

# **Web Professional Program Review**

**Business and Information Technology Department  
Cerro Coso Community College**

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Web Professional

## Instructional Program Review

### Executive Summary

In 1997, the Cerro Coso Community College Educational Master Plan identified a need for curriculum in computer graphics and multimedia. A local certificate was developed that included courses in digital imaging, computer illustration, and desktop publishing. This certificate was discontinued in 2000 when a two-year economic development grant from the California Community Colleges Chancellor's Office funded a tenure-track faculty position to develop a web design certificate of achievement and associate of science degree. At this time, an economic development grant also funded a tenure-track faculty position to develop a digital animation program. The Web Design and Digital Animation programs shared several entry-level courses. Both programs initially had strong enrollments and completions. However, the Digital Animation program was discontinued in 2007, due to declining enrollment and the departure of the coordinating faculty member.

The Web Design program, as it was initially named, has been an online program since its inception. Entry-level courses were also offered at the Indian Wells Valley campus, Kern River Valley campus, and the Eastern Sierra College Center. It experienced a strong growth pattern during the 2000-01 - 2011-12 academic years. In the 2011-12 academic year, the unduplicated headcount was 393 —as high as the best years of the combined enrollment of the Web Design and Digital Animation programs in previous years. This growth was owed to several factors. The curriculum appealed to a diverse student population, the program's brochure web site was well-ranked by Google, and there were still fairly limited high-quality options for web design/development skills attainment.

During the 2011-2017 program review cycle, there was a sharp decrease in enrollments. Enrollments were lost following a 2012 curriculum revision, loss of marketing exposure, and emerging training opportunities elsewhere for students. With this revision, the program was renamed Web Professional, electives were omitted, and the program acquired a narrow web development focus. Inadvertently, this disenfranchised students who were interested in design and multimedia. Despite the 2012 revision, there were no new declared majors for this program until 2015, and even then, the majority of students declaring majors were still claiming catalog rights for the previous iteration. The problem was rectified with a program revision in Fall 2016 to include design and development tracks, or options. The development option included scripting and programming courses, and the design option included design, multimedia, and e-commerce classes. We also leveraged social media marketing. During this cycle, the Web Fundamentals mini-certificate was created.

The result of this has been that declared majors and enrollment have rebounded. Annual declared majors across all digital media arts programs have increased from 6 in 2016-17 to 65 students in 2020-21 (1,080%). Unduplicated headcount peaked at 530 in 2019-20 and dropping to 495 during the COVID pandemic. This was an overall 425% increase during the program review cycle, whereas unduplicated headcount for the college has decreased 4% during this period. Census enrollments have grown 330%, section count has grown 264%, and average students per section has grown 125%. FTES has grown 287% and productivity has grown by 147%. Success and retention were on a growth curve in the first four years

of this cycle, but the 2020-21 academic year showed a decline, possibly owing to the pandemic. Retention and success have improved overall among at-risk ethnicities. The program has increased in student diversity. Completions are growing modestly, and this will be an area of focus in the next cycle.

Current challenges are competition with other training options, including other community college programs, subscription training, and free training. We recognize that to set ourselves apart now, our instruction, regular and effective contact with students, and substantive feedback must be outstanding. An additional on-going challenge is accurately capturing employment data. Only approximately 15% of web developers and designers work for information technology employers, and another 18% are self-employed. The remainder are dispersed across diverse industries outside of our TOP code. Finally, the COVID pandemic continues to be a threat to student persistence and success, and it currently limits opportunities to expand on-ground offerings.

Goals for the next two and five years include increasing program completions, expanding dual-enrollment, revising the long-term schedule, and increasing student diversity and success.

## Part 1: Program Overview

### 1.1 Program Definition

#### 1.1.1 College Mission

The mission of Cerro Coso Community College is to improve the life of every student it serves. Through traditional and distance delivery, Cerro Coso Community College brings transfer preparation, workforce education, remedial instruction, and learning opportunities that develop ethical and effective citizenry to the rural communities and unincorporated areas of the Eastern Sierra. In doing so, we promise clarity of educational pathways, comprehensive and equitable support services, and a commitment to equity.

#### 1.1.2 Program Mission

The mission of the Web Professional Associate of Science and Certificate of Achievement is to equip students for a variety of positions of employment and self-employment in which web development, web design, and/or digital media production is a primary function. The mission of Web Fundamentals Certificate of Achievement is similar, except that it provides entry levels skills and is a milestone of completion toward the Web Professional awards.

The mission of the Digital Media and Marketing Certificate of Achievement is to equip individuals with digital media production and electronic marketing skills whose positions of employment or self-employment is not primarily that of web development or design. This certificate is intended to provide individuals across diverse industries with basic skills in multimedia communications, which are essential in the digital age. Audiences of such communications include stakeholders, clients, customers, patients, students, industry partners, vendors, government agencies, and more.

The program mission aligns with the college mission primarily in the area of workforce education. The program also supports the college mission of ethics and citizenship by educating students of the importance of providing digital content in an accessible form for persons with disabilities.

#### 1.1.3 Program Catalog Description

Students have several award options for skill attainment:

- Web Professional Associate of Science Degree (60 units)
- Web Professional Certificate of Achievement (28 units)
- Web Fundamentals Certificate of Achievement (19 units)
- Digital Media and Marketing Certificate of Achievement (12 units)

The Web Professional awards are identical except that the Associate Degree adds Cerro Coso's local general education requirements. As mentioned above, the Web Fundamentals certificate is intended to provide entry-level marketable skills and/or a milestone of completion toward the Web Professional certificate or degree. And the Digital Media and Marketing certificate is intended to provide basic multimedia and electronic commerce proficiency for diverse professions.

#### *Web Professional Associate of Science (60 units)*

The Web Professional Associate of Science Degree is designed to prepare students for employment or self-employment as web designers or developers, emphasizing standards-based coding, usability, accessibility, and creative problem solving. Adding to this foundation, students choose one of two options: design or development. With the former, students acquire multimedia design skills, and with the latter they acquire web programming skills. Students obtain skills in Adobe applications, as well as open-

source products. Students develop realistic expectations about work conditions through individual and collaborative work-based projects and by learning in the same technological environment in which they will eventually work. The web development option is also designed to equip students for Certified Internet Web Professional certifications, including the Web Foundations Associate Series and the Web Design Specialist certifications.

This degree is not specifically designed for transfer. Courses required for the Associate degree major at Cerro Coso Community College may not be the same as those required for a major at a four-year school. Students who plan to transfer should consult a counselor and visit <http://www.assist.org> to identify the courses needed for the major at the transfer school and to develop a plan that will best meet the student's goals.

Students must complete a minimum of 60 units, including the courses listed in the major and general education requirements, with an overall GPA of 2.0 or better, and a grade of "A," "B," or "C," in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College. P/NP grading may not be used for courses in a student's major field.

Students must complete all of the following courses (16 units)

- |  |         |
|--|---------|
| • IT C101 – Introduction to Computer Information Systems | 3 units |
| • DMA C102 – Digital Imaging                             | 3 units |
| • DMA C111 – Fundamentals of Web Development             | 3 units |
| • DMA C113 – Accessibility and UX Design                 | 4 units |
| • DMA C280 – Web Production Management                   | 3 units |

Students complete four of the following courses (12 units)

- |  |         |
|--|---------|
| • DMA C107 – Computer Illustration                                 | 3 units |
| • DMA C117 – Web Design  | 3 units |
| • DMA C119 – Advanced Web Development                              | 3 units |
| • DMA C131 – Digital Video Production                              | 3 units |
| • DMA C210 – E-Commerce  | 3 units |
| • DMA C211 – Web Scripting with Javascript                         | 3 units |
| • DMA C213 – Web Development with PHP and MySQL                    | 3 units |
| • IT C251 – Introduction to Programming Concepts and Methodologies | 3 units |

Students additionally complete Cerro Coso's General Education requirements for a total of 60 units.

#### *Web Professional Certificate of Achievement (28 units)*

The Web Professional Certificate of Achievement is designed to prepare students for employment or self-employment as web designers or developers, emphasizing standards-based coding, usability, accessibility, and creative problem solving. Adding to this foundation, students choose one of two options: design or development. With the former, students acquire multimedia design skills, and with the latter they acquire web programming skills. Students obtain skills in Adobe applications, as well as open-source products. Students develop realistic expectations about work conditions through individual and collaborative work-based projects and by learning in the same technological environment in which they will eventually work. The web development option is also designed to equip students for Certified Internet Web Professional certifications, including the Web Foundations Associate Series and the Web

Design Specialist certifications. Students must complete 28 units in the program with a grade of “A,” “B,” or “C,” in all courses for the major. P/NP grading may not be used for courses in a student's major field.

Students must complete all of the following courses (16 units)

- IT C101 – Introduction to Computer Information Systems 3 units
- DMA C102 – Digital Imaging 3 units
- DMA C111 – Fundamentals of Web Development 3 units
- DMA C113 – Accessibility and UX Design 4 units
- DMA C280 – Web Production Management 3 units

Students complete four of the following courses (12 units)

- DMA C107 – Computer Illustration 3 units
- DMA C117 – Web Design 3 units
- DMA C119 – Advanced Web Development 3 units
- DMA C131 – Digital Video Production 3 units
- DMA C210 – E-Commerce 3 units
- DMA C211 – Web Scripting with Javascript 3 units
- DMA C213 – Web Development with PHP and MySQL 3 units
- IT C251 – Introduction to Programming Concepts and Methodologies 3 units

#### *Web Fundamentals Certificate of Achievement (19 units)*

The Web Fundamentals Certificate of Achievement prepares students for career entry in the Web industry by emphasizing standards-based coding and scripting, creative problem solving, digital imaging, layout and typography, usability, accessibility, customization of content management systems, and project management. The curriculum has the objective of developing technical and design skills, a combination of competencies that employers and clients value. Students develop realistic expectations about work conditions through individual and collaborative work-based projects and by learning in the same technological environment in which they will eventually work. Any student completing 18 units required for the major qualifies for a certificate in Web Fundamentals. Each course for this certificate must be completed with a grade of “C” or better, or with a grade of “P” if the course is taken on a pass/no pass basis.

Students must complete all of the following courses (19 units)

- IT C101 – Introduction to Computer Information Systems 3 units
- DMA C102 – Digital Imaging 3 units
- DMA C111 – Fundamentals of Web Development 3 units
- DMA C113 – Accessibility and UX Design 4 units
- DMA C117 – Web Design 3 units
- DMA C211 – Web Scripting with Javascript 3 units

#### *Digital Media and Marketing Certificate of Achievement (12 units)*

The purpose of this certificate is to equip individuals from the broader business community with fundamental skills in visual communication, such as creating and editing newsletters, advertisements, technical illustrations, photographs, web sites, and videos. Participants will also acquire skills in social media marketing. Those who work in business office technology, real estate, sales, marketing, administration, education, science, engineering, healthcare, small business, and other industries will



benefit from these skills as they communicate with customers, management, investors, colleagues, students, patients, and the general public. Complete each course to be applied toward the certificate with a “C” or better.

Students must complete three of the following elective courses

- |  |         |
|--|---------|
| • DMA C102 – Digital Imaging                 | 3 units |
| • DMA C107 – Computer Illustration           | 3 units |
| • DMA C111 – Fundamentals of Web Development | 3 units |
| • DMA C131 – Digital Video Production        | 3 units |

Students must complete the following capstone course

- |  |         |
|--|---------|
| • DMA C201 – E-Commerce and Social Media Marketing | 3 units |
|--|---------|

### *Analysis*

During the majority of this Program Review cycle, the Web Professional program was comprised of a core of five courses and two options of four courses each. Students were required to select one of the options to complete, and all of the courses within the selected option were necessary for completion. The two options, Design Option and Development Option, were designed to appeal to a more diverse student population, and indeed, numerous metrics described throughout this review have shown evidence of this. We also learned, however, that the requirement to select one option or the other created obstacles for program completion for some students. The development courses are offered less frequently because demand is lower than the design courses. As described later in this review, improving completion is a priority goal for the next Program Review cycle. Last year, we combined the previous options’ electives into a single elective list in order to give students more flexibility. This should enhance completions.

The Web Fundamentals Certificate of Achievement, established in the 2011-2017 program review cycle has not undergone any substantial changes. It provides students with certification of employable skills, while also providing a milestone of completion toward the full certificate or degree. It has a 2-semester pathway.

The Digital Media and Marketing Certificate of Achievement was established in the recent program review cycle.

All four award programs have been revised and approved in this Program Review cycle. Descriptions were re-evaluated to ensure that they accurately conveyed job skills that are learned. Program learning outcomes were revisited and analyzed to likewise ensure that skills were appropriate for current working conditions. The skills and outcomes of the Web Fundamentals Certificate of Achievement are a subset of those of the Web Professional Certificate of Achievement and Associate of Science Degree. These are oriented around a career in which web design and development skills are primary to the career. The skills and outcomes of the Digital Media and Marketing Certificate of Achievement similarly identify skills, but they are appropriate for individuals working in other industries who need a basic level of media literacy to complement other skills of their career. The descriptions and outcomes avoid exaggerated and unsustainable statements.

## 1.2 Program Pathway

### 1.2.1 Conditions of Enrollment

#### *Analysis*

None of the programs have conditions of enrollment for entry. However, computer literacy skills are required. During earlier iterations of the programs, deficits in computer literacy were identified as a significant barrier to student retention and success. As recently as the 2011 Web Design Program Review, we discussed the need for a skills-based assessment to be administered as part of the matriculation process. We did not want to make the Computer Literacy course a prerequisite because most students had sufficient skills, and that would have itself created a barrier and reduce enrollments. The Director of Distance Education at that time was exploring computer literacy assessment tools, and the legality of imposing an assessment was also being explored. Fortunately, over time, this problem has naturally dissolved as our society has become more ubiquitously digital. Barriers to student success now appear to be primarily due to health, work and family demands, and other non-academic factors.

We make use of advisory requisites for our courses to inform students of optimal entry skills and to suggest which classes should be taken first in the program.

Course	Advisory Requisites
IT C101	ENGL C070 Introductory Composition
DMA C102	ENGL C101 Freshman Composition, BSOT C075 Computer Literacy
DMA C107	ENGL C101 Freshman Composition, BSOT C075 Computer Literacy
DMA C111	ENGL C101 Freshman Composition, BSOT C075 Computer Literacy
DMA C113	DMA C111 Fundamentals of Web Development
DMA C117	DMA C102 Digital Imaging, DMA C111 Fundamentals of Web Development
DMA C119	DMA C111 Fundamentals of Web Development, DMA C211 Web Scripting with Javascript
DMA C131	ENGL C101 Freshman Composition, DMA C102 Digital Imaging
DMA C201	ENGL C101 Freshman Composition, BSOT C075 Computer Literacy
DMA C211	MATH C050 Elementary Algebra, DMA C111 Fundamentals of Web Development
DMA C213	DMA C211 Web Scripting with Javascript
IT C251	IT C101 Introduction to Computer Information Systems
DMA C280	DMA C111 Fundamentals of Web Development

#### *Analysis*

ENGL C070 Introductory Composition has been deleted from the curriculum inventory and catalog, and IT C101 should be revised to indicate ENGL C101 Freshman Composition as its advisory requisite.

### 1.2.2 Program Pathway

#### *Web Professional*

Fall Year 1	Spring Year 1	Fall Year 2	Spring Year 2	Summer Year 2
IT C101	DMA C113	Elective	Elective	DMA C280
DMA C102	Elective	Elective	Elective	
DMA C111				

#### *Web Fundamentals*

Fall Year 1	Spring Year 1
IT C101	DMA C113
DMA C102	DMA C117
DMA C111	DMA C211



### Digital Media and Marketing

Fall Year 1	Spring Year 1
Elective	DMA C201
Elective	Elective

#### Analysis

Each program is delivered entirely online. We are exploring the feasibility of offering the Digital Media and Marketing program on-ground at Tehachapi High School (THS) through dual enrollment. We currently offer two of the courses at THS. The program pathway and long-term schedule would span four semesters with the capstone class being offered in Spring of the second year. There is strong support for this from the media arts instructor and principal at THS. We have also explored offering Digital Media and Marketing courses at the Tehachapi Education Center (TEC), having considered offering the first on-ground course in Spring 2022. However, TEC on-ground enrollments are currently very low across many disciplines, and we have decided to postpone this another semester. The pandemic is still exhibiting new variant and infection surges. We will re-evaluate feasibility in the future.

#### 1.2.3 Long-Term Schedule

##### Long-term Schedule

Courses	FA Year 1	SP Year 1	SU Year 1	FA Year 2	SP Year 2	SU Year 2
IT C101	X	X	X	X	X	X
DMA C102	X	X		X	X	
DMA C107	X			X		
DMA C111	X	X		X	X	
DMA C113		X				
DMA C117					X	
DMA C119	X					
DMA C131	X			X		
DMA C201		X			X	
DMA C211		X			X	
DMA C213				X		
IT C251		X			X	
DMA C280		X			X	

#### Analysis

The current long-term schedule was developed in February 2020 with the guidance of the former Dean of Career Technical Education (CTE). The first-semester entry-level courses (IT C101, DMA C102, and DMA C111) are offered in both Fall and Spring, and the other courses are offered less frequently. IT C101 is also offered in the Summer because it is a core course in other programs. Previously, all courses except the entry level courses were offered once per year.

It was suggested that some of the courses in the Web Professional option (previous program iteration) be scheduled in alternate years:

- DMA C119
- DMA C213
- DMA C113

- DMA C117

DMA C119 and DMA C213 are only part of the Web Professional Certificate of Achievement and Associate of Science Degree. Offering in alternate years does not impede completions. However, DMA C113 and DMA 117 (while courses in the two-year Web Professional programs), are also core courses in the one-year Web Fundamentals Certificate of Achievement. I was concerned about completions of this award with this long-term schedule change. The Dean responded that courses could be added back into the schedule in on a semester-by-semester basis, but they could not be included annually in the long-term schedule because that would exceed five courses per semester. There was an administrative quota of five DMA courses per semester for the long-term schedule.

I presented the current DMA programs to the Counseling Department in November 2021. Counselors were in agreement that long-term schedule of DMA C113 and DMA C117 should be restored to annual offerings. Scheduling them in alternating years is adversely impacting completions – especially of the Web Fundamentals certificate. One counselor pointed out that staggering courses works with programs that are two years in length. But for 1-year certificates, students lose interest and simply do not complete.

As will be shown in section 3.1.5, increases in program completions are needed. And as shown in Section 3.2.1, DMA courses average an FTES to FTEF ratio (productivity) of 12.6. This has been steadily increasing over the past 5 years, from 8.6 in 2016-17 to 12.6 in 2020-21. The college average in 2020-21 was 13.8. I believe the discipline improvement in this ratio, coupled with the need for increased completions, justifies the restoration of DMA C113 and DMA C117 to annual offerings. Enrollments will not be as strong as entry-level courses, but the overall productivity of the discipline can carry these courses.

DMA C280 Web Production Management capstone course was offered Summer terms from the inception of the program until 2012, when it was moved to Spring. The rationale for originally offering it in the Summer was that this gave students an opportunity to complete all of the other program requirements first. Taking DMA C280 alone during the Summer also enabled students to regard the course experience as a simulated part-time job. The quality of student work was excellent. The previous Program Review (2017) did not address the rationale to move DMA C280 to the Spring, but I recall that we were encouraged to limit Summer offerings because it is not a “regular semester.” Moving the capstone course to the Spring also enabled students to graduate in May of the same year. However, the move significantly impaired the quality of student work, due to the reasons it was originally scheduled in the Summer: students were still developing core skills, they were taking other courses concurrently, and they were not able to focus on the class as if it were a job. In Summer 2021, we moved it back to the Summer. As is seen and discussed in section 3.1.5, this has resulted in an artificially low completion rate for 2021, but the 2022 rate will compensate for this, and completions should be normalized thereafter.

The following is the proposed revised long-term schedule:

<b>Courses</b>	<b>FA Year 1</b>	<b>SP Year 1</b>	<b>SU Year 1</b>	<b>FA Year 2</b>	<b>SP Year 2</b>	<b>SU Year 2</b>
IT C101	X	X	X	X	X	X
DMA C102	X	X		X	X	
DMA C107	X			X		
DMA C111	X	X		X	X	
DMA C113		X			X	
DMA C117		X			X	
DMA C119	X					

DMA C131	X			X		
DMA C201		X			X	
DMA C211		X			X	
DMA C213				X		
IT C251		X			X	
DMA C280			X			X

#### 1.2.4 Cost to Student

Program	Books	Tuition CA Residents	Tuition Nonresidents	Total CA Residents	Total Nonresidents
Web Professional AS 60 units, 4 semesters	\$3,600	\$2,760	\$19,740	\$6,360	\$23,340
Web Professional CoA 28 units, 4 semesters	\$1,680	\$1,288	\$9,212	\$2,968	\$10,892
Web Fundamentals CoA 19 units, 2 semesters	\$720	\$828	\$5,922	\$1,548	\$6,642
Digital Media and Marketing CoA 12 units, 2 semesters	\$720	\$552	\$3,948	\$1,272	\$4,668

(Resource: Program page on institutional website)

#### Analysis

The textbook costs indicated on the institutional web site are estimates. Many of our courses have “zero textbook costs,” due to using LinkedIn Learning video instruction or other sufficiently accessible learning resources. “Zero textbook costs” is defined as less than \$20 in required learning resources for the class.

The following courses have “zero textbook costs.”

- DMA C107
- DMA C111
- DMA C117
- DMA C119
- DMA C131
- DMA C201
- DMA C211
- DMA C213

The textbooks costs in other courses total \$503.33:

- IT C101 – \$105.84
- DMA C102 - \$222.66
- DMA C113 - \$32.57
- DMA C280 - \$55.26
- IT C251 - \$87.00

Students also need an Adobe Creative Cloud subscription at \$19.99/month (\$239.88) for a year subscription for

- DMA C102

- DMA C107
- DMA C117

Other required software is open source (no cost).

More realistic costs to students are the following:

Program	Books & Software	Tuition CA Residents	Tuition Nonresidents	Total CA Residents	Total Nonresidents
Web Professional AS 60 units, 4 semesters	\$2,833	\$2,760	\$19,740	\$5,593	\$22,573
Web Professional CoA 28 units, 4 semesters	\$913	\$1,288	\$9,212	\$2,201	\$10,125
Web Fundamentals CoA 19 units, 2 semesters	\$601	\$828	\$5,922	\$1,429	\$6,523
Digital Media and Marketing CoA 12 units, 2 semesters	\$479	\$552	\$3,948	\$1,031	\$4,427

The cost of the program is proportionate to prevailing wages, with an average salary of \$69,108 in California.

### 1.3 Program Connections

#### 1.3.1 Relationship to Other Programs

The Web Professional program is a fusion of design, development, and business. This program complements, but does not supplant, other programs at the college, including Information Technology, Business, Business Office technology, and Studio Arts. The Web Professional and Information Technology programs have two core courses in common: IT C101 Introduction to Computer Information Systems and IT C251 Introduction to Programming Concepts and Methodologies.

There are no other similar programs in Cerro Coso's service area. Within the wider area of the Kern Community College District, Bakersfield College formerly had web development and digital arts programs, but those have been discontinued. A small percentage (7%) of our entering students are migrating to Cerro Coso from Bakersfield College's discontinued programs. Porterville College has not had a similar program.

According to Economic Modeling Specialists, Inc. (EMSI), there are 25 colleges offering Associate's Degrees for "web/multimedia management and webmaster" and "web page, digital media/multimedia and information resource design" in California with a total of 95 Associate's Degree completions. EMSI data do not report on certificates of achievement.

The top ten ranked colleges for completions (traditional and distance education) include the following:

Institution	AS Completions (2020)	Growth % (2020)	Market Share (2020)	IPEDS Tuition & Fees (2020)
Imperial Valley College	13	160.0%	13.7%	\$1,126
Long Beach City College	12	71.4%	12.6%	\$1,556
Grossmont College	12	140.0%	12.6%	\$1,332
San Diego Mesa College	6	0.0%	6.3%	\$1,144
MiraCosta College	5	Insf. Data	5.3%	\$1,152

Southwestern College	5	150.0%	5.3%	\$1,340
West Los Angeles College	4	0.0%	4.2%	\$1,238
Cerro Coso Community College	4	100.0%	4.2%	\$1,382
Laurus College	4	-20.0%	4.2%	N/A
Academy of Art University	4	-55.6%	4.2%	\$24,664

Five colleges offer such programs through distance education, including Cerro Coso. They are ranked by completions as the following:

<b>Institution</b>	<b>AS Completions (2020)</b>	<b>Growth % (2020)</b>	<b>Market Share (2020)</b>	<b>IPEDS Tuition &amp; Fees (2020)</b>
Academy of Art University	4	-55.6%	26.7%	\$24,664
Laurus College	4	-20.0%	26.7%	N/A
Cerro Coso Community College	4	100.0%	26.7%	\$1,382
San Jose City College	2	Insf. Data	13.3%	\$1,362
Solano Community College	1	Insf. Data	6.7%	\$1,163

### *Analysis*

Early in the history of Cerro Coso's web program (entitled Web Design Associate of Science in 2002), we were among very few web design/development programs in the state, and we were the only distance education program. Students have more options now, and enrollments are much more competitive. Given our ranking of 8th out of 25 colleges with respect to completions, our program is still competitive.

We do not offer courses through the Incarcerated Student Education Program (ISEP) at this time, due to limitations of computer and network access. If this could be accommodated, we would hire adjunct faculty to staff courses.

### 1.3.2 Intersegmental Alignment

#### *Analysis*

We are offering dual enrollment at Tehachapi High School (THS) and Kern Valley High School (KVHS). DMA C102 and DMA C107 are offered in alternating semesters at THS, and we are planning on expanding offerings to allow students to complete Digital Media and Marketing certificate. We will only offer electives DMA C102, DMA C107, and DMA C131 and the capstone course DMA C201. Thus far, we are only offering DMA C102 at KVHS. Owens Valley Unified School District recently hired a CTE instructor with education and professional background in media arts. There is a possibility of running dual enrollment in that district.

### 1.3.3 Professional Development

#### *Analysis*

There are several ways that discipline faculty may meet their professional development obligation. The California Community Colleges Vision Resource Center, <https://cccpln.csod.com>, hosts events, courses,

and videos on topics related to instructional best practice, equity and anti-racism, faculty leadership, guided pathways, dual enrollment, instruction in prisons, accessibility, and more. All full time and adjunct California Community College faculty can use their institutional login credentials to access the site content. This single sign-on also provides access to LinkedIn Learning, where there are over 16,000 video courses that pertain to business, digital media, design, scripting, and programming, as well as related software applications. LinkedIn Learning is particularly valuable for digital media arts faculty because technology is ever evolving, and this resource enables us to stay current.

The Information, Communications, and Technology (ICT) and Digital Media sector of the California Community Colleges Chancellor's Office has hosted a Digital Media Educators Conference for several years. Initially, full-time and adjunct digital media arts faculty could attend at no cost, and stipends were paid for hotel and meals. In 2018, stipends were no longer offered, but registration was covered. The conference was not offered in 2019 and 2020. In 2021, the conference was virtual, with a cost of \$50. As many Cerro Coso digital media arts faculty who wished to attend were able to attend.

Finally, full time faculty in the department have approximately \$1,100 allocated for professional development. Social Media Marketing World is another conference of value. It is scheduled every March in San Diego, and the cost is \$697 for on-demand access to session and workshop recordings or live streaming. In-person attendance is \$1,197, but the uncertainty and risks of the pandemic make virtual access preferable.

#### 1.3.4 Describe Marketing and Outreach

The full-time faculty coordinator of the digital media arts programs (Web Professional, Web Fundamentals, and Digital Media and Marketing) has hosted and maintained a brochure web site since 2001: <https://www.academy-webdesign.com/>. This site, and Cerro Coso's institutional site, <https://www.cerrocoso.edu> are crosslinked.

The content on the <https://www.academy-webdesign.com/> site is not time-sensitive except for the long-term schedule, where semesters are updated in column headings. The site will still present the Web Professional AS and COA with the Design and Development options until the 2022 catalog is published with the new program configuration.

#### 2021 Usage Data

Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2021	2,525	5,195	22,350	24,597	126.43 MB
Feb 2021	1,448	3,271	19,590	21,541	114.19 MB
Mar 2021	2,400	6,357	43,405	45,728	173.92 MB
Apr 2021	1,878	4,216	25,228	27,093	98.68 MB
May 2021	2,021	5,263	34,059	35,813	138.27 MB
Jun 2021	2,294	7,585	44,827	45,960	167.06 MB
Jul 2021	2,427	8,065	25,570	27,348	118.65 MB
Aug 2021	2,954	11,806	30,225	31,561	120.98 MB
Sep 2021	2,356	8,254	54,049	55,565	174.08 MB
Oct 2021	2,242	7,920	14,842	22,409	148.20 MB
Nov 2021	3,496	8,366	20,073	21,874	132.73 MB
Dec 2021	2,684	9,605	19,994	22,348	119.56 MB
<b>Total</b>	<b>28,725</b>	<b>85,903</b>	<b>354,212</b>	<b>381,837</b>	<b>1.59 GB</b>



### January 2021 Visit Durations

Number of visits: 5,195 - Average: 171 s		Visits	Percent
0s-30s		4,742	91.2 %
30s-2mn		93	1.7 %
2mn-5mn		20	0.3 %
5mn-15mn		46	0.8 %
15mn-30mn		58	1.1 %
30mn-1h		164	3.1 %
1h+		72	1.3 %

### January 2021 Operating System of Visitors

Linux	10,815	48.3 %	11,088	45 %
Windows	10,698	47.8 %	12,073	49 %
Unknown	581	2.5 %	606	2.4 %
Macintosh	138	0.6 %	376	1.5 %
iOS	115	0.5 %	427	1.7 %
Unknown Unix system	3	0 %	27	0.1 %

### January 2021 Browsers of Visitors

Browsers	Pages	Percent	Hits	Percent
Firefox	12,406	55.5 %	13,103	53.2 %
Google Chrome	8,248	36.9 %	9,120	37 %
Unknown	557	2.4 %	558	2.2 %
Edge	505	2.2 %	505	2 %
MS Internet Explorer	347	1.5 %	671	2.7 %
Safari	107	0.4 %	349	1.4 %
Opera	76	0.3 %	76	0.3 %
Android browser (PDA/Phone browser)	53	0.2 %	68	0.2 %
Mozilla	28	0.1 %	52	0.2 %
IPhone (PDA/Phone browser)	13	0 %	13	0 %
Others	10	0 %	82	0.3 %

For January 2021, the number of unique visitors is relatively consistent across months, except February is low, and August, November, and December are higher than average. This is a trend that we would hope to see, as students are researching enrollment opportunities for an upcoming term. A little over 91% of visits have a duration less than 30 seconds. But 4.4% (236 visitors) spent 30-60 minutes or over an hour on the site. 94% of visitors use Windows or Linux operating systems, and Firefox and Chrome are the most commonly used browsers by visitors. Most site visits are likely bots and spiders. I receive student inquiries through the site, but not as many as might be expected by the number of visitors in a typical month. Still, it is a method of outreach that has offered value, and I will continue to maintain it.

Significant marketing of the programs through Cerro Coso's Public Information Office occurs in the late Spring or early Summer to promote Fall enrollments. This includes a banner on the home page of the institutional site and Facebook advertisements. It would be very helpful if the Public Information Office had an online dashboard that shows current and scheduled campaigns at the college so we can know where we are in the queue and when we can expect to see our ads running. I have also requested Facebook analytics from the Public Information Officer for this Program Review, but this request has not

been fulfilled. The Public Information Office needs more institutional support, and it would be helpful for there to be a dedicated staff member for CTE marketing requests.

I have submitted content to service area chambers of commerce newsletters and have given presentations to chambers, marketing classes. I also participate in Career Day, when high school students in our service area come to campus to hear presentation and talk to faculty and employers. The pandemic has interrupted this event recently. However, an event is planned for this Spring.

## 1.4 Employment (CTE Only)

### 1.4.1 Labor Market

According to Economic Modeling Specialists, Inc. (EMSI), regional employment growth for “web developers” and “digital interface designers” in Cerro Coso’s service area is projected to be slightly higher than the national and state average with 25 new positions. This data spans pre-pandemic 2019 through (hopefully) post-pandemic 2025.

Region	2019 Jobs	2025 Jobs	Change	% Change
United States	267,599	296,726	29,127	10.9%
California	39,733	43,429	3,696	9.3%
Cerro Coso Region	213	238	25	11.5%

Looking beyond 2025 through 2030, projected job growth is projected at 4.5%, 4.1% and 4.6% for the US, California, and Cerro Coso’s service area, respectively.

The 2020 median annual wage for “web developers” and “digital interface designers” in California is \$69,108, higher than the national average of \$64,127.

The top five hard skills listed in job postings are:

1. Javascript
2. Cascading Style Sheets (CSS)
3. Java
4. Hypertext Markup Language (HTML)
5. Front End

The top five soft skills listed in job postings are:

1. Communication
2. Problem solving
3. Management
4. Integration
5. Innovation

National educational attainment of “web developers” and “digital interface designers” is reported as

	% of Jobs
Less than high school diploma	0.7%
High school diploma or equivalent	4.9%
Some college, no degree	15.4%

	<b>% of Jobs</b>
Associate's degree	10.4%
Bachelor's degree	53.7%
Master's degree	13.6%
Doctoral or professional degree	1.3%

Age and gender diversity are reported as average, compared to other occupations. Racial diversity is reported as higher than average.

#### *Analysis*

Because the Web Professional and Web Fundamentals programs are delivered entirely online, our graduates will enter the workforce both regionally and statewide. Projected job openings support sustainability of the program.

#### 1.4.2 Employment

	2016-17		2017-18		2018-19		2019-20		2020-21	
	n=x	%	n=x	%	n=x	%	n=x	%	n=x	%
<b>Program</b>	4	25%	11	64%	6	1%	1	100%	7	71%
<b>District</b>	7	43%	11	64%	6	83%	1	100%	8	63%
<b>State</b>	1,124	54%	1,004	64%	761	69%	612	65%	759	67%

Source: PERKINS IV Core Indicators of Performance by 6-digit Vocational TOP Code

#### *Analysis*

Capturing accurate employment data for this TOP code has historically been challenging because many workers are employed in positions that are not primarily web-focused. Web development skills are often tangential to other duties. Many web professionals are also self-employed. According to the U.S. Bureau of Labor Statistics, 18% of web developers and digital designers are self-employed, 15% work in information technology services, 9% work in publishing, 5% work in management, scientific, and technical consulting, and 4% work in advertising and public relations. The remainder are dispersed across other occupations. Perkins TOP code reporting can only capture occupations that are directly related to web development. If Perkins is able to accurately capture freelance workers, this roughly accounts for only 33% of employed graduates.

Perkins reporting does not depict a meaningful pattern. In 2016-17 and 2018-19, Cerro Coso's program was well below the District and State percentages. In 2017-18, the college, district, and state were all 64%. And in 2019-20 and 2020-21 the college was at or above the district and state percentage.

#### 1.4.3 Employer Relationships

Relationships with employers in our service area are maintained through the advisory committee, described below. The program does not predominantly support one or few employers. We do not use employer facilities for training. All training occurs in online course offerings.

#### 1.4.4 Advisory Committee

See Supporting Documentation section for list of advisory committee members.

### *Analysis*

The primary employers of web developers and designers in our service area are represented on the Web Professional Advisory Committee, including the Naval Air Warfare Center, General Dynamics Information Technology, New Directions Technologies, Inc., The Jacobs Group, Ridgecrest Regional Hospital, chambers of commerce, city and county government, and self-employed developers in our service area. This program has an active advisory committee in all populated regions of our service area, including the Indian Wells Valley, Bishop, Mammoth Lakes, and Tehachapi. Advisory committee members regularly contribute input about emerging industry trends, which drive curriculum updates and student learning outcomes.

Advisory committee members are recruited from mutual contacts and other advisory members. Chambers of commerce directors were recruited by contacting them directly. The committee is a good cross section of the types of employment opportunities available to our graduating students.

## Part 2: Outcomes

### 2.1 Overview of Outcomes

#### 2.1.1 Culture of Outcomes

Course and program student learning outcomes are thoroughly reviewed within each Program Review cycle. Curriculum is reviewed and revised within each cycle, and outcomes are evaluated for currency, relevance, alignment, rigor, and integrity, with input from the program advisory committee. There is also continuous dialogue about appropriate summative assessment tools. Both full-time and adjunct faculty are regular contributors to this input.

### 2.2 Program Learning Outcomes

#### 2.2.1 List of Program Learning Outcomes

##### *Web Professional*

1. Identify concepts of Internet technology, databases, eCommerce, and electronic communications.
2. Demonstrate technical mastery of open-source and commercial software applications to produce web content and media.
3. Use valid markup, cascading style sheets, semantic encoding, accessibility compliance, and error-free scripting in the creation of Web content.
4. Apply principles of user-centered design, develop an attractive, accessible, and usable web site or mobile application.
5. Demonstrate professionalism in leadership, project management, and communication skills.

##### *Web Fundamentals*

1. Identify concepts of internet technology, networking, databases, and electronic communications.
2. Demonstrate technical and creative mastery of the creation of Web media, such as graphics, motion graphics, and interactive media.
3. Use valid markup, cascading style sheets, semantic encoding, accessibility compliance, and error-free scripting in the creation of Web content.
4. Apply design principles to solve visual communication problems.

##### *Digital Media and Marketing*

1. Evaluate the suitability of an eCommerce revenue model for a specific application.
2. Evaluate the suitability of different forms of digital marketing for a specific application.
3. Apply software skills in the creation and modification of digital media.
4. Apply design principles and/or specification standards to the creation of digital media content.

##### *Analysis*

Program learning outcomes are generally organized around several domains, including overarching concepts of information technology, mastery of creative problem solving, and technical mastery of software and standards. Some also include soft skills, such as leadership and communication. The advisory committee has certified that they each effectively prepare students for the workforce. The outcomes measure discreet skills and are attainable by students, given the structure of course learning outcomes and “backwards design” of courses. In other words, outcomes define assessment methods, which in turn drive content and instruction.

## 2.2.2 Institutional and General Education Learning Outcomes

*Matrix of Program Learning Outcomes and Institutional Learning Outcomes Alignment*

Course	ILO A (Citizenship)	ILO B (Communication)	ILO C (Critical Thinking)	ILO D (Information Competency)
IT C101			X	X
DMA C102	X	X	X	X
DMA C107		X	X	X
DMA C111			X	X
DMA C113	X	X	X	X
DMA C117			X	X
DMA C119			X	X
DMA C131		X	X	X
DMA C201			X	X
DMA C211			X	X
DMA C213			X	X
IT C251			X	X
DMA C280	X	X	X	X

## 2.2.3 Course Matrix

*Web Professional - Matrix of Courses and Program Learning Outcomes Alignment*

Course	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
DMA C102	SLO 4- 5	SLO 1		SLO 2-3	
DMA C107		SLO 1, 5		SLO 2-4	
DMA C111			SLO 1-4		
DMA C113		SLO 4	SLO 1	SLO 2-3	
DMA C117		SLO 2, 4		SLO 1, 3	
DMA C119		SLO 4-5	SLO 1-3		
DMA C131		SLO2-4		SLO 1, 5	
DMA C201	SLO 1-4			SLO 5	
DMA C211	SLO 1		SLO 2-4		
DMA C213	SLO 2	SLO 1, 3-5			
DMA C280		SLO 1		SLO 3	SLO 2,4
IT C101	SLO 1,2	SLO 3			

*Web Fundamentals - Matrix of Courses and Program Learning Outcomes Alignment*

Course	PLO 1	PLO 2	PLO 3	PLO 4			
DMA C102		SLO 4- 5			SLO 1		SLO 2-3
DMA C111			SLO 1-4				
DMA C113		SLO 4	SLO 1	SLO 2-3			
DMA C117					SLO 2, 4		SLO 1, 3
DMA C211	SLO 1		SLO 2-4				
IT C101	SLO 1,2	SLO 3					



## Digital Media and Marketing - Matrix of Courses and Program Learning Outcomes Alignment

Course	PLO 1	PLO 2	PLO 3	PLO 4		
DMA C102			SLO 1-3	SLO 4		
DMA C107					SLO 1, 5	SLO 2-4
DMA C111					SLO 3, 4	SLO 1, 2
DMA C131					SLO 4	SLO 1-3, 5
DMA C201	SLO 1,2, 4	SLO 3				

### Analysis

Course learning outcomes and the emergent course design provided a scaffolded presentation of skills throughout each program. Course outcomes align well with program outcomes, which enable students to be equipped for employment in a web-dedicated position or to complement employment with visual literacy skills. There is no unnecessary duplication of knowledge or skills.

### 2.2.4 Assessment History

#### Web Professional

##### PLO 1 Assessment Results

Identify concepts of Internet technology, databases, eCommerce, and electronic communications.

Target:	70%
Assessment Method:	Course mapping (DMA C102, DMA C211, DMA C213, IT C101)
Assessment Date:	Fall 2019, Fall 2021, Spring 2021
Recent Results:	94%, 100%, 88%, 87%

##### PLO 2 Assessment Results

Demonstrate technical mastery of open-source and commercial software applications to produce web content and media.

Target:	70%
Assessment Method:	Course mapping
Assessment Date:	Spring 2019, Fall 2019,
Recent Results:	100%, 100%

##### PLO 3 Assessment Results

Use valid markup, cascading style sheets, semantic encoding, accessibility compliance, and error-free scripting in the creation of Web content.

Target:	70%
Assessment Method:	Course mapping
Assessment Date:	Fall 2019, Spring 2021, Fall 2021
Recent Results:	100%, 100%, 94%

##### PLO 4 Assessment Results

Apply principles of user-centered design, develop an attractive, accessible, and usable web site or mobile application.

Target:	70%
Assessment Method:	Course mapping
Assessment Date:	Fall 2018, Spring 2020, Summer 2021

<b>Recent Results:</b>	100%, 93%, 100%
------------------------	-----------------

#### *PLO 5 Assessment Results*

Demonstrate professionalism in leadership, project management, and communication skills.

<b>Target:</b>	70%
<b>Assessment Method:</b>	Course mapping
<b>Assessment Date:</b>	Summer 2021
<b>Recent Results:</b>	100%

#### *PLO Assessment History Summary*

PLO #	Target	Semester	Met?	Semester	Met?
PLO 1	70%	Fall 2019, Fall 2021, Spring 2021	92%		
PLO 2	70%	Spring 2019, Fall 2019,	100%		
PLO 3	70%	Fall 2019, Spring 2021, Fall 2021	98%		
PLO 4	70%	Fall 2018, Spring 2020, Summer 2021	97%		
PLO 5	70%	Summer 2021	100%		

#### *Web Fundamentals*

##### *PLO 1 Assessment Results*

Identify concepts of Internet technology, databases, eCommerce, and electronic communications.

<b>Target:</b>	70%
<b>Assessment Method:</b>	Course mapping (DMA C102, DMA C211, DMA C213, IT C101)
<b>Assessment Date:</b>	Fall 2019, Fall 2021, Spring 2021
<b>Recent Results:</b>	94%, 100%, 88%, 87%

##### *PLO 2 Assessment Results*

Demonstrate technical mastery of open-source and commercial software applications to produce web content and media.

<b>Target:</b>	70%
<b>Assessment Method:</b>	Course mapping
<b>Assessment Date:</b>	Spring 2019, Fall 2019,
<b>Recent Results:</b>	100%, 100%

##### *PLO 3 Assessment Results*

Use valid markup, cascading style sheets, semantic encoding, accessibility compliance, and error-free scripting in the creation of Web content.

<b>Target:</b>	70%
<b>Assessment Method:</b>	Course mapping
<b>Assessment Date:</b>	Fall 2019, Spring 2021, Fall 2021
<b>Recent Results:</b>	100%, 100%, 94%

##### *PLO 4 Assessment Results*

Apply principles of user-centered design, develop an attractive, accessible, and usable web site or mobile application.

Target:	70%
Assessment Method:	Course mapping
Assessment Date:	Fall 2018, Spring 2020, Summer 2021
Recent Results:	100%, 93%, 100%

*PLO Assessment History Summary*

PLO #	Target	Semester	Met?	Semester	Met?
PLO 1	70%	Fall 2019, Fall 2021, Spring 2021	92%		
PLO 2	70%	Spring 2019, Fall 2019,	100%		
PLO 3	70%	Fall 2019, Spring 2021, Fall 2021	98%		
PLO 4	70%	Fall 2018, Spring 2020, Summer 2021	97%		

*Digital Media and Marketing*

*PLO 1 Assessment Results*

Evaluate the suitability of an eCommerce revenue model for a specific application.

Target:	80%
Assessment Method:	Course mapping
Assessment Date:	Spring 2021
Recent Results:	83%

*PLO 2 Assessment Results*

Evaluate the suitability of different forms of digital marketing for a specific application.

Target:	80%
Assessment Method:	Course mapping
Assessment Date:	Spring 2021
Recent Results:	83%

*PLO 3 Assessment Results*

Apply software skills in the creation and modification of digital media.

Target:	80%
Assessment Method:	Course mapping
Assessment Date:	Spring 2021
Recent Results:	72%

*PLO 4 Assessment Results*

Apply design principles and/or specification standards to the creation of digital media content.

Target:	80%
Assessment Method:	Course mapping
Assessment Date:	Spring 2021
Recent Results:	81%

### PLO Assessment History Summary

PLO #	Target	Semester	Met?	Semester	Met?	Semester	Met?
PLO 1	80%	SP21	83%				
PLO 2	80%	SP21	83%				
PLO 3	80%	SP21	72%				
PLO 4	80%	SP21	81%				

### 2.2.5 Evaluation of Program Learning Outcomes

The only program learning outcome that did not meet the target was “Apply software skills in the creation and modification of digital media” in the Digital Media and Marketing Certificate of Achievement. It has a result of 72%, and the target for all of the Digital Media and Marketing PLOs is 80%. The targets for the Web Professional and Web Fundamentals PLOs are 70%. Most other programs at the college also have PLO targets of 70%. I don’t recall why targets of 80% were chosen for this certificate, but it seems appropriate to align them with standard practice of 70%.

Assessment artifacts are selected for course learning outcomes, and in the eLumen system, program learning outcomes are simply aligned with course learning outcomes. There isn’t a separate assessment artifact for PLOs.

It must be mentioned that the PLO reports in eLumen were extremely difficult to use. While SLO reports allow for the omission of non-participating students, the PLO reports do not. Manual calculations were necessary to remove the N/A data. I’m glad to know that the college will transition to database that will be built in-house.

## 2.3 Course Student Learning Outcomes

### 2.3.1 Assessment History

#### SLO Assessment 5-Year History

Course	SLO #	Target	Semester	%	Met?
DMA C102	SLO 1	70%	FA19	60%	✗
	SLO 2	70%	FA19	95%	✓
	SLO 3	70%	FA19	100%	✓
	SLO 4	70%	FA19	94%	✓
	SLO 5	70%	FA19	94%	✓
DMA C107	SLO 1	70%	FA18	55%	✗
	SLO 2	70%	FA18	80%	✓
	SLO 3	70%	FA18	92%	✓
	SLO 4	70%	FA18	73%	✓
DMA C111	SLO 1	70%	FA19	100%	✓
	SLO 2	70%	FA19	100%	✓
	SLO 3	70%	FA19	100%	✓
	SLO 4	70%	FA19	100%	✓
DMA C113	SLO 1	70%	SP20	100%	✓
	SLO 2	70%	SP20	100%	✓
	SLO 3	70%	SP20	100%	✓
DMA C117	SLO 1	70%	SP20	100%	✓

	SLO 2	70%	SP20	100%	✓
	SLO 3	70%	SP20	88%	✓
	SLO 4	70%	SP20	100%	✓
DMA C119	SLO 1	70%	FA20	100%	✓
	SLO 2	70%	FA20	100%	✓
	SLO 3	70%	FA20	100%	✓
	SLO 4	70%	FA20	100%	✓
	SLO 5	70%	FA20	100%	✓
DMA C131	SLO 1	70%	FA18	100%	✓
	SLO 2	70%	FA18	100%	✓
	SLO 3	70%	FA18	100%	✓
	SLO 4	70%	FA18	100%	✓
	SLO 5	70%	FA18	100%	✓
DMA C201	SLO 1	70%	SP21	83%	✓
	SLO 2	70%	SP21	83%	✓
	SLO 3	70%	SP21	83%	✓
	SLO 4	70%	SP21	83%	✓
	SLO 5	70%	SP21	72%	✓
DMA C211	SLO 1	70%	SP21	100%	✓
	SLO 2	70%	SP21	100%	✓
	SLO 3	70%	SP21	100%	✓
	SLO 4	70%	SP21	100%	✓
DMA C213	SLO 1	70%	FA21	88%	✓
	SLO 2	70%	FA21	88%	✓
	SLO 3	70%	FA21	100%	✓
	SLO 4	70%	FA21	100%	✓
	SLO 5	70%	FA21	88%	✓
DMA C280	SLO 1	70%	SU21	100%	✓
	SLO 2	70%	SU21	100%	✓
	SLO 3	70%	SU21	100%	✓
	SLO 4	70%	SU21	100%	✓
IT C101	SLO 1	70%	SP19	91%	✓
	SLO 2	70%	SP19	92%	✓
	SLO 3	70%	SP19	100%	✓

### 2.3.2 Evaluation of Student Learning Outcomes

*DMA C102: Critique fine art, digital paintings, and iconography for use of design elements and principles. (60% met)*

This outcome was deleted from a subsequent iteration of DMA C102 because it is superfluous to the essential skills of web design. Therefore, despite the outcome not being met, it was not reassessed. As recently as ten years ago, DMA C102 was an elective in the Associate of Arts Fine Art program, and the course accommodated skills to satisfy art and web design. The Fine Arts program was eliminated and replaced with a Studio Arts for Transfer degree, which no longer includes digital media arts courses.

*DMA C107: Create aesthetic illustrations and designs that employ a grid system, gestalt principles, typographic principles, color theory, and usability. (55% met)*

Clearly, there was a gap in some aspect of instructional delivery, but upon reflection, this outcome encompassed far too many variables and types of media (an illustration is distinct from a page design) to effectively assess. It was revised in Spring 2021. The new outcome is: Apply principles of page layout and typography to a brochure design. The new outcome exclusively focuses on page design. If a deficit remains, it will now be easier to identify where the gap in learning is occurring. The new outcome will be assessed in the coming Program Review cycle.

## 2.4 Planning

### 2.4.1 Planned Assessment Cycles for PLOs and SLOs

#### *PLO Assessment Cycle*

Program	PLO #	FA 2024	SP 2025	SU 2025	FA 2025	SP 2026	SU 2026
Web Professional							
	PLO 1				X	X	
	PLO 2						
	PLO 3				X	X	
	PLO 4						
	PLO 5				X	X	X
Web Fundamentals							
	PLO 1				X	X	
	PLO 2				X	X	
	PLO 3				X	X	
	PLO 4				X	X	
Digital Media/Marketing					X	X	
	PLO 1					X	
	PLO 2					X	
	PLO 3				X	X	
	PLO 4				X	X	

#### *SLO Assessment Cycle*

Course	SLO #	FA 2024	SP 2025	SU 2025	FA 2025	SP 2026	SU 2026
DMA C102	SLO 1	X					
	SLO 2	X					
	SLO 3	X					
	SLO 4	X					
	SLO 5	X					
DMA C107	SLO 1	X					
	SLO 2	X					
	SLO 3	X					
	SLO 4	X					
DMA C111	SLO 1	X					
	SLO 2	X					
	SLO 3	X					
	SLO 4	X					
DMA C113	SLO 1		X				



	SLO 2		X				
	SLO 3		X				
	SLO 4		X				
DMA C117	SLO 1		X				
	SLO 2		X				
	SLO 3		X				
	SLO 4		X				
DMA C119	SLO 1	X					
	SLO 2	X					
	SLO 3	X					
	SLO 4	X					
	SLO 5						
DMA C131	SLO 1	X					
	SLO 2	X					
	SLO 3	X					
	SLO 4	X					
	SLO 5	X					
DMA C201	SLO 1		X				
	SLO 2		X				
	SLO 3		X				
	SLO 4		X				
	SLO 5		X				
DMA C211	SLO 1		X				
	SLO 2		X				
	SLO 3		X				
	SLO 4		X				
DMA C213	SLO 1				X		
	SLO 2				X		
	SLO 3				X		
	SLO 4				X		
	SLO 5				X		
DMA C280	SLO 1			X			
	SLO 2			X			
	SLO 3			X			
	SLO 4			X			
IT C101	SLO 1		X				
	SLO 2		X				
	SLO 3		X				

We intend to assess most of the student learning outcomes two years prior to the next Program Review to allow for reassessment, if needed. DMA C119 and DMA C213 are on alternating year schedules, so DMA C213 will be assessed one year prior. DMA C113 and DMA C117 have been on alternative year schedules for the past two years, but we are requesting they both be restored to an annual schedule. Program learning outcomes will be assessed one year prior to the next Program Review.

## Part 3: Trends

### 3.1 Student Experience and Trends

#### 3.1.1 Student Majors

##### *Unduplicated Headcount*

	2016-17	2017-18	2018-19	2019-20	2020-21
<b>Web Professional AS</b>	4	22	31	27	30
Yr to Yr Change	0%	450%	41%	-13%	11%
<b>Web Professional CoA</b>	1	9	13	13	27
Yr to Yr Change	0%	800%	44%	0%	108%
<b>Web Fundamentals CoA</b>	1	1	13	6	7
Yr to Yr Change	0%	0%	1200%	-54%	17%
<b>Digital Media/Marketing CoA</b>	n/a	n/a	n/a	n/a	1
% of Total	n/a	n/a	n/a	n/a	100%
Yr to Yr Change	n/a	n/a	n/a	n/a	0%

Total declared majors across all digital media arts programs has increased from 6 to 65 students in the past 5 years (1,080%). A comparison with college trends is not accessible because the Unique Headcount Dashboard on the District IR site appears to be total unduplicated headcount. But even without this comparison, we are very happy with the significant increase in declared majors.

The following chart compares unduplicated headcount for all of the DMA programs with the College;

##### *DMA Programs*

	2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total</b>	117	207	219	530	495
<b>% of Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Yr to Yr Change</b>		76.90%	5.80%	142.00%	-6.60%

##### *Cerro Coso Community College*

	2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total</b>	8,946	9,521	10,103	9,947	8,603
<b>% of Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Yr to Yr Change</b>		6.40%	6.10%	-1.50%	-13.50%

Unduplicated headcount in the DMA programs increased from 117 to 495 (425%) in the past five years. Unduplicated headcount across Cerro Coso Community College decreased from 8,946 to 8,603 (-4%). Both the DMA programs and the College experienced a decrease during the 2020-21 academic year, likely owing to the pandemic. While we have not been offering DMA courses on-ground, which certainly would have had an adverse impact, we know that many students and their families have been impacted by illness and financial strain over the past year and a half.

The significant improvement in declared majors and unduplicated headcount in the DMA programs is owed to the restoration of design and multimedia courses to the program.

### 3.1.2 Student Demographics and Equity

#### Gender

##### *Combined DMA Programs (Web Professional, Web Fundamentals, Digital Media and Marketing)*

		2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total</b>	Men	17	54	72	86	115
<b>Total</b>	Women	10	56	84	90	94
<b>Total</b>	Not Reported		1		1	1
<b>% of Total</b>	Men	63%	49%	46%	49%	55%
<b>% of Total</b>	Women	37%	51%	54%	51%	45%
<b>% of Total</b>	Not Reported		1%		1%	1%
<b>Yr to Yr Change</b>	Men		218%	33%	19%	34%
<b>Yr to Yr Change</b>	Women		460%	50%	7%	4%
<b>Yr to Yr Change</b>	Not Reported			-100%		0%

##### *Cerro Coso Community College*

		2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total</b>	Men	3,566	4,012	4,325	4,227	3,889
<b>Total</b>	Women	5,276	5,393	5,646	5,601	4,609
<b>Total</b>	Not Reported		116		119	104
<b>% of Total</b>	Men	40%	42%	43%	43%	45%
<b>% of Total</b>	Women	60%	57%	57%	56%	54%
<b>% of Total</b>	Not Reported		1%		1%	1%
<b>Yr to Yr Change</b>	Men		13%	8%	-2%	-8%
<b>Yr to Yr Change</b>	Women		2%	5%	-1%	-18%
<b>Yr to Yr Change</b>	Not Reported			-100%		-13%

The DMA programs have experienced a modest increase in female students and decrease in male students, however, males are still in the majority (55%). This is an opposite trend across the college in which females have increased and males have decreased. Across the college, females are in the majority (54%). Web development (coding, scripting) tends to be a male-dominated field, whereas design tends to be favored by females. The trend seen in the DMA programs can be owed to the curriculum revision to restore design and multimedia courses.

#### Age

##### *Combined DMA Programs (Web Professional, Web Fundamentals, Digital Media and Marketing)*

		2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total</b>	17 or Younger	5	6	24	14	25
<b>Total</b>	18-19		34	22	39	36
<b>Total</b>	20-24	8	15	35	28	39
<b>Total</b>	25-29	12	15	8	13	22

Total	30-34		3	19	37	44
Total	35-39		14	21	16	5
Total	40-49		15	17	13	14
Total	50 and Older	2	9	10	17	25
% of Total	17 or Younger	19%	5%	15%	8%	12%
% of Total	18-19		31%	14%	22%	17%
% of Total	20-24	30%	14%	22%	16%	19%
% of Total	25-29	44%	14%	5%	7%	11%
% of Total	30-34		3%	12%	21%	21%
% of Total	35-39		13%	14%	9%	2%
% of Total	40-49		14%	11%	7%	7%
% of Total	50 and Older	7%	8%	6%	10%	12%
Yr to Yr Change	17 or Younger		20%	300%	-42%	79%
Yr to Yr Change	18-19			-35%	77%	-8%
Yr to Yr Change	20-24		88%	133%	-20%	39%
Yr to Yr Change	25-29		25%	-47%	63%	69%
Yr to Yr Change	30-34			533%	95%	19%
Yr to Yr Change	35-39			50%	-24%	-69%
Yr to Yr Change	40-49			13%	-24%	8%
Yr to Yr Change	50 and Older		350%	11%	70%	47%

*Cerro Coso Community College*

		2016-17	2017-18	2018-19	2019-20	2020-21
Total	17 or Younger	911	1,060	1,401	1,404	1,279
Total	18-19		1,080	1,166	1,155	951
Total	20-24	2,021	2,086	2,056	1,987	1,517
Total	25-29	1,522	1,636	1,596	1,513	1,229
Total	30-34		1,113	1,196	1,199	1,150
Total	35-39		814	896	908	829
Total	40-49		1,092	1,115	1,108	1,065
Total	50 and Older	586	638	666	667	581
% of Total	17 or Younger	18%	11%	14%	14%	15%
% of Total	18-19		11%	12%	12%	11%
% of Total	20-24	40%	22%	20%	20%	18%
% of Total	25-29	30%	17%	16%	15%	14%
% of Total	30-34		12%	12%	12%	13%
% of Total	35-39		9%	9%	9%	10%
% of Total	40-49		11%	11%	11%	12%
% of Total	50 and Older	12%	7%	7%	7%	7%
Yr to Yr Change	17 or Younger		16%	32%	0%	-9%
Yr to Yr Change	18-19			8%	-1%	-18%
Yr to Yr Change	20-24		3%	-1%	-3%	-24%
Yr to Yr Change	25-29		7%	-2%	-5%	-19%
Yr to Yr Change	30-34			7%	0%	-4%

Yr to Yr Change	35-39			10%	1%	-9%
Yr to Yr Change	40-49			2%	-1%	-4%
Yr to Yr Change	50 and Older		9%	4%	0%	-13%

Most age groups have grown in the DMA programs, with the exception of ages 35-49. The largest increases are seen among 17 and younger, 30-35, and 50 and older. We have had a successful dual-enrollment program at Tehachapi High School, which accounts for the increase in 17 and younger. It is difficult to interpret the other trends. Similar trends are seen collegewide.

### *Ethnicity*

#### *Combined DMA Programs (Web Professional, Web Fundamentals, Digital Media and Marketing)*

		2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total</b>	African American				11	2
<b>Total</b>	American Indian		1			
<b>Total</b>	Asian			5	5	1
<b>Total</b>	Filipino		9	3		1
<b>Total</b>	Hispanic/ Latino	1	23	41	73	82
<b>Total</b>	White	24	69	80	55	100
<b>Total</b>	Two or More Races	2	9	27	33	24
<b>% of Total</b>	African American				6%	1%
<b>% of Total</b>	American Indian		1%			
<b>% of Total</b>	Asian			3%	3%	1%
<b>% of Total</b>	Filipino		8%	2%		1%
<b>% of Total</b>	Hispanic/ Latino	4%	21%	26%	41%	39%
<b>% of Total</b>	White	89%	62%	51%	31%	48%
<b>% of Total</b>	Two or More Races	7%	8%	17%	19%	11%
<b>Yr to Yr Change</b>	African American					-82%
<b>Yr to Yr Change</b>	American Indian			-100%		
<b>Yr to Yr Change</b>	Asian				0%	-80%
<b>Yr to Yr Change</b>	Filipino			-67%	-100%	
<b>Yr to Yr Change</b>	Hispanic/ Latino		2200%	78%	78%	12%
<b>Yr to Yr Change</b>	White		188%	16%	-31%	82%
<b>Yr to Yr Change</b>	Two or More Races		350%	200%	22%	-27%

#### *Cerro Coso Community College*

		2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total</b>	African American				645	605
<b>Total</b>	American Indian		149			
<b>Total</b>	Asian			291	280	243
<b>Total</b>	Filipino		113	125		116
<b>Total</b>	Hispanic/ Latino	3,601	3,906	4,353	4,414	3,866
<b>Total</b>	White	3,876	3,811	3,865	3,702	3,120
<b>Total</b>	Two or More Races	418	447	462	429	367

<b>% of Total</b>	African American				7%	7%
<b>% of Total</b>	American Indian		2%			
<b>% of Total</b>	Asian			3%	3%	3%
<b>% of Total</b>	Filipino		1%	1%		1%
<b>% of Total</b>	Hispanic/ Latino	46%	46%	48%	47%	47%
<b>% of Total</b>	White	49%	45%	43%	39%	38%
<b>% of Total</b>	Two or More Races	5%	5%	5%	5%	4%
<b>Yr to Yr Change</b>	African American					-6%
<b>Yr to Yr Change</b>	American Indian			-100%*		
<b>Yr to Yr Change</b>	Asian				-4%	-13%
<b>Yr to Yr Change</b>	Filipino			11%	-100%*	
<b>Yr to Yr Change</b>	Hispanic/ Latino		9%	11%	1%	-12%
<b>Yr to Yr Change</b>	White		-2%	1%	-4%	-16%
<b>Yr to Yr Change</b>	Two or More Races		7%	3%	-7%	-15%

\*Due to low numbers

Data appears to be missing for certain ethnicities and certain years. This missing data correlates between the DMA programs and the college. The most notable trends are an increase in Hispanic students and a decrease in White students, trends seen both in the DMA programs and collegewide. Looking at 2020-21, the Hispanic students are in the majority at 47%. White students represent 38% of the college population. Within the DMA programs, White students are in the majority at 39%, with Hispanic students at 48%. These trends reflect changing demographics in the communities we serve. We would like to see more African American students in the DMA programs, and they will continue to be a focus of outreach.

### *Educational Plan Completions*

#### *Combined DMA Programs (Web Professional, Web Fundamentals, Digital Media and Marketing)*

		<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>
<b>Total</b>	Abbreviated	8	12	28	58	37
<b>Total</b>	Both (Abbrev. and Comp.)	8	34	32	28	38
<b>Total</b>	Comprehensive	4	43	25	26	60
<b>Total</b>	Exempt		3	10	14	4
<b>Total</b>	No Ed Plan	7	19	61	51	71
<b>% of Total</b>	Abbreviated	30%	11%	18%	33%	18%
<b>% of Total</b>	Both (Abbrev. and Comp.)	30%	31%	21%	16%	18%
<b>% of Total</b>	Comprehensive	15%	39%	16%	15%	29%
<b>% of Total</b>	Exempt		3%	6%	8%	2%
<b>% of Total</b>	No Ed Plan	26%	17%	39%	29%	34%
<b>Yr to Yr Change</b>	Abbreviated		50%	133%	107%	-36%
<b>Yr to Yr Change</b>	Both (Abbrev. and Comp.)		325%	-6%	-13%	36%
<b>Yr to Yr Change</b>	Comprehensive		975%	-42%	4%	131%
<b>Yr to Yr Change</b>	Exempt			233%	40%	-71%
<b>Yr to Yr Change</b>	No Ed Plan		171%	221%	-16%	39%



		2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total</b>	Abbreviated	1,364	1,392	1,469	1,076	828
<b>Total</b>	Both (Abbrev. and Comp.)	1,448	1,725	2,011	2,097	1,510
<b>Total</b>	Comprehensive	1,980	2,000	1,972	2,349	2,508
<b>Total</b>	Exempt		529	389	272	121
<b>Total</b>	No Ed Plan	3,698	3,855	4,255	4,147	3,628
<b>% of Total</b>	Abbreviated	16%	15%	15%	11%	10%
<b>% of Total</b>	Both (Abbrev. and Comp.)	17%	18%	20%	21%	18%
<b>% of Total</b>	Comprehensive	23%	21%	20%	24%	29%
<b>% of Total</b>	Exempt		6%	4%	3%	1%
<b>% of Total</b>	No Ed Plan	44%	41%	42%	42%	42%
<b>Yr to Yr Change</b>	Abbreviated		2%	6%	-27%	-23%
<b>Yr to Yr Change</b>	Both (Abbrev. and Comp.)		19%	17%	4%	-28%
<b>Yr to Yr Change</b>	Comprehensive		1%	-1%	19%	7%
<b>Yr to Yr Change</b>	Exempt			-27%	-30%	-56%
<b>Yr to Yr Change</b>	No Ed Plan		4%	10%	-3%	-13%

As a percent of the total, students with an abbreviated educational plan have declined, students with a comprehensive educational plan have increased, and students with no educational plan have also increased. This does not quite correlate with collegewide data, which shows a slight decrease in the percent of total students who have no educational plan.

Looking at 2020-21 and making program to college comparisons:

- Across DMA programs, 18% of the total had an abbreviated plan, and across the college, 10% had an abbreviated plan.
- In both DMA programs and collegewide, 18% of the total had both an abbreviated and a comprehensive education plan.
- In both DMA programs and collegewide, 29% of the total had a comprehensive education plan.
- Across DMA programs, 34% of the total did not have an educational plan, and across the college, 42% did not have an education plan.

The data show that students in DMA programs have educational plan preparedness on par or better than collegewide data. I'm not certain of the reason for this difference, but we are aligning our courses with the Online Education Initiative rubric, which includes providing students with access to student services in Canvas course shells.

### 3.1.3 Student Demand

#### *Distance Ed*

#### *Web Professional*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	8	11	10	10	9
Section Count	11	16	13	21	18
First Day Enrollment	241	293	281	592	519

Census Enrollment	187	244	226	469	459
Mean Students per Section	17	15	17	22	26
First Day Waitlist	0	0	0	19	5

#### *Web Fundamentals*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	5	5	5	6	5
Section Count	8	10	8	17	14
First Day Enrollment	201	203	211	492	423
Census Enrollment	155	173	164	390	381
Mean Students per Section	19	17	21	23	27
First Day Waitlist	0	0	0	19	5

#### *Digital Media and Marketing*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	3	5	4	5	5
Section Count	6	10	7	8	7
First Day Enrollment	174	231	216	231	227
Census Enrollment	131	197	179	175	184
Mean Students per Section	22	20	26	22	26
First Day Waitlist	0	0	0	0	0

#### *Traditional*

#### *Web Professional*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	0	1	3	3	3
Section Count	0	2	7	10	11
First Day Enrollment	0	12	38	43	28
Census Enrollment	0	32	95	132	158
Mean Students per Section	0	16	14	13	14
First Day Waitlist	0	0	0	0	0

#### *Web Fundamentals*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	0	1	1	2	2
Section Count	0	2	3	6	6
First Day Enrollment	0	12	6	43	14
Census Enrollment	0	32	35	88	93
Mean Students per Section	0	16	12	15	16
First Day Waitlist	0	0	0	0	0

*Digital Media and Marketing*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	0	1	3	2	2
Section Count	0	2	7	8	10
First Day Enrollment	0	12	38	0	15
Census Enrollment	0	32	95	85	145
Mean Students per Section	0.0	16	14	11	15
First Day Waitlist	0	0	0	0	0

*Total**Web Professional*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	8	11	11	10	9
Section Count	11	18	20	31	29
First Day Enrollment	241	305	319	635	547
Census Enrollment	187	276	321	601	617
Mean Students per Section	17	15	16	19	21
First Day Waitlist	0	0	0	19	5

*Web Fundamentals*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	5	5	5	6	5
Section Count	8	12	11	23	20
First Day Enrollment	201	215	217	535	437
Census Enrollment	155	205	199	478	474
Mean Students per Section	19	17	18	21	24
First Day Waitlist	0	0	0	19	5

*Digital Media and Marketing*

	2016-17	2017-15	2018-19	2019-20	2020-21
Course Count	3	5	5	5	5
Section Count	6	12	14	16	17
First Day Enrollment	174	243	254	231	242
Census Enrollment	131	229	274	260	329
Mean Students per Section	22	19	20	16	19
First Day Waitlist	0	0	0	0	0

Student demand has grown significantly over the past five years, reflected in enrollments, number of sections, and mean students per section (improving productivity). The data for the Web Fundamentals

and Digital Media and Marketing certificates are a subset of the Web Professional program. Traditional delivery mode is solely dual enrollment sections, and the lower mean student per section is not problematic because the high schools are paying the instructors. Combining delivery methods, census enrollment has grown 330%. Section count has grown 264%. Mean students per section is 125% of beginning of period.

As previously discussed, curriculum revisions to restore design and multimedia courses to the Web Professional program, as well as expand certificate options for students has been attractive. Also previously discussed, we have been able to eliminate textbook costs for many of our courses, making the courses more financially accessible to students.

The data for traditional enrollments appears odd at first glance. Census enrollments are much higher than first day enrollments. This is likely because all traditional enrollments are dual enrollments at Tehachapi High School, and their first day of the second semester is likely around our census date – when students are actually enrolling.

Future plans include increasing dual-enrollment courses and offering on-ground classes for key entry level classes again. The latter initiative is on hold, however, until the pandemic subsides.

### 3.1.4 Course Retention and Success

#### *Retention: Distance Ed*

	2016-17	2017-15	2018-19	2019-20	2020-21
Graded Counts	11	42	45	85	97
Metric Counts	10	35	41	76	82
Retention Rate	91%	83%	91%	89%	85%

#### *Retention: Traditional*

	2016-17	2017-15	2018-19	2019-20	2020-21
Graded Counts			2	1	4
Metric Counts			1	1	4
Retention Rate			50%	100%	100%

#### *Retention: Total*

	2016-17	2017-15	2018-19	2019-20	2020-21
Graded Counts	11	42	47	86	101
Metric Counts	10	35	42	77	86
Retention Rate	91%	83%	89%	90%	85%

#### *Success: Distance Ed*

	2016-17	2017-15	2018-19	2019-20	2020-21
Graded Counts	11	42	45	85	97
Metric Counts	8	32	38	67	67
Retention Rate	73%	76%	84%	79%	69%

*Success: Traditional*

	2016-17	2017-15	2018-19	2019-20	2020-21
Graded Counts			2	1	4
Metric Counts				1	4
Retention Rate				100%	100%

*Success: Total*

	2016-17	2017-15	2018-19	2019-20	2020-21
Graded Counts	11	42	47	86	101
Metric Counts	8	32	38	68	71
Retention Rate	73%	76%	81%	79%	70%

*Retention by Ethnicity*

		2016-17	2017-18	2018-19	2019-20	2020-21
Graded Counts	<b>African American</b>	12	7	8	7	5
	<b>Native American</b>	1	0	2	1	2
	<b>Hispanic/ Latino</b>	69	96	136	148	122
	<b>Asian</b>	2	5	7	16	5
	<b>Filipino</b>	8	4	5	2	4
	<b>White</b>	86	151	148	143	206
	<b>Two or More Races</b>	9	14	27	37	29
Retention Counts	<b>African American</b>	8	4	6	2	5
	<b>Native American</b>	1	0	1	0	2
	<b>Hispanic/ Latino</b>	56	79	117	118	106
	<b>Asian</b>	2	4	6	12	5
	<b>Filipino</b>	8	4	3	2	4
	<b>White</b>	74	120	122	110	184
	<b>Two or More Races</b>	6	10	24	30	26
Retention Rate	<b>African American</b>	67%	57%	75%	29%	100%
	<b>Native American</b>	100%	-	50%	0%	100%
	<b>Hispanic/ Latino</b>	81%	82%	86%	80%	87%
	<b>Asian</b>	100%	80%	86%	75%	100%
	<b>Filipino</b>	100%	100%	60%	100%	100%
	<b>White</b>	86%	79%	82%	77%	89%

	<b>Two or More Races</b>	67%	71%	89%	81%	90%
Collegewide Retention Rate	<b>African American</b>	81%	84%	87%	81%	86%
	<b>Native American</b>	85%	85%	89%	85%	89%
	<b>Hispanic/ Latino</b>	89%	88%	89%	86%	89%
	<b>Asian</b>	94%	93%	92%	91%	94%
	<b>Filipino</b>	92%	92%	93%	92%	95%
	<b>White</b>	90%	89%	91%	88%	91%
	<b>Two or More Races</b>	87%	85%	88%	84%	89%

### *Success by Ethnicity*

		<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>
Graded Counts	<b>African American</b>	12	7	8	7	5
	<b>Native American</b>	1	0	2	1	2
	<b>Hispanic/ Latino</b>	69	96	136	148	122
	<b>Asian</b>	2	5	7	16	5
	<b>Filipino</b>	8	4	5	2	4
	<b>White</b>	86	151	148	143	206
	<b>Two or More Races</b>	9	14	27	37	29
Succeeded Counts	<b>African American</b>	7	1	4	2	5
	<b>Native American</b>	0	0	1	0	2
	<b>Hispanic/ Latino</b>	32	59	98	106	86
	<b>Asian</b>	2	4	6	10	4
	<b>Filipino</b>	8	4	3	2	3
	<b>White</b>	61	105	107	100	167
	<b>Two or More Races</b>	4	8	20	28	19
Success Rate	<b>African American</b>	58%	14%	50%	29%	100%
	<b>Native American</b>	0%		50%	0%	100%
	<b>Hispanic/ Latino</b>	46%	61%	72%	72%	70%
	<b>Asian</b>	100%	80%	86%	63%	80%
	<b>Filipino</b>	100%	100%	60%	100%	75%
	<b>White</b>	71%	70%	72%	70%	81%
	<b>Two or More Races</b>	44%	57%	74%	76%	66%

Collegewide Success Rate	<b>African American</b>	56%	68%	72%	67%	70%
	<b>Native American</b>	67%	66%	72%	74%	73%
	<b>Hispanic/ Latino</b>	72%	72%	76%	74%	78%
	<b>Asian</b>	82%	86%	85%	85%	89%
	<b>Filipino</b>	82%	85%	84%	82%	89%
	<b>White</b>	77%	78%	80%	80%	83%
	<b>Two or More Races</b>	69%	69%	74%	72%	73%

Retention and success have oscillated slightly over the past 5 years, ending on a slight decline of 6% for total retention and 3% for total success. The 2018-19 and 2019-20 academic years were strong, however, and gains were lost in 2020-21, possibly owing to the pandemic.

Comparing 2016-17 with 2020-21, retention seems to have improved or stayed the same across all ethnicities. This seems to be at odds with the retention data of total retention, but this is what the data provided shows. Likewise, success seems to have improved across all ethnicities, except for Filipino, which declined

Strategies that we have been using to improve equity for students include:

- Syllabus/orientation quiz that is implemented as a department goal.
- Early Alert, which is used to provide struggling students with early outreach.
- Promotion of student services, including Umoja.
- Marketing materials that are representative of diverse student population.
- Online Education Initiative approval of DMA C111, which includes accessibility alignment.

### 3.1.5 Program Completion

#### Completion

##### Web Professional

		2017-18	2018-19	2019-20	2020-21
Awards Conferred	Associate in Science	3	2	4	2
	Cert of Achievement >1 <2 yr	3	4	4	0
% of Total Awards Conferred by Degree Type	Associate in Science	50%	33%	50%	100%
	Cert of Achievement >1 <2 yr	50%	67%	50%	0%
% Change of Awards Conferred by Degree Year	Associate in Science	0%	-33%	100%	-50%
	Cert of Achievement >1 <2 yr	0%	33%	0%	-100%
Awards Conferred	Total	6	6	8	2
% of Total Awards Conferred by Degree Type	Total	100%	100%	100%	100%
% Change of Awards Conferred by Degree Year	Total	0%	0%	33%	-75%

### Web Fundamentals

		2017-18	2018-19	2019-20	2020-21
Awards Conferred	Cert of Achievement >1 <2 yr	1	3	2	5
% of Total Awards Conferred by Degree Type	Cert of Achievement >1 <2 yr	100%	100%	100%	100%
% Change of Awards Conferred by Degree Year	Cert of Achievement >1 <2 yr	0%	200%	-33%	150%
Awards Conferred	Total	1	3	2	5
% of Total Awards Conferred by Degree Type	Total	100%	100%	100%	100%
% Change of Awards Conferred by Degree Year	Total	0%	200%	-33%	150%

### Digital Media and Marketing

		2017-18	2018-19	2019-20	2020-21
Awards Conferred	Cert of Achievement >1 <2 yr	n/a	n/a	n/a	2
% of Total Awards Conferred by Degree Type	Cert of Achievement >1 <2 yr	n/a	n/a	n/a	100%
% Change of Awards Conferred by Degree Year	Cert of Achievement >1 <2 yr	n/a	n/a	n/a	0%
Awards Conferred	Total	n/a	n/a	n/a	2
% of Total Awards Conferred by Degree Type	Total	n/a	n/a	n/a	100%
% Change of Awards Conferred by Degree Year	Total	n/a	n/a	n/a	0%

### Combination of Program Awards Conferred

2017-18	2018-19	2019-20	2020-21
7	9	10	9

### Analysis

The data show increase in completions over four years for Web Fundamentals and Digital Media and Marketing (the latter being a new certificate). The data show (6, 6, 8, 2) a marked drop in completions of the Web Professional AS and CoA, but this is because we moved the capstone course DMA C280 to the Summer term in 2021. Seven students successfully completed DMA C280 in Summer 2021. Reviewing their transcripts,

- One student was awarded the Web Professional AS and CoA on August 6, 2021
- One student was awarded the Web Professional CoA on August 6, 2021
- Two students are eligible to be awarded the Web Professional CoA

The two students who are eligible for the Web Professional CoA are enrolled in classes this Fall (2021) and likely don't know they are eligible or think that they must wait until the Spring term to apply for graduation. If DMA C280 were offered in Spring 2021, we believe we would have 6 Web Professional completers and 13 completers for all of the digital media arts programs combined. As describe above in



section 1.2.3, it makes good pedagogical sense to schedule DMA C280 in the Summer term, but during this transition year, the data is artificially low. The completion numbers will normalize after this year.

Despite these modest gains over the past 5 years, I see program completion as an area of necessary focus in the next Program Review cycle. A current barrier of completion of the 2-semester Web Fundamentals Certificate of Achievement is scheduling of two courses, DMA C113 and DMA C117, every other year. As discussed in Section 1.2.3 Long-Term Schedule, these need to be restored to annual offerings to enable timely completion of this certificate. These are not entry-level courses so enrollments will not be as strong as other courses, but recent improvement of productivity across the discipline can sustain them.

Another curriculum change, approved in Fall 2021, was the combination of the Web Professional options into a general list of electives. This will increase flexibility and allow for more timely program completions.

## 3.2 Faculty Experience and Trends

### 3.2.1 Faculty Load and Productivity

#### *FTEF – By Contract Type*

	2016-17	2017-15	2018-19	2019-20	2020-21
Full-Time	1.00	1.20	1.07	2.13	2.53
Overload	2.20	2.66	2.86	2.00	3.53
Adjunct	0.00	0.33	0.47	2.06	0.53
Summer	0.33	0.33	0.33	1.00	0.33

#### *Distance Ed*

	2016-17	2017-15	2018-19	2019-20	2020-21
FTES	30.47	43.19	30.67	66.68	59.87
FTEF	3.53	4.53	4.40	6.53	6.06
FTES to FTEF Ratio	8.6	9.5	7.0	10.2	9.9

#### *Traditional*

	2016-17	2017-15	2018-19	2019-20	2020-21
FTES	0	5.31	19.37	22.30	27.67
FTEF	0	0.00	0.33	0.67	0.87
FTES to FTEF Ratio	0	0.0	58.2	33.5	32.0

#### *Total*

	2016-17	2017-15	2018-19	2019-20	2020-21
FTES	30.47	48.50	50.04	88.97	87.55
FTEF	3.53	4.53	4.73	7.19	6.93
FTES to FTEF Ratio	8.6	10.7	10.6	12.4	12.6

#### *Analysis*

Fulltime equivalent students (FTES) and fulltime equivalent faculty (FTEF) have both grown during this Program Review cycle. Distance education FTES has grown by 196% and FTEF has grown by 172%. Productivity has grown modestly by 115%. Total FTES has grown by 287% and total productivity has grown by 147%.

This is owed to dual-enrollment offerings, whereby our credit courses are offered at a participating high school, enrolled students are counted among FTES, and the teacher is paid for by the high school (thereby avoiding the FTEF denominator in the productivity equation). As previously discussed, we began offering dual-enrollment offerings at Tehachapi High School and Kern Valley High School during this Program Review cycle. We currently offer one course, DMA C102, at Kern Valley High School and two courses, DMA C102 and DMA C107, at Tehachapi High School. There is a possibility of offering dual-enrollment courses in the Eastern Sierra region in the near future, as a high school digital media arts instructor was hired recently.

Regarding the contract type data above, it is unclear why adjunct load was zero in 2016-17 because we have had steady adjunct staffing for many years. The full-time load should be relatively consistent.

Adjunct pools are reviewed annually. There is a trend of an abundance of applicants with expertise in video and filmmaking, where we do not have a projected need, and a scarcity of applicants with expertise in web development, where we would like some back up support. However, we currently have sufficient adjunct staffing for all of our courses. We have no need for an additional fulltime faculty member.

### 3.2.2 Program Evaluation

Generally, the Web Professional program and its ancillary programs, Web Fundamentals and Digital Media and Marketing, are functioning well. Strengths include student preparation for high wage careers, with an average salary of \$69,108 in California. Job growth is predicted to be 11.5% in the Cerro Coso service area and 9.3% in California. The curriculum is aligned with the top hard and soft skills for the industry. We have an active advisory committee that provides input about emerging industry skills.

The most significant positive impact has been the Web Professional curriculum revision from a prescribed linear pathway to a more flexible pathway that includes electives. This has regained the interest of students who were disenfranchised by the previous curriculum iteration. Declared majors across all of the digital media arts programs have grown 1,080% over the past five years. Unduplicated headcount has increased 425% during this period, whereas the college has decreased 4%. Census enrollments have grown 330%, section count has grown 264%, and average students per section has grown 125%. FTES has grown 287% and productivity has grown by 147%.

Success and retention were on a growth curve in the first four years of this cycle, but the 2020-21 academic year showed a decline, possibly owing to the pandemic. Retention and success have improved overall among at-risk ethnicities. The program has increased in diversity of sex and ethnicity. Completions are growing modestly, and this will be an area of focus in the next cycle.

We added a new certificate: Digital Media and Marketing, which consists of existing courses, but which reaches a new audience of potential students. Whereas the Web Professional and Web Fundamentals awards are intended to train students to work in a dedicated capacity of web development and design, the Digital Media and Marketing Certificate is intended to provide visual literacy skills to the general population so they may communicate effectively with customers, colleagues, and others which whom they interact regularly to communicate ideas.

All student learning outcomes were met with the exception of two outcomes, one of which was deleted in Spring 2021 because it was an artifact of an older focus of the program. The other outcome was determined to encompass too many skills to make it an effective measurement. This outcome was also revised in a Spring 2021 curriculum update. All program learning outcomes were met except for one in the Digital Media and Marketing certificate, which had a result of 72%. The targets for this certificate had been set to 80% In retrospect, these targets were set without consideration of what was common

practice at the college. Most programs at the college have PLO targets of 70%. We will revisit the targets and make them consistent.

Additional positive impacts have been the start of regular dual-enrollment courses at two high schools, one of which is interested in adding two more courses to allow students to complete the Digital Media and Marketing certificate in two years. We have also been able to reduce textbook costs by using LinkedIn Learning, paid for by the regional consortia.

An adverse impact has been the assignment of DMA C113 and DMA C117 to alternating years in the long-term schedule. They are both required courses in the Web Fundamentals Certificate, which is a one-year program. Completions are not as high as they could be, and counselors confirmed this schedule has discouraged students and adversely impacted completion.

The 2020-21 academic year reflected dips in performance across several metrics, likely owing to the COVID pandemic. These dips also correlate with college data. We had hoped to start offering selected on-ground offerings, but it appears it is still too soon with new COVID variants emerging and continued surges in cases.

A continued threat to the program is competition with other training options, including other community college programs, subscription training, and free training. Early in this program's history, we had little competition. We recognize that to set ourselves apart now, our instruction, regular and effective contact with students, and substantive feedback must be excellent. That said, we are tied for first place among online associate degree program completions and tied for seventh place among all California Community College programs for associate degree completions. Most web developers and interface designers have a Bachelor's degree, but 26% have some college or an Associate's degree.

An additional on-going challenge is accurately capturing employment data. Only approximately 15% of web developers and designers work for information technology employers, and another 18% are self-employed. The remainder are dispersed across all industries.

### 3.2.3 Response to Previous Goals

The following were the goals of the 2017 Program Review

#### *1. Close equity gaps among at-risk students. In Progress.*

At-risk students in the Digital Media Arts courses and programs have been African American, Native American, Hispanic/Latino, males, and students of ages 29 and younger. Strategies have included

- Seeking OEI course alignment
- Marketing to reach diverse populations
- Use of Early Alert
- Informing students of services and communities like Umoja
- Syllabus quizzes in every course

Improvements in retention and success have been seen in all of these groups, however enrollment growth has been less consistent. We would like to retain this as a goal in the next cycle.

#### *2. Increase enrollment. Completed.*

Total enrollments were 187 in 2016-17. Enrollments have been increasing steadily with total enrollments of 376 in 2020-21. Strategies have included curriculum revision to appeal to a greater diversity of student interests, social media marketing, and community presentations. These strategies will continue, but this goal is marked complete.

### 3. Improve Retention and Success. Completed.

In addition to retention and success improving among at-risk students, these markers have shown improvements overall. The same strategies that accommodate at-risk students also benefit all students. These strategies will continue, but this goal is marked complete.

### 4. Evaluate Adoption of Lynda.com. Completed.

Since the last Program Review, Lynda.com was acquired by LinkedIn and is now LinkedIn Learning. The California Community College Association for Occupational Education, Central Valley and Mother Lode Region has funded student access to LinkedIn Learning, and students can access this free of charge. They are able to search the library freely, and instructors can also curate pathways of video content to directly link within their courses. We have been able to forego required textbooks in many DMA courses, providing cost savings to students. This goal is marked complete.

### 5. Embed oral presentations within the program. Dropped.

There was discussion in the advisory committee about the value of students developing oral communication skills, in addition to written communication skills. We explored the idea of embedding oral presentations in several courses. A significant obstacle to implementation was securing equivalence of access for students with hearing impairments. We routinely make instructional video accessible with captions, but this is a one-time effort for the content – at least until instructional content changes. It would be unsustainable to caption oral presentations of every student in the class, every semester, and across multiple courses. This is also a skill that students acquire in SPCH C101 if they pursue the Web Professional Associate Degree. This goal has therefore been dropped.

## Part 4: Looking Ahead

### 4.1 Goals

#### 4.1.1 Two-Year Goals

##### *Action Plan for 2-Year Strategy 1*

<b>Concise Description of Strategy</b>	Increase program completions by 20%
<b>Measurement of Completion</b>	Institutional research data
<b>Timeline</b>	2022-24
<b>Responsible Person</b>	Department faculty

##### *Action Plan for 2-Year Strategy 2*

<b>Concise Description of Strategy</b>	Explore expansion of dual enrollment at THS to allow Digital Media and Marketing Certificate completion.
<b>Measurement of Completion</b>	Communications with CC Dual Enrollment Coordinator, THS Principal, and THS instructor
<b>Timeline</b>	2022-24
<b>Responsible Person</b>	Department faculty

##### *Action Plan for 2-Year Strategy 4*

<b>Concise Description of Strategy</b>	Revise long term schedule to restore DMA C113 and DMA C117 to annual offerings.
<b>Measurement of Completion</b>	Long term schedule document
<b>Timeline</b>	2022-24
<b>Responsible Person</b>	Department faculty

### 4.1.2 Five-Year Goals

#### *Action Plan for 5-Year Strategy 1*

<b>Concise Description of Strategy</b>	Increase program completions by 50%
<b>Measurement of Completion</b>	Institutional research data
<b>Timeline</b>	2022-27
<b>Responsible Person</b>	Department faculty

#### *Action Plan for 5-Year Strategy 2*

<b>Concise Description of Strategy</b>	Expand dual enrollment to Inyo County, offering one course per semester
<b>Measurement of Completion</b>	Schedule
<b>Timeline</b>	2022-27
<b>Responsible Person</b>	Department faculty

#### *Action Plan for 5-Year Strategy 3*

<b>Concise Description of Strategy</b>	Increase student diversity in the programs by developing marketing materials that are inclusive of a diverse student population
<b>Measurement of Completion</b>	Institutional research data
<b>Timeline</b>	2022-27
<b>Responsible Person</b>	Department faculty

## 4.2 Program Needs

### 4.2.1 Dialogue

Dialogue about program needs occurs in department meetings, advisory committee meetings, and one-on-one conversations. Dialogue can be improved in the area of student learning outcome assessment. Although all outcomes were met with a few exceptions, our discipline needs to be more intentional about discussing outcomes and how we can further improve instruction and student mastery of outcomes.

### 4.2.2 Staffing

Full-time and adjunct staffing is currently adequate. The new NeoEd system will make it easier to routinely review adjunct applicants and hire them, if appropriate.

### 4.2.3 Professional Development

Professional development opportunities for faculty are currently adequate.

### 4.2.4 Technology

Institutional support for facilities is needed at the Tehachapi Education Center. Smart classrooms are needed with optimal internet bandwidth and reliable connectivity.

### 4.2.5 Facilities and Physical Resources

Institutional support for facilities is needed at the Tehachapi Education Center. Smart classrooms are needed with optimal internet bandwidth and reliable connectivity.

### 4.2.6 Safety and Security

Institutional support for safety and security is currently adequate.

### 4.2.7 Marketing and Outreach

Additional institutional support for marketing and outreach is needed. When marketing requests are made through the Public and Information Office, there is lack of transparency about where requests fall

within the queue of requests and when a campaign will be launched. Campaigns often lag considerably following requests. It has been difficult to obtain analytics about marketing campaigns. There should be an online dashboard to make the queue of requests clear and transparent. It would be helpful for there to be a marketing staff member who is wholly dedicated to CTE programs.

## Part 5: Supporting Documentation and Appendices

### Course SLOs

#### DMA C102

1. Critique fine art, digital paintings, and iconography for use of design elements and principles. 60%
2. Apply design elements and principles to construct composite digital images. 95%
3. Demonstrate mastery in the use of software tools and features. 100%
4. Optimize web graphics that balance file size with considerations for quality. 94%
5. Evaluate the application of copyright law to specific scenarios. 94%

#### DMA C107

1. Create aesthetic illustrations and designs that employ a grid system, gestalt principles, typographic principles, color theory, and usability. 55%
2. Identify visual elements that constitute specific aesthetic style or genre, and create an original illustration in a particular style. 80%
3. Create an appropriate technical illustration to best convey certain types of data. 92%
4. Exhibit proficiency in vector application tools, techniques, and features. 73%

#### DMA C111

1. Describe current concepts in web technology, hypertext markup language (HTML), and cascading style sheets (CSS), including history, standards, validation, and best practices. 100%
2. Apply valid HTML markup to different types of content. 100%
3. Use HTML semantically. 100%
4. Apply valid CSS with concepts of the box model to control page design and layout. 100%

#### DMA C113

1. Evaluate the usability of Web content and apply usability principles, taking into account such issues as user technology, visual hierarchy, legibility and readability, writing style, site structure, navigation, search engine optimization, Intranets, eCommerce, and internationalization. 100%
2. Identify disabilities that impede access to Web content and categorize appropriate accommodations for each. 100%
3. Defend the position that sites should be accessible from a legal and ethical perspective. 100%

#### DMA C117

1. Design and produce visually attractive, usable, accessible, and interactive web content that takes the intended audience needs and expectations into account. 100%
2. Use Dreamweaver's features to create Web content that correctly separates semantic encoding from content. 100%
3. Apply characteristics of trends from design periods to a web design. 88%
4. Customize the theme of a content management system. 100%

#### DMA C119

1. Use valid, semantic Hypertext Markup Language (HTML) to enhance interaction between content, users, and search engines. 100%
2. Apply advanced Cascading Style Sheets (CSS) techniques including web fonts, gradients, transitions, transforms, and responsive design for multiple devices. 100%
3. Use HTML5 application program interfaces (APIs) including canvas, multimedia, geolocation, and others relating to web applications. 100%

4. Use the console to reveal and manipulate the Document Object Model of a given document. 100%
5. Demonstrate proficiency in using GitHub as a collaborative tool for version control. 100%

### DMA C131

1. Describe a general outline of the moviemaking process, including genres, formats, production processes, data storage, and compression. 100%
2. Describe the principles and aesthetics involved in video editing. 100%
3. Perform single camera operation using a digital camcorder. 100%
4. Perform basic lighting and sound recording. 100%
5. Perform basic digital video and audio editing using a nonlinear editing program. 100%

### DMA C201

1. Analyze the market and identify how to meet needs with specific products or services. 83%
2. Evaluate the suitability of revenue models for a specific application. 83%
3. Evaluate the suitability of different forms of digital marketing for a specific application. 83%
4. Develop an electronic commerce marketing plan. 83%
5. Design and develop an e-commerce web site. 72%

### DMA C211

1. Utilize the Document Object Model and manipulate object properties. 100%
2. Create interactive web content using programming concepts such as variables, expressions, operators, functions, events, arrays, decision statements, and repetition statements. 100%
3. Write scripts that manipulate form data. 100%
4. Create, read, and delete cookies. 100%

### DMA C213

1. Use the basic syntax of the PHP language to create PHP programs. 88%
2. Create dynamic web content using programming concepts. 88%
3. Write programs that will add, edit and delete records from a MySQL database. 100%
4. Write programs that process form input data and use it to update a MySQL database. 100%
5. Use PHP to maintain session state between pages or log-ins. 88%

### DMA C280

1. Use project management software to plan tasks, establish dependencies, and allocate and track resources. 100%
2. Develop a project specification. 100%
3. Collaboratively produce a commercial web site or app that satisfies the goals and expectations of the client. 100%
4. Communicate effectively with a design team during various phases of production. 100%

### IT C101

1. Describe existing and emerging technologies and their impact on organizations and society. 91%
2. Analyze the development and use of information systems in business. 92%
3. Solve common business problems using appropriate Information Technology applications and systems. 100%



## Advisory Committee Membership

First	Last	Title	Organization
Denise	Allen	Administrative Secretary, CTE	Cerro Coso Community College
Suzie	Ama	BIT Department Faculty Chair Fulltime Faculty Member	Cerro Coso Community College
Susan	Bamberger	Business Development Manager	General Dynamics Information Technology
Peggy	Breeden	Ridgecrest Mayor	City of Ridgecrest
Deanna	Campbell	Director, Eastern Sierra College Center	Cerro Coso Community College
Lawrence	Cosner	Medical Director	Ridgecrest Regional Hospital
Joe	Cota	Senior System Administrator	New Directions Technologies
Thomas	Della Santina	Business Director	The Jacobs Group
Matthew	Denny	Web Developer	Naval Air Warfare Center
Julie	Faber	Owner, Web Developer	Mountain Studio
Arnulfo	Gonzalez	Digital Media Teacher	Tehachapi High School
Nicole	Griffin	Dean, Career Technical Education	Cerro Coso Community College
Terri	Hack	Counselor	Cerro Coso Community College
Kristin	Hanle	Dual Enrollment Coordinator	Cerro Coso Community College
April	Hayman	Instructional Design Consultant	Self-employed
Matt	Hightower	Fulltime Faculty Member	Cerro Coso Community College
Ray	Hocker	Adjunct Faculty Member Videographer	Cerro Coso Community College Naval Air Warfare Center
Elaine	Jackson	Adjunct Faculty Member	Cerro Coso Community College
Jennifer	Jaeger	IT Program Manager	General Dynamics Information Technology
Valerie	Karnes	Fulltime Faculty Member	Cerro Coso Community College
Jennifer	Marshall	Job Development Specialist	Cerro Coso Community College
Ida	Perkins	Director	Tehachapi Chamber of Commerce
Jeff	Simpson	Economic Development Manager	Mono County
Tim	Smith	Director	Ridgecrest Chamber of Commerce
Michelle	Stallings	Adjunct Faculty Member Web Developer	Cerro Coso Community College Naval Air Warfare Center
Lisa	Stephens	Director, East Kern / Kern River Valley	Cerro Coso Community College
Vickie	Taton	Adjunct Faculty Member	Cerro Coso Community College
Tawni	Thomson	Director	Bishop Chamber of Commerce
Jabez	Vejendla	System Administrator	New Directions Technologies
Djuna	Withers	Data System Processing Manager	General Dynamics Information Technology

## Advisory Committee Minutes

## Part 5: Supporting Documentation and Appendices

### Course SLOs

#### DMA C102

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3. Demonstrate mastery in the use of software tools and features. 100%
4. Optimize web graphics that balance file size with considerations for quality. 94%
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1. Create aesthetic illustrations and designs that employ a grid system, gestalt principles, typographic principles, color theory, and usability. 55%
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3. Create an appropriate technical illustration to best convey certain types of data. 92%
4. Exhibit proficiency in vector application tools, techniques, and features. 73%

#### DMA C111

1. Describe current concepts in web technology, hypertext markup language (HTML), and cascading style sheets (CSS), including history, standards, validation, and best practices. 100%
2. Apply valid HTML markup to different types of content. 100%
3. Use HTML semantically. 100%
4. Apply valid CSS with concepts of the box model to control page design and layout. 100%

#### DMA C113

1. Evaluate the usability of Web content and apply usability principles, taking into account such issues as user technology, visual hierarchy, legibility and readability, writing style, site structure, navigation, search engine optimization, Intranets, eCommerce, and internationalization. 100%
2. Identify disabilities that impede access to Web content and categorize appropriate accommodations for each. 100%
3. Defend the position that sites should be accessible from a legal and ethical perspective. 100%

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1. Design and produce visually attractive, usable, accessible, and interactive web content that takes the intended audience needs and expectations into account. 100%
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1. Use the basic syntax of the PHP language to create PHP programs. 88%
2. Create dynamic web content using programming concepts. 88%
3. Write programs that will add, edit and delete records from a MySQL database. 100%
4. Write programs that process form input data and use it to update a MySQL database. 100%
5. Use PHP to maintain session state between pages or log-ins. 88%

### DMA C280

1. Use project management software to plan tasks, establish dependencies, and allocate and track resources. 100%
2. Develop a project specification. 100%
3. Collaboratively produce a commercial web site or app that satisfies the goals and expectations of the client. 100%
4. Communicate effectively with a design team during various phases of production. 100%

### IT C101

1. Describe existing and emerging technologies and their impact on organizations and society. 91%
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Elaine	Jackson	Adjunct Faculty Member	Cerro Coso Community College
Jennifer	Jaeger	IT Program Manager	General Dynamics Information Technology
Valerie	Karnes	Fulltime Faculty Member	Cerro Coso Community College
Jennifer	Marshall	Job Development Specialist	Cerro Coso Community College
Ida	Perkins	Director	Tehachapi Chamber of Commerce
Jeff	Simpson	Economic Development Manager	Mono County
Tim	Smith	Director	Ridgecrest Chamber of Commerce
Michelle	Stallings	Adjunct Faculty Member Web Developer	Cerro Coso Community College Naval Air Warfare Center
Lisa	Stephens	Director, East Kern / Kern River Valley	Cerro Coso Community College
Vickie	Taton	Adjunct Faculty Member	Cerro Coso Community College
Tawni	Thomson	Director	Bishop Chamber of Commerce
Jabez	Vejendla	System Administrator	New Directions Technologies
Djuna	Withers	Data System Processing Manager	General Dynamics Information Technology

## Advisory Committee Minutes



## Web Professional Advisory Meeting

### Agenda

September 30, 2015

Grape Leaf Restaurant

11:30 am – 1:00 pm

**Present:** Suzie Ama, Rich Christenson, Larry Cosner, Anthony Damiano, Matt Denny, Ray Hocker, Valerie Karnes, Ashlin Mattos, Mike McNair, Rene Mora, Frank Timone

**Absent:** Eric Bleau, April Hayman, Thomas Della Santina, Forrest Lloyd, Karen O'Connor, Ron Rodriguez, Elaine Rudis-Jackson, Julia Stepro

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
1. Call to order	S. Ama			
2. Approval of Agenda	S. Ama	Approved		X
3. Introductions	S. Ama	Introductions were made.		X
4. Web Professional Curriculum Updates	S. Ama	Digital Media Arts (Web Professional program) has experienced a severe decline in enrollments over the past 5 years (from 403 to 140). From 2010-2013, enrollments dropped commensurately with other programs at the college during a general downturn in college attendance. But during the past 2 years the college as a whole has plateaued, whereas the Web Professional program has continued to decline. This coincides with the conversion of the Web Design program, which included a large set of electives of graphic design, videography, art, and computer science courses, to the Web Professional program, which is now a linear program consisting solely of core requirements and focusing exclusively on web development. It has been speculated that the much narrower focus has excluded a population of students who desired the broader subject area exposure. Conversations with Cerro Coso counselors, Rene Mora and Missy Gross, confirmed that there is a significant population of students who are not being served by the new configuration. During this meeting, Rene also pointed out that the previous program configuration had several courses that also met General Education requirements, reducing the total number of courses that students needed. A		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>revision to the program is being proposed that has 4 foundation courses and 1 capstone course. Then students choose from one of two options, each option emphasizing either design or development and including 4 courses. Rene provided handouts of the previous program, highlighting courses that had dual applicability to general education requirements. Suzie also explained that DMA C280, currently named Web Production Management, would be renamed to Capstone Project (or similar), in which design-option students would develop a highly interactive web site and development-option students would develop an app.</p> <p>The committee was unanimously supportive of the proposal. Matt Denny shared that python is emerging as a high-demand scripting language, and Javascript skills would provide sufficient prerequisite skills. He said they do not use Java in his area of work (user experience design). Rich Christenson said that the classification of jobs that his colleague, Thomas Della Santina, oversees often list Python as a requirement. Rich also said that 8570 (Information Assurance) compliance is a requirement for most IT jobs on the base. Rich provided job descriptions for several opening positions. The positions require a B.S. or B.A Computer Science or a related field.</p> <p>Mike McNair suggested dual-enrollment possibilities for pathway courses or entry-level core courses at the high school. There was consensus that this would be a good way to generate interest among high school students.</p> <p>Rich pointed out that the student trend data shows that over 50% of our students are 29 years of age or younger. The majority have grown up playing video games and are relatively poor communicators. He stressed the need for communication skills to be taught, and others agreed. Students need to be able to accurately hear what the client needs and requests, and they should be able to effectively present a proposal. Students should be able to communicate orally and in writing with clients and colleagues. Ray Hocker added that students should be able to work with content--to integrate it into media effectively and appropriately. Rene suggested that Speech be added to the curriculum. The Business Communications course, which Frank Timpone teaches was also suggested as a possibility. The Technical Communication course,</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>which was previously part of the Web Design program was discontinued by the English Department, due to low enrollments. Suzie suggested that an alternative to adding course requirements might be to use embedded instruction and to use supplemental college resources. For example, it is likely that this year, the college will migrate to the learning management system, Canvas, which allows for video posting to class discussions. Students could receive instruction on how to deliver an effective oral presentation and have repeated opportunities throughout each semester and throughout the program to hone these skills. Also, Ashlin Mattos, the college's Job Development Specialist, has started offering resume writing and interviewing skills workshops to students and conducted mock interviews with several of Valerie Karnes' students last week. This program could potentially be expanded to assist more students.</p> <p>Larry Cosner asked how students might learn and understand the importance of certain courses or content that, at first glance, may not appear to be relevant to the program or the career for which they are preparing. Valerie said that we try to do this within courses—explain the relevance of content that is being presented. But conveying this to potential students is more challenging. Counselors may be able to contribute, and Rene said that PDEV C052 Becoming a Successful College Student helps students gain an appreciation how foundation classes do, in fact, make later content much more relevant and applicable.</p> <p>There was discussion about the name of the program, Web Professional, as being off-putting. Web Development would be an improvement. It was mentioned that the name of CSCI C101 Introduction to Computer Information Systems, might be off-putting to students who are interested in graphic design. CSCI C101 feeds into other programs, however, and there isn't as much flexibility with name changing of this course as there is with the web program.</p> <p>Suzie asked Ray about videography jobs on the Base. How many openings are there per year, and what kind of training is required? He said that 4 positions were filled in the past month, but this was unusual. Typically a couple positions need to be filled</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>annually. The Base prefers candidates with a B.A., but it is not required. Computer literacy with video editing software is essential. Ray said that the Design option in the proposed curriculum would enhance a candidate's prospects. He said that the title of the video course, Digital Video Production, would appeal to the broadest audience.</p> <p>Anthony Damiano conveyed that Forrest Lloyd was interested in the following topics.</p> <ol style="list-style-type: none"> <li>1. Responsive web design</li> <li>2. Latest SEO strategies and tools</li> <li>3. Web design (layout, colors, fonts, navigation, etc)</li> </ol> <p>These topics are, indeed, covered in existing courses: 1) DMA C119 Advanced Web Development, 2) DMA C113 Accessibility and Usability, and 3) DMA C117 Web Design with Dreamweaver.</p> <p>The meeting was adjourned at 1:00 PM.</p>		
7. Adjourned		1:00 PM		

Facilitator: S. Ama

Recorder: S. Ama

☐ Open/☐ Closed





## Web Professional Advisory Meeting

### Agenda

May 12, 2017

Zoom Virtual Meeting

12:00 pm – 1:00 pm

Present: Suzie Ama, Larry Cosner, Julie Faber, Elaine Jackson, Valerie Karnes, Karen O'Connor, Forrest Lloyd, Vickie Taton

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
1. Call to order	S. Ama			
2. Approval of Agenda	S. Ama	Approved		
3. Introductions	S. Ama	Introductions were made.		
4. Program Review: Key Findings	S. Ama	<p><b>Program Review: Key Findings</b></p> <p>Program review is a self-assessment of program relevance, appropriateness, currency, and student achievement. Academic programs are reviewed in this manner every 5 years at Cerro Coso. It is typical to find program strengths and weaknesses, and the weaknesses form the basis for action plans for improvement.</p> <p>Program strengths include:</p> <ul style="list-style-type: none"> <li>• Prepares students for high wage career (\$29.41/hour median)</li> <li>• Web development is a high-growth industry (18.7% projected increase over 5 years)</li> <li>• Statewide, colleges are not keeping pace with demand, so this program's service to the state region is appropriate.</li> <li>• Costs to students are low; good return on investment</li> <li>• The program has performed well on Perkins Core Indicators: Attainment, Completion, and Persistence.</li> <li>• Perkins data shows low employment, however a direct survey of graduates shows 65% employment.</li> <li>• Student success and achievement of student learning outcomes have shown improvements over the past 5 years.</li> </ul> <p>Graphs were presented to illustrate these.</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>Program weaknesses include:</p> <ul style="list-style-type: none"> <li>• Enrollment has declined substantially over the past five years.</li> <li>• Program completions are low.</li> <li>• Retention and success overall (while improving) still trail behind the college.</li> <li>• Course retention and success are low in DMA C111, DMA C113, and (to a lesser extent) DMA C102.</li> <li>• Retention and success are low across all courses for African American and Native American students (this is also a college trend).</li> </ul> <p>Graphs were presented to illustrate these.</p>		
5. Program Goals	S. Ama	<p><b>Program Goals:</b></p> <ul style="list-style-type: none"> <li>• Increase enrollment through curriculum redesign, consistent web marketing, and improved search engine optimization.</li> <li>• Increase completions through increased enrollment and improved retention and success.</li> <li>• Increase retention and success in DMA C102, DMA C111, and DMA C113 through improved implementation of tutoring, strategies to close equity gaps, refining scaffolding of concepts and skills, and closing the loop of student learning outcome assessment faster.</li> <li>• Embed oral presentations in courses and ensure that deaf students can be accommodated.</li> <li>• Explore ways of further reducing costs to students (Lynda.com)</li> <li>• More clearly define emphasis of Development option (use of APIs and scraping)</li> </ul>		
6. Discussion	S. Ama	<p><b>Discussion</b></p> <p>Suzie: The goal of curriculum redesign has been completed. In Fall 2016, the program was redesigned to include a set of core course and two sets of courses from which students choose either the Design Option or the Development Option. While the college's philosophy about web marketing has varied, there is now strong support for using social media marketing and linking from the institutional site to the brochure web site. Suzie has also contacted webprofessionals.org to correct a broken link to the brochure web site.</p> <p>Completions will be increased through increased enrollment and by improved retention and success. Improvements of retention and success will be concentrated on DMA C102, DMA C111, and DMA C113.</p> <p>Suzie, Elaine, and Vickie: All agreed that lack of computer literacy is a significant impediment to some students. Suzie said that this semester there were even some students who were unclear</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>about what a browser was. Larry commented that while younger students are technology-literate, this is primarily limited to the use of apps on cell phones that present content with little effort on the user's part. Yet, they are actually quite computer illiterate, lacking skills in managing files and navigating the operating system. Julie asked what kinds of pre-assessments we might be able to use to guide students to the remedial computer literacy course. Karen: After having completed some training, she was introduced to several pre-assessment tools, which she will forward to the department. She referred to these as "low risk formative assessments." Elaine has found that when presented with computer literacy pre-assessments, students either don't participate or they ignore the results. Rarely will a student drop when they are counseled that they are not quite ready for the course. Suzie said that we can't practically add CSCI C070 Computer Literacy as a prerequisite because many (or most) students are already computer literate, and the process to get a prerequisite waived is cumbersome and will be detrimental to enrollment. The best we can do is strongly encourage participation and focus on strategies that we can control, like utilizing tutoring and scaffolding concepts. Julie suggested leveraging technology to present alternate web based messages to students, depending upon their performance on a pre-assessment. Elaine recommended utilizing the Access Report in Canvas (People&gt;Analytics) to monitor how much instructional content students are using.</p> <p>Suzie reviewed the committee's discussion from Fall 2015 to incorporate opportunities for students to develop oral communication skills. She explained that there are sometimes conflicting pressures upon an academic program: the need to equip students with employable skills and the need to keep the program's total units attainable to support completions. She presented the idea of embedding oral presentations in some assignments in some courses, for this purpose. Canvas accommodates video recording for discussion posts. We would need to accommodate hearing impaired students, if necessary. The details and logistics will be further discussed and planned in upcoming months. Elaine suggested implementing oral presentations in small group settings or in one-on-one demonstrations to the instructor, using Zoom as a presentation technology.</p> <p>Suzie shared that during the Eastern Sierra College Center Business and Information Technology advisory meeting this semester, Julie Faber suggested that the development option of the program emphasize data scraping. Suzie asked Julie to confirm that data scraping was a means of extracting and reusing data when APIs are not available, and Julie said it was. Suzie asked if data scraping was more specialized and "niche" than development with APIs, and Julie said, no, and that the need is growing. Elaine asked Julie what a real world example of data scraping might be. Julie responded that one could scrape data pertaining to every PHP college course in the country and compile the results. Suzie asked if there might be copyright restrictions on a project like this, and Julie said there weren't. Larry added that data scraping can be extremely simple and straightforward, such as combining two web pages. But he said that it can quickly</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>get very complex. He suggested that students of older age groups may be generally better equipped to tackle complex scraping projects, due to the computer literacy gap for younger students.</p> <p>Vickie added that students should learn which mobile apps can enhance business. Suzie asked if DMA C201 eCommerce would be a good place for that to be taught, and Vickie said yes.</p> <p>Vickie said she really like the idea of switching to Lynda.com instead of textbooks. Suzie added that she and Vickie have the most opportunity to reduce costs this way because design theory books are very expensive. Vickie asked if we could make the switch now, but Suzie said that Dr. Marvin cautioned against making textbook changes after enrollment opens because students may have already made purchases. We can adopt this in Spring 2018.</p> <p>Julie suggested that we carefully consider the end goals of the program. The pathways for development, design, and business are very different. Suzie agreed.</p> <p>Elaine added that she feels that students need to be proficient in using GitHub and StackExchange. The classroom should model the collaborative work environment.</p>		
7. Advisory Member Updates	S. Ama	Suzie invited members to share about projects they are working on or developments in the community that might be relevant to the program. None were shared, but some of the above comments were offered following the invitation.		
8. Adjourned	S. Ama	1:15 PM		

Facilitator: S. Ama

Recorder: S. Ama

☐ Open/☐ Closed



## Web Professional Advisory Meeting

### Agenda

Dec. 4, 2017

Grapeleaf Restaurant

12:00 pm – 1:00 pm

Present: Suzie Ama, Larry Cosner, Elaine Jackson, Karen O'Connor, Ashlin Mattos, Terri Hack, Laura Vitale

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
1. Call to order	S. Ama			
2. Approval of Agenda	S. Ama	Approved		
3. Introductions	S. Ama	Introductions were made.		
4. Program Review: Key Findings	S. Ama	<p><b>Program Review: Key Findings</b></p> <p>Program review is a self-assessment of program relevance, appropriateness, currency, and student achievement. Academic programs are reviewed in this manner every 5 years at Cerro Coso. It is typical to find program strengths and weaknesses, and the weaknesses form the basis for action plans for improvement.</p> <p>Program strengths include:</p> <ul style="list-style-type: none"> <li>• Prepares students for high wage career (\$29.41/hour median)</li> <li>• Web development is a high-growth industry (18.7% projected increase over 5 years)</li> <li>• Statewide, colleges are not keeping pace with demand, so this program's service to the state region is appropriate.</li> <li>• Costs to students are low; good return on investment</li> <li>• The program has performed well on Perkins Core Indicators: Attainment, Completion, and Persistence.</li> <li>• Perkins data shows low employment, however a direct survey of graduates shows 65% employment.</li> <li>• Student success and achievement of student learning outcomes have shown improvements over the past 5 years.</li> </ul> <p>Graphs were presented to illustrate these.</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>Program weaknesses include:</p> <ul style="list-style-type: none"> <li>• Enrollment has declined substantially over the past five years.</li> <li>• Program completions are low.</li> <li>• Retention and success overall (while improving) still trail behind the college.</li> <li>• Course retention and success are low in DMA C111, DMA C113, and (to a lesser extent) DMA C102.</li> <li>• Retention and success are low across all courses for African American and Native American students (this is also a college trend).</li> </ul> <p>Graphs were presented to illustrate these.</p>		
5. Program Goals	S. Ama	<p><b>Program Goals:</b></p> <ul style="list-style-type: none"> <li>• Increase enrollment through curriculum redesign, consistent web marketing, and improved search engine optimization.</li> <li>• Increase completions through increased enrollment and improved retention and success.</li> <li>• Increase retention and success in DMA C102, DMA C111, and DMA C113 through improved implementation of tutoring, strategies to close equity gaps, refining scaffolding of concepts and skills, and closing the loop of student learning outcome assessment faster.</li> <li>• Embed oral presentations in courses and ensure that deaf students can be accommodated.</li> <li>• Explore ways of further reducing costs to students (Lynda.com)</li> <li>• More clearly define emphasis of Development option (use of APIs and scraping)</li> </ul>		
6. Discussion	S. Ama	<p><b>Discussion</b></p> <p>Suzie: The goal of curriculum redesign has been completed. In Fall 2016, the program was redesigned to include a set of core course and two sets of courses from which students choose either the Design Option or the Development Option. While the college's philosophy about web marketing has varied, there is now strong support for using social media marketing and linking from the institutional site to the brochure web site. Suzie has also contacted webprofessionals.org to correct a broken link to the brochure web site.</p> <p>Completions will be increased through increased enrollment and by improved retention and success. Improvements of retention and success will be concentrated on DMA C102, DMA C111, and DMA C113.</p> <p>Suzie, Elaine, and Vickie: All agreed that lack of computer literacy is a significant impediment to some students. Suzie said that this semester there were even some students who were unclear</p>		

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		<p>about what a browser was. Larry commented that while younger students are technology-literate, this is primarily limited to the use of apps on cell phones that present content with little effort on the user's part. Yet, they are actually quite computer illiterate, lacking skills in managing files and navigating the operating system. Julie asked what kinds of pre-assessments we might be able to use to guide students to the remedial computer literacy course. Karen: After having completed some training, she was introduced to several pre-assessment tools, which she will forward to the department. She referred to these as "low risk formative assessments." Elaine has found that when presented with computer literacy pre-assessments, students either don't participate or they ignore the results. Rarely will a student drop when they are counseled that they are not quite ready for the course. Suzie said that we can't practically add CSCI C070 Computer Literacy as a prerequisite because many (or most) students are already computer literate, and the process to get a prerequisite waived is cumbersome and will be detrimental to enrollment. The best we can do is strongly encourage participation and focus on strategies that we can control, like utilizing tutoring and scaffolding concepts. Julie suggested leveraging technology to present alternate web based messages to students, depending upon their performance on a pre-assessment. Elaine recommended utilizing the Access Report in Canvas (People&gt;Analytics) to monitor how much instructional content students are using.</p> <p>Suzie reviewed the committee's discussion from Fall 2015 to incorporate opportunities for students to develop oral communication skills. She explained that there are sometimes conflicting pressures upon an academic program: the need to equip students with employable skills and the need to keep the program's total units attainable to support completions. She presented the idea of embedding oral presentations in some assignments in some courses, for this purpose. Canvas accommodates video recording for discussion posts. We would need to accommodate hearing impaired students, if necessary. The details and logistics will be further discussed and planned in upcoming months. Elaine suggested implementing oral presentations in small group settings or in one-on-one demonstrations to the instructor, using Zoom as a presentation technology.</p> <p>Suzie shared that during the Eastern Sierra College Center Business and Information Technology advisory meeting this semester, Julie Faber suggested that the development option of the program emphasize data scraping. Suzie asked Julie to confirm that data scraping was a means of extracting and reusing data when APIs are not available, and Julie said it was. Suzie asked if data scraping was more specialized and "niche" than development with APIs, and Julie said, no, and that the need is growing. Elaine asked Julie what a real world example of data scraping might be. Julie responded that one could scrape data pertaining to every PHP college course in the country and compile the results. Suzie asked if there might be copyright restrictions on a project like this, and Julie said there weren't. Larry added that data scraping can be extremely simple and straightforward, such as combining two web pages. But he said that it can quickly</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>get very complex. He suggested that students of older age groups may be generally better equipped to tackle complex scraping projects, due to the computer literacy gap for younger students.</p> <p>Vickie added that students should learn which mobile apps can enhance business. Suzie asked if DMA C201 eCommerce would be a good place for that to be taught, and Vickie said yes.</p> <p>Vickie said she really like the idea of switching to Lynda.com instead of textbooks. Suzie added that she and Vickie have the most opportunity to reduce costs this way because design theory books are very expensive. Vickie asked if we could make the switch now, but Suzie said that Dr. Marvin cautioned against making textbook changes after enrollment opens because students may have already made purchases. We can adopt this in Spring 2018.</p> <p>Julie suggested that we carefully consider the end goals of the program. The pathways for development, design, and business are very different. Suzie agreed.</p> <p>Elaine added that she feels that students need to be proficient in using GitHub and StackExchange. The classroom should model the collaborative work environment.</p>		
7. Advisory Member Updates	S. Ama	Suzie invited members to share about projects they are working on or developments in the community that might be relevant to the program. None were shared, but some of the above comments were offered following the invitation.		
8. Adjourned	S. Ama	1:15 PM		

Facilitator: S. Ama

Recorder: S. Ama

☐ Open/☐ Closed





## Web Professional Advisory Meeting

### Agenda

Dec. 14, 2017

Pupfish Cafe

12:00 pm – 1:00 pm

Present: Suzie Ama, Julie Faber, Vickie Taton, Stephen, Eric

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
1. Discussion about industry	S. Ama	<b>General Discussion</b> <ol style="list-style-type: none"> <li>Eric and Stephen described the work they do. Eric works for NVIDIA as a programmer. Stephen is a developer for a company that is scraping data from ASSIST and college catalogs to inform students of articulated courses at other colleges. This could enable them to graduate without delays due to local impacting of programs.</li> <li>There was discussion about program configuration. Eric and Stephen asked whether students realize that there is minimal opportunity for students who do not know web programming. Suzie said that this is conveyed to them, but students' interests in web design and content creation often still prevail. Vickie suggested that programming may feel overwhelming to some students.</li> <li>Ruby on Rails was identified as more important than Python for web development, but Python has greater demand for general development.</li> <li>Suzie mentioned that she is seeking an additional adjunct instructor in web development with specific experience in data scraping.</li> <li>Benefit of common work area and suggestion for new public internet café in Mammoth as an alternative to the CC LRC when it is not open.</li> <li>There was discussion of student risk factors. Vickie and I discussed that we employ best practices that are based in research to minimize attrition, but there are often factors outside of our control, including family, health, work, food, and housing obstacles.</li> <li>There was discussion about the value of a rapid development assignment to simulate the schedule of an authentic project. Stephen offered to generate ideas for such an assignment if I shared formative assignments with him.</li> <li>There was discussion about showcasing student work to a larger audience. We could</li> </ol>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		also reach out to the Art department and ask if we could do a show of student illustration and digital imaging work in the gallery. The capstone course has this outcome naturally, given that students develop a real non-profit or commercial site during the semester. Suzie mentioned that she is searching for an appropriate capstone project for the Spring 2018 term and asked the group to let he know if they were aware of any non-profits or businesses that would like their site redesigned.		
8. Adjourned	S. Ama	1:15 PM		

Facilitator: S. Ama

Recorder: S. Ama

☐ Open/☐ Closed



## Web Professional Advisory Meeting

### Agenda

May 2, 2018

Zoom Webinar

11:30 pm – 12:30 pm

Present: Suzie Ama, Julie Faber, Ray Hocker, Elaine Jackson, Karen O'Connor, Laura Vitale

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
1. Review of Program Review Findings and Current Goals	S. Ama	<p><b>General Discussion</b></p> <p>Suzie reviewed key findings of the 2017 Web Professional Program Review. Program strengths are high wages, high industry growth, unfilled training demand throughout the State, good return on investment for students, and good performance on several Perkins Core Indicators. Direct surveying of students shows 65% employment in the field. And student success and retention is improving, although still lagging behind the college. Program weaknesses are declined enrollments, low completions, success and retention lagging behind college, particularly low success and retention in DMA C111, DMA C113, and (to a lesser extent) DMA C102. Retention and success are also low across all courses for African American and Native American students (also a college trend). The program is being monitored by Administration for improvements in enrollments and completions. We need to show steady improvements, with targets for 65% average course fill rate and at least 10 completers per year by 2020. Karen mentioned that the emphasis is on improvement. Low completions are a downstream effect of low enrollments, and low enrollments were due to the program's curriculum configuration, competition from other training opportunities on the web, and the need for more marketing.</p> <p>Program goals are:</p> <ul style="list-style-type: none"> <li>• Increase enrollment through curriculum redesign, consistent web marketing, and improved search engine optimization.</li> <li>• Increase completions through increased enrollment and improved retention and success.</li> <li>• Increase retention and success in DMA C102, DMA C111, and DMA C113 though improved implementation of tutoring, strategies to close equity gaps, refining scaffolding of concepts and skills, and closing the loop of student learning outcome</li> </ul>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>assessment faster.</p> <ul style="list-style-type: none"> <li>• Embed oral presentations in courses and ensure that deaf students can be accommodated.</li> <li>• Explore ways of further reducing costs to students (Lynda.com)</li> <li>• More clearly define emphasis of Development option (use of APIs and scraping)</li> </ul> <p>The curriculum has been revised to accommodate a broader range of student interests and has been published in the 2018-2019 catalog.</p> <p>Current marketing efforts include outreach to Burroughs and Coachella Valley high schools. The brochure web site is being redesigned, and will feature more video. A YouTube channel has been created and will be populated with instructor interviews, student interviews, and short instructional lectures/demonstrations. The Cerro Coso Public Information Office is conducting Facebook ad and Google AdSense campaigns. The Dean of Career Technical Education has hired a blogger to profile programs, and the Web Professional program is first on his docket.</p> <p>We are seeking to improve retention and success—especially in DMA C102, DMA C111, and DMA 113—with online tutoring. There have been legal challenges to overcome with remote tutoring because line-of-sight of faculty member to tutor is needed. However, the college determined that Zoom would be sufficient if the Learning Assistance Center Coordinator is also logged into the meeting. We have a wonderful tutor from the Coachella Valley, Enrique Franco Martin, who was able to begin tutoring late this semester. Elaine said that one of her students improved substantially after starting to meet with Enrique. Enrique is set up to begin tutoring at the start of Summer and Fall with no delays. The college is implementing the student learning outcome assessment portal, eLumen, which should make outcomes assessment more integrated with our instructional workflow and, therefore, facilitate more frequent and meaningful assessment.</p> <p>We are reducing costs to students by offering them free access to Lynda.com, through the NexusEdge portal. Some instructors have been able to eliminate textbooks, as a result. Elaine has found limited value because she was using many video courses, which was complex to coordinate. Suzie, Ray, and Vickie have found it to be positive and easy to replace textbook content with the video training. It may work best for courses that teach software applications. Ray discussed its particular value in Digital Video Production because he allows students to choose any video editing software application they wish, and Lynda.com supports all of those applications. NexusEdge also offers students free mentoring and career coaching. Cerro Coso's Job Development Specialist, Ashlin Mattos, is a mentor on the platform, enabling him to expand his services to online students.</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>Goals for the coming year include:</p> <ul style="list-style-type: none"> <li>• Outreach to Owens Valley High Schools</li> <li>• Continue partnership with Coachella Valley High School</li> <li>• Continue with annual social media and web marketing campaigns.</li> <li>• Finish brochure web site redesign</li> <li>• Develop YouTube channel content</li> <li>• Course-level student learning outcome assessment</li> <li>• Embed oral presentations in courses</li> <li>• Offer DMA C214 Web Development with Python course and/or cross-list with CSCI C251 Introduction to Programming Concepts and Methodologies, which uses Python.</li> </ul> <p>With respect to improving persistence and completion, Karen shared about an assignment that she requires in her entry Business Office Technology course. Students develop an educational plan, including meeting with a counselor. She introduces the project in Week 5 and gives students several weeks to meet with a counselor and develop the plan. The plan also includes the identification of campus resources to support their success. There was some discussion between Suzie, Elaine, and Karen about which course in the Web Professional program would be most appropriate for this assignment. The consensus was that DMA C111 would be best because it is a first semester course and the plan would help guide students' scheduling decisions in upcoming semesters.</p> <p>Julie mentioned the challenge of measuring a program's viability with graduate employment because 95% of our students will be self-employed. She wondered what kind of assessment could be used to accurately measure. Suzie said that she is connected with graduates through LinkedIn, and reported that 65% of students are working in the industry, based on information in their LinkedIn profiles. Fortunately, the college is not requiring a specific level of employment in its assessment of program viability.</p> <p>Ray mentioned that video literacy has grown substantially. Several years ago, very few students were uploading video to YouTube regularly. His survey of students last Fall showed that the majority of students are producing and uploading video now.</p> <p>Karen suggested creating a Digital Media Skills certificate that would be specifically promoted to business office technology students. The idea would be to provide office workers with a level of media literacy, including basic web development, digital imaging, digital video, and computer illustration. She and Suzie have discussed this previously and both support the idea. Suzie will propose this curriculum in the Fall.</p> <p>Suzie asked Julie if she is aware of whether the high schools in our northern service area are</p>		

TOPIC	FACILITATOR	SUMMARY/ FOLLOW-UP	O	C
		<p>running ROP classes. She is not aware of what Mammoth is doing, but Bishop does not have any ROP classes. They do, however, have a club, and five female students are creating an app for a local restaurant. The Technology Center has also been moved to the high school. There may be outreach opportunities there, and Suzie will contact Julie for the points of contact.</p> <p>Elaine inquired about the feasibility of offering a community education course on “Running Your Own Web Site.” Suzie shared that community education courses are not credit courses and can’t be credited toward enhancements to the Web Professional program. The funding for community education and credit courses are also entirely separate. It is not permissible for faculty members who are paid by the academic/credit side of the college to be involved in coordinating community education courses. Kara Tolbert coordinates community education, and if someone has interested in the development of this type of course, they should contact her.</p> <p>Elaine and Julie discussed the value of students using Inspector to modify the document object model. Elaine incorporates this into her classes.</p> <p>The meeting was adjourned at 12:35 PM.</p>		
8. Adjourned	S. Ama	12:35 PM		

Facilitator: S. Ama

Recorder: S. Ama

☐ Open/☐ Closed



## Minutes

Committee Name: IWV Web Professional/Digital Media Advisory

Date: November 12, 2021

Time: 12:00 – 1:00

Location: Zoom

Attendees	
Suzanne Ama	Department Chair Business CCCC
Matt Hightower	Faculty CCCC
Michelle Stallings	Faculty CCCC
Larry Cosner	Medical Community
Nicole Griffin	Dean CTE CCCC
Ray Hocker	Faculty CCCC
Deanna Campbell	Director Bishop/Mammoth Campuses
Vickie Taton	Faculty CCCC

1. Call to Order – *the meeting was called to order by Professor Suzanne Ama at 12:02 p.m.*
2. Introductions - *all those in attendance introduced themselves and their role at the college or in the community.*
3. Program Review 2021 – *A thorough and detailed program review was presented and discussed. Presentation is attached.*
4. Discussion – Professor Ama opened the floor for discussion:
  - a Vickie Taton discussed the need to move towards embracing mobile apps and cross device usage within the programs. She also discussed the need to recognize the uptick in businesses operating solely from social media platforms. A need to stay up to date with technology and trends is important for the programs.
  - b Ray Hocker expressed a need for a digital photography class. His proposal is to offer the course once a year. Discussion took place on the feasibility of folding it into existing classes, the consensus was, it would be difficult to do based off the time it

takes to learn and apply Adobe Photoshop. Professor Hocker also discussed partnering more closely with SSUSD to meet digital media demands. Professor Ama expressed the desire for more dual enrollment opportunities with BHS but currently there is not a qualified teacher.

- c** Larry Cosner addressed the need for real world experiences for young people coming into the professional world. A gap exists between what young people think of social media and its applications, as well as how to be professional in a social media world. Is it possible to partner with business for externships for students to gather real world knowledge with social media in a professional sense being the main application? Professor Ama will discuss with Jennifer Marshall, CCCC job development specialist.
- d** Michelle Stallings reported that a majority of the drops or completion issues, in her courses, correlate to the pandemic or too much going on in life. This report lead to the discussion of how to better communicate to students the requirements and intensity of the courses. Professor Ama adds the time requirements to her syllabus quiz. Another suggestion was to make sure the counseling department is communicating to students effectively about the program requirements, and for professors within the web professionals/digital media courses to communicate their expectations in the syllabus; as well as, drop and withdrawal dates.

**5.** Adjournment – *Professor Ama adjourned the meeting at 1:04*

Meeting Chair: Suzanne Ama

Recorder: Denise Allen





# Minutes

**Committee Name: Web Professional Advisory Meeting**

**Date: December 4, 2018**

**Time: 7:00 PM**

**Location: Zoom** <https://cccconfer.zoom.us/j/3094482728>

**Present: Suzie Ama, Terri Hack, Vickie Taton**

**Absent:** April Hayman, Thomas Della Santina, Djuna Withers, Elaine Jackson, Eric Bleau, Forrest Lloyd, Arulfo Gonzalez, Jennifer Jaeger, Jule Faber, Karen O'Connor, Kathleen O'Brien, Kristin Hanle, Laura Vitale, Larry Cosner, Matt Hightower, Matthew Denny, Maura Murabito, Peggy Breeden, Ray Hocker, Susan Bamberger, Valerie Karnes

## 1. Call to Order

1.1 At 7:07 PM

## 2. Approval of Agenda

2.1 Agenda Approved

## 3. Approval of Minutes and Action Items

3.1 Minutes Approved

## 4. Review of Goals

4.1 Suzie shared the program's progress on increased retention. The latest data is from the 2017-2018 academic year. The previous four years exhibited declines in enrollment of 26%, 25%, 4%, and 13% respectively, however 2017-2018 showed a gain of enrollment of 77%. We primarily attribute this to the new program curriculum which was published in the catalog in Fall 2017. The new configuration accommodates students with interests in design and multimedia. There is a core of requirements, and then students choose a Design Option or a Development Option, each of which includes four courses. We also attribute increases in enrollment to coordinated marketing efforts through social media and Google AdWords.

4.2 Increased completions is also Program Review goal, however, it will take another year for the benefits of recent enrollment increases to propagate through to student completion. Our goal is double digit completions across all web-related degree and certificates annually. We had 9 completers in 2017-2018, however, this is a slightly inflated number because the DMA C280 capstone class was not offered in Spring 2017. There was only 1 completer in Spring 2017, so the 9 completers in 2018 reflected students from a two-year cohort, rather than a single year. But again, we expect the



# Minutes

77% increase in enrollment to significantly improve our completions, perhaps as soon as May.

- 4.3 Success and retention is relatively flat. Vickie discussed the problem of students participating up until the Withdraw deadline, and then dropping off completely. Suzie asked Terri if this might be due to students gaming the financial aid system, and she said that is true to some extent. Others just get overwhelmed at that point in the semester.
- 4.4 Embedding oral presentations in courses poses an accessibility challenge, however, including this requirement in DMA C113 makes sense, as students must learn to caption video. This will be implemented in Spring 2019.
- 4.5 LinkedIn acquired Lynda.com, and students' free access to video instruction was interrupted early in the semester as the transition was being worked out. By the second week of the Fall semester, the problems were ironed out, and students used LinkedIn Learning video all semester in several courses. This is a strategy for lowering textbook costs for students.

## 5. Outreach to high schools

- 5.1 Suzie is scheduled to present to Tehachapi High School students immediately following winter break in Arulfo Gonzalez' course. He is teaching DMA C102, and students are dual enrolled. He will be teaching DMA C107 in the Spring.
- 5.2 Suzie and Vickie will schedule presentations at the high schools in Bishop and Mammoth in the Spring.
- 5.3 Suzie will also return to the Coachella Valley High School to encourage online dual enrollment and participate in the CVHS Career Day.

## 6. Curriculum updates

- 6.1 Suzie and Karen O'Connor are collaborating on the renewal of the Digital Media Skills certificate, which will be a visual and media literacy certificate for non-web majors, marketed specifically to Business Office Technology courses. It will consist of DMA C102 Digital Imaging, DMA C107 Computer Illustration, DMA C111 Fundamentals of Web Development, and DMA C131 Digital Video Production. Vickie discussed the importance of social media marketing skills for business owners, citing that entrepreneurs along the Digital 395 lack these skills. Suzie asked if DMA C201 eCommerce would be appropriate to add to the certificate. Vickie said it would, but she would like to minimize some of the technical networking content and expand content pertaining to social media marketing. Suzie agreed with that strategy.
- 6.2 Suzie is going to revise the Web Professional Certificate and AS to remove DMA C214 Web Development with Python and replace it with CSCI C251 Introduction to Programming Concepts and Methodologies, which has Python as a course topic. This will better manage enrollments to use a single course in multiple programs.



# Minutes

## 7. Marketing

- 7.1 The Web Professional brochure web site was redesigned over the summer.
- 7.2 Plans to develop YouTube channel content have not been complete yet, but is a goal for the coming year. The intention is to publish short video demonstrations from courses as teasers for course content. We also plan to publish interviews of faculty and students to market the program.

## 8. DMA C280 Capstone Project

- 8.1 Suzie shared with the group that she is seeking for a client/project for DMA C280 in the Spring, during which students redesign a web site for a non-profit or commercial client. Vickie thinks she may have a lead and will get back to Suzie on this within the next 2 weeks. Suzie needs to begin coordination with the client several weeks in advance of the semester.

## 9. Review of Action Items:

- 9.1 Continue to improve retention and success by promoting tutoring, early alerts. Align courses with the OEI rubric.
- 9.2 Add oral presentation with captioning assignment to DMA C113.
- 9.3 High school presentations
- 9.4 YouTube channel content
- 9.5 Submit curriculum changes to CIC.
- 9.6 Vickie will follow up with the potential DMA C280 client within the next 2 weeks and let Suzie know if they are interested in a free web site redesign and are able to commit to communicating with students at key points during the semester.

## 10. Future Agenda Items

- 10.1 None identified

## 11. Future Meeting Dates

- 11.1 Spring 2019, TBD

## 12. Adjournment

- 12.1 8:03 PM

Meeting Chair: Suzie Ama

Recorder: Suzie Ama



# Minutes

**Committee: Digital Media and Marketing Certificate Advisory Committee**

**Date: September 27, 2019**

**Time: 2:00 PM**

**Location: Tehachapi Chamber of Commerce**

**Present: Suzie Ama, Ida Perkins**

## 1. Call to Order

1.1 2:00

## 2. Background of existing programs: Web Professional and Web Fundamentals

- 2.1 Almost 20 years ago, the Web Design Certificate of Achievement and Associate of Science was established. It originally had a core set of classes and a varied list of electives from which students chose three courses. In 2012, it was recommended that the program become a linear pathway of web development without electives, in order to best prepare students for high wage web development work. While this was excellent preparation for completers, this disenfranchised many other students, and enrollments dropped precipitously, putting the program at risk. This was corrected in 2016 when the program was again revised to offer a core set of classes and two options from which students could choose: Web Design Option or Web Development option. The first year after this program revision was published in the catalog, enrollments increased 76%. Enrollments have continued to increase, although not as steeply as the first year after the revision was published.
- 2.1 Shorter certificates are also encouraged to provide a midway academic milestone during the pursuit of a longer program or to provide a smaller, but still meaningful, set of job skills. The Web Fundamentals certificate (19 units) was created with this objective.

## 3. Digital Media and Marketing Certificate – Labor Market information

- 3.1 The Information Communication Technologies & Digital Media (ICT-DM) Sector Navigator, Stephen Wright, says that California Community College Chancellor's Office data suggests that there is saturation in the training for dedicated digital media professions, but the community colleges are undertraining in embedding foundation digital skills across all professions.
- 3.2 The need for embedded digital media skills among non-design professionals has been noted in a 2005 survey conducted by the Multimedia and Entertainment Initiative of the California Community College Chancellor's office. Of 613 California survey participants, the routine use and need for digital media skills was found across industry, including



accounting/finance, administration, consulting, customer service, education, engineering, healthcare, human resources, legal, manufacturing, marketing, information technology, research and development, and sales.

- 3.3 Burning Glass Technologies, a labor market research company, in their 2015 report entitled "The Digital Skills Gap in the Workforce," found that 80% of middle skill jobs require digital skills. Their report encompassed all digital skills, including basic office applications, customer relationship software, computer and network support, digital media and design, social media tools, and search engine outcomes analysis. The data shows that workers' skills are not keeping pace with the digital skills needs of occupations.
- 3.4 In response to this need, the Digital Media and Marketing certificate is being proposed to provide non-media professionals (i.e. those who do not work full-time in the digital media industry) with a set of core competencies in visual communication with digital media. This certificate will provide participants with the skills to communicate more effectively with customers, clients, colleagues, vendors, and other stakeholders in their business sector. It will provide participants with foundation skills in logo design, brochure design, technical illustration, photography and photo retouching, video editing, web site development, eCommerce, and social media marketing. The certificate is 12 units, consisting of a selection of three digital media electives and a capstone course in eCommerce and Social Media Marketing. It can be completed in two semesters and is proposed as a 100% online program.
- 3.5 Suzie is engaged in dialog about this program with advisory committee members in Ridgecrest, Bishop, and Tehachapi.

#### **4. Digital Media and Marketing Certificate – Committee Input**

- 4.1 Ida Perkins, President of the Tehachapi Chamber of Commerce, was very enthusiastic about the program. She said that she believes there is a need for the program in the community, and she herself is interest in taking the courses. She mentioned that she has been very successful self-training in the Adobe Creative Suite applications, but she feels that formally completing courses would further enhance her skills.
- 4.2 Ida mentioned that Stephanie Garcia from the Tehachapi News would also likely be very interested in and supportive of the program.
- 4.3 Ida suggested that content about editing Adobe Acrobat files be included. Suzie said this would be easy to accommodate in DMA C107 Illustration and Design, which includes document design.
- 4.4 There were no other suggested changes to the proposed curriculum.

#### **5. Digital Media and Marketing Certificate – Marketing the Program**

- 5.1 Ida offered to help promote the program by allowing Suzie to give periodic presentations to the Chamber. Suzie said that she would be very eager to present.



## **6. DMA C280 Capstone Project**

6.1 Suzie shared that she is seeking a client/project for DMA C280 in the Spring, in which students redesign a web site for a non-profit or commercial client. The client needs to be identified in December so Suzie can prepare for the project. The Spring semester starts January 18. Ida said that she would ask the community if there is an interest in this opportunity.

## **7. Review of Action Items:**

7.1 Suzie is presenting the certificate and revised courses at the Curriculum and Instruction Council on Friday, Oct. 18.

## **8. Future Meeting Dates**

8.1 TBD

## **9. Adjournment**

9.1 2:45 PM

Meeting Chair: Suzie Ama

Recorder: Suzie Ama



## Sign-in Sheet

**Committee:** Digital Media and Marketing Certificate Advisory Committee

**Date:** September 27, 2019

**Time:** 2:00 PM

**Location:** Tehachapi Chamber of Commerce

The following members were in attendance and have approved the minutes.

Name	Title	Email	Signature
Ida Perkins	President of the Tehachapi Chamber of Commerce	idaperkins@tehachapi.com	



# Minutes

**Committee: Digital Media and Marketing Certificate Advisory Committee**

**Date: October 15, 2019**

**Time: 9:30 AM**

**Location: Pupfish Café, Bishop, CA**

**Present: Suzie Ama, Julie Faber, Jeff Simpson, Vickie Taton, Tawni Thomson**

## 1. Call to Order

1.1 9:45

## 2. Background of existing programs: Web Professional and Web Fundamentals

- 3.1 Almost 20 years ago, the Web Design Certificate of Achievement and Associate of Science was established. It originally had a core set of classes and a varied list of electives from which students chose three courses. In 2012, it was recommended that the program become a linear pathway of web development without electives, in order to best prepare students for high wage web development work. While this was excellent preparation for completers, this disenfranchised many other students, and enrollments dropped precipitously, putting the program at risk. This was corrected in 2016 when the program was again revised to offer a core set of classes and two options from which students could choose: Web Design Option or Web Development option. The first year after this program revision was published in the catalog, enrollments increased 76%. Enrollments have continued to increase, although not as steeply as the first year after the revision was published.
- 3.1 Shorter certificates are also encouraged to provide a midway academic milestone during the pursuit of a longer program or to provide a smaller, but still meaningful, set of job skills. The Web Fundamentals certificate (19 units) was created with this objective.

## 3. Digital Media and Marketing Certificate – Labor Market information

- 3.1 The Information Communication Technologies & Digital Media (ICT-DM) Sector Navigator, Stephen Wright, says that California Community College Chancellor's Office data suggests that there is saturation in the training for dedicated digital media professions, but the community colleges are undertraining in embedding foundation digital skills across all professions.
- 3.2 The need for embedded digital media skills among non-design professionals has been noted in a 2005 survey conducted by the Multimedia and Entertainment Initiative of the California Community College Chancellor's office. Of 613 California survey participants, the routine use and need for digital media skills was found across industry, including





accounting/finance, administration, consulting, customer service, education, engineering, healthcare, human resources, legal, manufacturing, marketing, information technology, research and development, and sales.

- 3.3 Burning Glass Technologies, a labor market research company, in their 2015 report entitled "The Digital Skills Gap in the Workforce," found that 80% of middle skill jobs require digital skills. Their report encompassed all digital skills, including basic office applications, customer relationship software, computer and network support, digital media and design, social media tools, and search engine outcomes analysis. The data shows that workers' skills are not keeping pace with the digital skills needs of occupations.
- 3.4 In response to this need, the Digital Media and Marketing certificate is being proposed to provide non-media professionals (i.e. those who do not work full-time in the digital media industry) with a set of core competencies in visual communication with digital media. This certificate will provide participants with the skills to communicate more effectively with customers, clients, colleagues, vendors, and other stakeholders in their business sector. It will provide participants with foundation skills in logo design, brochure design, technical illustration, photography and photo retouching, video editing, web site development, eCommerce, and social media marketing. The certificate is 12 units, consisting of a selection of three digital media electives and a capstone course in eCommerce and Social Media Marketing. It can be completed in two semesters and is proposed as a 100% online program.
- 3.5 Suzie is engaged in dialog about this program with advisory committee members in Ridgecrest, Bishop, and Tehachapi.

#### **4. Digital Media and Marketing Certificate – Committee Input**

- 4.1 The committee is very enthusiastic about the certificate. Tawni Thomson, Executive Director of the Bishop Chamber of Commerce, said that every business in the Eastern Sierra needs this.
- 4.2 Jeff Simpson, Economic Development Manager of Mono County, agreed.
- 4.3 Julie Faber, web developer and owner of Mountain Studio, said that she wants her clients to complete this program.
- 4.4 Tawni also said that government agencies need this. The group asked if the name of the certificate should be modified to be: Digital Media and Communications.

#### **5. Digital Media and Marketing Certificate – Marketing the Program**

- 5.1 Certificate of Achievement – There were no recommendations to add or delete required courses, but it was suggested that a refresher course be available to graduates of the program because technologies and trends change so rapidly. Vickie shared that this is an on-going concern for the existing web programs, as well, but we address this by teaching students to be lifelong learners. We tell students to expect that what they are



learning today will be outdated in a few years. The formal education they receive at Cerro Coso equips them to competently self-train throughout their career.

5.2 Julie requested that at least one of the courses be offered on-ground so that participants feel a stronger relationship with the program and are more invested.

5.3 DMA C102

5.3.1 Julie suggested adding web graphic compression/optimization tools: Smoosh (a WordPress plugin) and tinypng.com.

5.4 DMA C107

5.4.1 No specific recommendations were made to proposed course outline.

5.5 DMA C111

5.5.1 Julie recommended adding instruction on “mobile first design.” The Googlebot now primarily crawls with a smartphone agent, and sites that are not responsive and optimized for mobile are penalized in the indexing process. She also pointed out that Google now looks for pages with at least 2,500 words to establish “authority” on a topic, affecting ranking.

5.5.2 Julie recommended that instruction be provided in linking to Google docs and using cloud storage. She said that this could be incorporated into assignments, rather than making it part of the course topical outline.

5.6 DMA C131

5.6.1 Jeff recommended adding storyboarding and storytelling to the topical outline.

5.7 DMA C201

5.7.1 Julie recommended adding General Data Protection Regulation (GDPR) compliance, which is required now of commerce within the European Union.

5.7.2 Julie recommended added responsive themes to outline. If sites are not responsive to small screens, they will not be indexed by Google.

5.7.3 Jeff recommended adding a topic about social media influencers.

5.7.4 Suzie asked the group whether there should be content about management of online reviews. The group affirmed this. This process is called “reputation management.” Reviews occur whether or not business owners are engaged, and they would be wise to actively engage in the process in a way that assumes responsibility for errors and manages expectations. It is also very important to keep business information (hours, location, etc) correct on review sites.

5.7.5 There was discussion about the process of “funnel marketing,” starting with marketing that appeals to a broad audience and progressively tailoring communications to a more pre-qualified audience. Email marketing should be highly personalized.

5.7.6 Suzie asked about professional development opportunities for e-commerce. She said that there really aren’t web design or web development conferences anymore because it’s become so mainstream. She asked if there are any good e-commerce or social media marketing conferences. The group said that Social Media Marketing World, Content Marketing World, and VIDCON were all very good. Social Media Marketing Word and VIDCON are always hosted in Southern California, making them quite accessible to us.

## 6. Marketing



- 6.1 The group offered to promote the program among their own clients and colleagues.
- 6.2 Tawni said that the Bishop Chamber issues a newsletter monthly. She is happy to publish information triannually about upcoming course registration. The deadline for newsletter submission is the second week of the month prior to publication.
- 6.3 Tawni invited Suzie to present to Chamber members.
- 6.4 Tawni recommended that Suzie contact Ken Bringle and Emily Wood of the Mammoth Lakes Chamber of Commerce about the program and promotion opportunities.

## **7. DMA C280 Capstone Project**

- 7.1 Suzie shared with the group that she is seeking a client/project for DMA C280 in the Spring, in which students redesign a web site for a non-profit or commercial client. Students designed the web site for Wild Iris in Bishop about 10 years ago. It would be nice to work with another Eastern Sierra organization or business this coming Spring.

## **8. Review of Action Items:**

- 8.1 Suzie will send committee a draft of the meeting minutes for feedback. If there are no changes or after changes have been made, a final draft of the minutes will be sent to member as a signable PDF document, serving as a meeting sign-in sheet and affirmation of the minutes' accuracy.
- 8.2 Suzie is presenting the certificate and revised courses at the Curriculum and Instruction Council on Friday, Oct. 18. Since the curriculum is already in the approval queue, she may not be able to incorporate requested changes in this review cycle. If this is the case, the courses will be brought back through another revision in the near future. Any final changes will also be vetted by other advisory committee members in our region (e.g. Ridgecrest and Tehachapi).
- 8.3 Suzie will provide content to Tawni for the next newsletter.
- 8.4 Suzie will contact Ken Bringle and Emily Wood of the Mammoth Lakes Chamber of Commerce.

## **9. Future Meeting Dates**

- 9.1 Spring 2019, TBD

## **10. Adjournment**

- 10.1 11:00 AM

Meeting Chair: Suzie Ama  
Recorder: Suzie Ama



## Sign-in Sheet

**Committee: Digital Media and Marketing Certificate Advisory Committee**

**Date: October 15, 2019**

**Time: 9:30 AM**

**Location: Pupfish Café, Bishop, CA**

The following members were in attendance and have approved the minutes.

Name	Title	Email	Signature
<b>Julie Faber</b>	Owner, Mountain Studio	julie@mtnstudio.com	
<b>Jeff Simpson</b>	Economic Development Manager of Mono County	jsimpson@mono.ca.gov	
<b>Tawni Thomson</b>	Executive Director of the Bishop Chamber of Commerce	ExecDir@bishopvisitor.com	
<b>Vickie Taton</b>	Adjunct Faculty, Cerro Coso Community College	vtaton@cerrocoso.edu	