Date:	12/12/2019
External Review Approval Date:	12/12/2019
Course Description:	<p>This course covers beginning through intermediate concepts in digital image capture and creation. Topics covered include photograph retouching and enhancing, original creation of composite images from photographs and artwork, drawing and painting original digital artwork, and the creation of web graphics. Students learn techniques for high quality image acquisition and how to evaluate the application of copyright law in specific scenarios.</p>
Submission Type:	<p>Change to Content New Course Materials Mandatory Revision</p> <p>This is being updated for Program Review. This course was last assessed in 2019. There were no impacts from assessment that factored into this revision.</p>
Author:	No value

Faculty Minimum Qualifications

Master Discipline Preferred:	<ul style="list-style-type: none">• Art
Alternate Master Discipline Preferred:	<ul style="list-style-type: none">• Computer Science
Bachelors or Associates Discipline Preferred:	<ul style="list-style-type: none">• Computer Information Systems (Computer network installation, microcomputer technology, computer applications)• Multimedia
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skills Status (CB08)

Course is not a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

Rationale For Credit By Exam/Challenge

No value

Course Support Course Status (CB26)

Course is not a support course

Course Special Class Status (CB13)

Course is not a special class.

Allowed Number of Retakes

0

Retake Policy Description

No value

Grade Options

- Letter Grade Methods
- Pass/No Pass

Course Prior To College Level (CB21)

Not applicable.

Allow Students To Audit Course

Associated Programs

Course is part of a program (CB24)

Associated Program

Award Type

Active

CC Web Professional

Certificate of Achievement

Summer 2018

CC Web Professional

A.S. Degree Major

Summer 2018

Digital Media and Marketing

Certificate of Achievement

Fall 2020

Web Professional Associate of Science (In Development)

A.S. Degree Major

Fall 2022

Web Professional Certificate of Achievement (In Development)

Certificate of Achievement

Fall 2022

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

Y

Transferability

Transferable to both UC and CSU

Transferability Status

Approved

Units and Hours

Summary

Minimum Credit Units (CB07)	3
Maximum Credit Units (CB06)	3
Total Course In-Class (Contact) Hours	90
Total Course Out-of-Class Hours	72
Total Student Learning Hours	162
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Status (CB11)

Credit Course.

Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2	4
Laboratory Hours	3	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	36
Laboratory	54
Activity	0
Total	90
Course Out-of-Class Hours	
Lecture	72
Laboratory	0
Activity	0
Total	72

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGLC101 - Freshman Composition

Students are expected to identify central points, both explicit and implied, of college level textbooks, instructor lectures, and web resources. Students must summarize complex topics, including principles of design, layout, typography, and color separation. They are expected to write summaries of their projects, explaining the application of these principles in clear and error-free prose, based on the assigned college level textbook readings, instructor lectures, and web resources.

Outcomes

- Read, analyze, and evaluate a variety of university-level texts for content, context, and rhetorical merit with consideration of tone, audience, and purpose.
- Integrate the ideas of others through paraphrasing, summarizing, and quoting without plagiarism.
- Find, evaluate, analyze, interpret, and see the relations among primary and secondary sources, incorporating them into written essays using accurate MLA documentation and formatting.
- Proofread and edit essays for presentation so they exhibit no disruptive errors in English grammar, usage, or punctuation.

AND

Advisory

BSOTC075 - Computer Literacy

Students are expected to have basic computer literacy and be able to perform computer start up and shut down procedures correctly; use computer input and output devices, such as the keyboard, mouse, stylus, trackball, or printer with proficiency; access and manage login accounts and documents effectively, including downloading, creating, naming, retrieving, and decompressing files and folders with an awareness of file size, location of saved files and folders, and available space on storage media and a clear distinction between various campus, email, and course login accounts; perform editing tasks, such as copying, cutting, and pasting of content and applying spell checking; send an outgoing e-mail with an attachment, and open an incoming e-mail and its attachment; search and navigate the Internet and other types of media and environments easily; and be aware of the need to evaluate Internet content for relevance, authenticity, authority, and currency.

Outcomes

- Perform basic computer tasks using hardware and software functions including startup, login, shutdown, and basic input/output procedures.
- Recognize and use programs to create and edit introductory word processing, spreadsheet, and presentation software files, including MS Office.
- Access and manage login accounts and documents effectively, including downloading, creating, naming, copying, deleting, retrieving, and compressing/decompressing files and folders with an awareness of file size, location of saved files and folders, and available space on storage media, all with a clear distinction between various email, and course login accounts.
- Open and use an email account including sending and receiving email with attachments, saving files, and managing the inbox.
- Search and navigate the Internet and other types of media environments with an awareness of relevance, authenticity, authority, and currency.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment	
Limitations on Enrollment	Description
No value	No value

Specifications	
Methods of Instruction	
Methods of Instruction	Audiovisual
Rationale	Students watch captioned video content to observe the use of software tools and techniques.
Methods of Instruction	
Methods of Instruction	Discussion
Rationale	Students post their work to allow for instructor and peer review.
Methods of Instruction	
Methods of Instruction	Laboratory
Rationale	Students practice techniques and tools through formative exercises, which are posted to asynchronous discussion for instructor review.
Methods of Instruction	
Methods of Instruction	Lecture
Rationale	Students read instructor lectures and watch video lectures to learn concepts and techniques that are needed for assignments.
Methods of Instruction	
Methods of Instruction	Peer analysis, critique & feedback
Rationale	Students provide feedback and critique to each other in asynchronous discussion forums.
Methods of Instruction	
Methods of Instruction	Problem Solving
Rationale	Students solve design problems that are typical of design projects in the workplace.

Methods of Instruction

Project-based learning

Rationale

There are five major projects in the class, which incorporate concepts and techniques developed in formative assignments.

Assignments

A. Textbook and web readings.

Example: Students read chapter 2 in Design Basics to learn about how to recognize line in a composition.

B. Creative assignments and projects

Example: Students create and organize layers, apply blending modes and layer effects to create a composite image.

C. Quizzes

Example: Students answer questions about copyright, fair use, and creative commons.

Methods of Evaluation**Rationale**

Project

A. Creative assignments and projects

Example: Students create and organize layers, applying blending modes and layer effects to create a composite image.

Tests

B. Quizzes

Example: Students describe the difference between raster and vector images.

Homework

D. Critiques

Example: Students describe the design elements present in a selected image and evaluate the use of the principles of design in the image.

Participation

E. Discussion

Example: Students respond to each other's posts to provide feedback, offer suggestions, and share additional resources.

Distance Education Description: how outcomes are evaluated

The evaluation criteria and rigor are identical, regardless of delivery mode.

Equipment

Students need to subscribe to the Adobe Creative Cloud, which includes Adobe Photoshop. Minimum hardware System Requirements include:

Windows

	Minimum	Recommended
Processor	Intel® or AMD processor with 64-bit support; 2 GHz or faster processor with SSE 4.2 or later	
Operating system	Windows 10 (64-bit) version 1809 or later; LTSC versions are not supported	
RAM	8 GB	16 GB or more
Graphics card	<ul style="list-style-type: none"> GPU with DirectX 12 support 2 GB of GPU memory 	<ul style="list-style-type: none"> GPU with DirectX 12 support 4 GB of GPU memory for 4k displays and greater
	See the Photoshop graphics processor (GPU) card FAQ (https://helpx.adobe.com/photoshop/kb/photoshop-cc-gpu-card-faq.html)	
Monitor resolution	1280 x 800 display at 100% UI scaling (https://helpx.adobe.com/photoshop/kb/hidpi-retina.html)	1920 x 1080 display or greater at 100% UI scaling (https://helpx.adobe.com/photoshop/kb/hidpi-retina.html)
Hard disk space	4 GB of available hard-disk space; additional space is required for installation	4 GB of available hard-disk space; additional space is required for installation <ul style="list-style-type: none"> Fast internal SSD for app installation Separate internal drive for scratch disks (https://helpx.adobe.com/photoshop/using/scratch-disks-preferences.html).

Internet	Internet connection and registration are necessary for required software activation, validation of subscriptions, and access to online services †	
macOS		
	Minimum	Recommended
Processor	Intel processor with 64-bit support; 2 GHz or faster processor with SSE 4.2 or later	
Operating system	macOS Mojave (version 10.14) or later	macOS Big Sur (version 11) macOS Catalina (version 10.15)
RAM	8 GB	16 GB or more
Graphics card	<ul style="list-style-type: none"> GPU with Metal support 2 GB of GPU memory 	<ul style="list-style-type: none"> GPU with Metal support 4 GB of GPU memory for 4k displays and greater
	<p>To find out if your computer supports Metal, see Mac computers that support Metal (https://support.apple.com/en-us/HT205073)</p> <p>See the Photoshop graphics processor (GPU) card FAQ (https://helpx.adobe.com/photoshop/kb/photoshop-cc-gpu-card-faq.html)</p>	
Monitor resolution	1280 x 800 display at 100% UI scaling (https://helpx.adobe.com/photoshop/kb/hidpi-retina.html)	1920 x 1080 display or greater at 100% UI scaling (https://helpx.adobe.com/photoshop/kb/hidpi-retina.html)
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	<i>Photoshop will not install on a volume that uses a case-sensitive file system</i>	
Internet	Internet connection and registration are necessary for required software activation, membership validation, and access to online services †	

Textbooks

Author	Title	Publisher	Date	ISBN
Faulkner, A.	Adobe Photoshop CC Classroom in a Book	Adobe Press	2021	978-0136904731
Lauer D. & Pentak, S.	Design Basics	Cengage	2015	978-1285858227

Other Instructional Materials

Description	Adobe Creative Cloud Subscription
Author	Adobe, Inc.
Citation	No value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Create and modify digital composite images.

Expected SLO Performance: 75.0

*Business Information
Technolog
Web Professional
Certificate of Achievement*

2. Demonstrate technical and creative mastery of the creation of Web media, such as graphics, motion graphics, and interactive media. Assessment:This will be assessed with a project, scored by a rubric

Optimize a digital photograph for high dynamic range and emphasis of subject matter

Expected SLO Performance: 75.0

*Business Information Technolog
Web Professional Certificate of
Achievement*

4. Apply design principles to solve visual communication problems. Assessment:This will be assessed with a project, scored by a rubric.

Create and optimize web site graphics.

Expected SLO Performance: 75.0

*Business Information Technolog
Web Professional Certificate of
Achievement*

4. Apply design principles to solve visual communication problems. Assessment:This will be assessed with a project, scored by a rubric.

Specify a digital image input device that meets identified objectives.

Expected SLO Performance: 75.0

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Achievement*

1. Identify concepts of Internet technology, networking, databases, and electronic communications. Assessment:This will be assessed with an exam.

Evaluate the application of copyright law to specific scenarios.

Expected SLO Performance: 75.0

*Business Information Technolog
Web Professional Certificate of
Achievement*

1. Identify concepts of Internet technology, networking, databases, and electronic communications. Assessment:This will be assessed with an exam.

Outline

Course Outline

1. Basics of raster images
 1. Resolution
 2. Image size
 3. File size
2. Digital Image Acquisition
 1. Scanning
 2. Digital SLRs
 3. Other devices
 4. Photographing products and office space
 5. Stock photography
3. Selection techniques
 1. Marquee
 2. Lasso
 3. Magnetic lasso
 4. Magic wand
 5. Quick mask

6. Alpha channels
7. Modifying selections
8. Moving and manipulating selected areas
4. Image Adjustment
 1. Correcting in camera raw
 2. Modes
 3. Hue and Color
 4. Tone and Contrast
 5. Vibrance and Saturation
 6. Scaling, cropping, resampling
 7. Transformation
 8. Filters
 9. Retouching tools
5. Layers
 1. Layer groups
 2. Layer opacity
 3. Layer blending modes
 4. Layer styles
 5. Locking functions
 6. Layer masks
 7. Vector masks
 8. Clipping layers
 9. Adjustment layers
6. Painting
 1. Color and swatches
 2. Painting tools
 3. Brush settings
 4. Brush blending modes
 5. Gradients
7. Type Tool
 1. Typeface
 2. Character settings
 3. Paragraph settings
 4. Glyphs
 5. Aliasing
8. Paths and vector shapes
 1. Pen tool
 2. Shapes tools
 3. Drawing modes
 4. Paths palette
9. Optimizing web graphics
 1. Slicing
 2. Color palette and bit depth
 3. Compression
 4. Transparency
 5. File formats
10. Copyright law
 1. Notice
 2. Duration
 3. Registration with Library of Congress
 4. Fair use
 5. Creative Commons
11. Design Theory
 1. Design elements
 2. Design principles
 3. Color theory

Lab Outline

1. Basics of raster images
 1. Resolution
 2. Image size
 3. File size
2. Digital Image Acquisition
 1. Scanning

2. Digital SLRs
3. Other devices
4. Photographing products and office space
5. Stock photography
3. Selection techniques
 1. Marquee
 2. Lasso
 3. Magnetic lasso
 4. Magic wand
 5. Quick mask
 6. Alpha channels
 7. Modifying selections
 8. Moving and manipulating selected areas
4. Image Adjustment
 1. Correcting in camera raw
 2. Modes
 3. Hue and Color
 4. Tone and Contrast
 5. Vibrance and Saturation
 6. Scaling, cropping, resampling
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 2. Character settings
 3. Paragraph settings
 4. Glyphs
 5. Aliasing
8. Paths and vector shapes
 1. Pen tool
 2. Shapes tools
 3. Drawing modes
 4. Paths palette
9. Optimizing web graphics
 1. Slicing
 2. Color palette and bit depth
 3. Compression
 4. Transparency
 5. File formats

Delivery Methods

Delivery Method: Please list all that apply -Face to face -Online (purely online no face-to-face contact) -Online with some required face-to-face meetings ("Hybrid") -Online course with on ground testing -iTV – Interactive video = Face to face course with significant required activities in a distance modality -Other

- Face to face

- Online (purely online no face-to-face contact)
- Online with some required face-to-face meetings ("Hybrid")
- iTV – Interactive video = Face to face course with significant required activities in a distance modality
- Other

Rigor Statement: Assignments and evaluations should be of the same rigor as those used in the on-ground course. If they are not the same as those noted in the COR on the Methods of Evaluation and out-of-class assignments pages, indicate what the differences are and why they are being used. For instance, if labs, field trips, or site visits are required in the face to face section of this course, how will these requirements be met with the same rigor in the Distance Education section? Describe the ways in which instructor-student contact and student-student contact will be facilitated in the distance ed environments.

All assignments in distance education course sections of DMA C102 are of the same rigor as those in the on-ground section, except that students in purely online sections will submit all of their assignments virtually. Instructor evaluation of student work in distance education course sections is the same as in the on-ground course section, except that evaluation of student work in the online version is presented virtually. Instead of onsite lectures, hybrid and online courses use a variety of methods including, but not limited to videos, and written lecture notes. Students will interact with the instructor and other students via discussion forums or similar methods.

Good practice requires both asynchronous and synchronous contact for effective contact. List the methods expected of all instructors teaching the course. -Learning Management System -Discussion Forums -Message -Other Contact -Chat/Instant Messaging -E-mail -Face-to-face meeting(s) -Newsgroup/Discussion Board -Proctored Exam -Telephone -iTV - Interactive Video -Other

- Discussion Forums
- Message
- E-mail

Software and Equipment: What additional software or hardware, if any, is required for this course purely because of its delivery mode? How is technical support to be provided?

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Accessibility: Section 508 of the Rehabilitation Act requires access to the Federal government's electronic and information technology. The law covers all types of electronic and information technology in the Federal sector and is not limited to assistive technologies used by people with disabilities. It applies to all Federal agencies when they develop, procure, maintain, or use such technology. Federal agencies must ensure that this technology is accessible to employees and the public to the extent it does not pose an "undue burden". I am using -iTV—Interactive Video only -Learning management system -Publisher course with learning management system interface.

- Learning management system

Class Size: Good practice is that section size should be no greater in distance ed modes than in regular face-to-face versions of the course. Will the recommended section size be lower than in on-ground sections? If so, explain why.

The recommended section size for online courses is not lower than on-ground sections.

Emergency Distance Education Options The course will operate in remote delivery mode when all or part of the college service area is under an officially declared city, county, state, or federal state of emergency, including (check all that apply) - Online including all labs/activity hours - Hybrid with online lecture and onsite lab/activity hours - Correspondence education in high school and prison facilities - None. This course will be cancelled or paused if it cannot be held fully onsite.

- Online including all labs/activity hours