SANTA MONICA COLLEGE
ACADEMIC SENATE

1900 Pico Boulevard Santa Monica, CA 90405
310.434.4611

Curriculum Committee Agenda – <mark>Revised</mark>

Wednesday, November 3, 2021, 3:00 p.m.
Zoom Meeting:
Join from PC, Mac, Linux, iOS or Android: https://cccconfer.zoom.us/j/93520754825

Or iPhone one-tap (US Toll): +16699006833,93520754825# or +13462487799,93520754825#

Or Telephone:
Dial:
+1 669 900 6833 (US Toll)
+1 346 248 7799 (US Toll)
+1 253 215 8782 (US Toll)
+1 312 626 6799 (US Toll)
+1 646 876 9923 (US Toll)
+1 301 715 8592 (US Toll)
Meeting ID: 935 2075 4825
International numbers available:
**https://cccconfer.zoom.us/zoomconference?m=OTM1MjA3NTQ4MjU.8jCMR5vap_ZXEu3Qz54v
GMfRR4kf7uzs**

Or Skype for Business (Lync):
SIP:93520754825@lync.zoom.us

Members:

Sheila Cordova, *Chair*	Walker Griffy	Jacqueline Monge	Briana Simmons
Jason Beardsley, *Vice Chair*	Hafedh Herichi	Maria Muñoz	Lydia Strong
Bren Antrim	Alex Ibaraki	Estela Narrie	Esau Tovar
Fariba Bolandhemat	Sharlene Joachim	Patricia Ramos	Audra Wells
Susan Caggiano	Bradley Lane	Brandon Reilly	Dominic Prendergast (A.S.)
Lisa Collins	Emin Menachekanian	Redelia Shaw	Denise White-Odimo (A.S.)

Interested Parties:

Joelle Adams	Rachel Demski	Tracie Hunter	Estela Ruezga
Stephanie Amerian	Nathaniel Donahue	Maral Hyeler	Scott Silverman
Maria Bonin	Joshua Elizondo (A.S.)	Laura Manson	Tammara Whitaker
Dione Carter	Kiersten Elliott	Stacy Neal	

Ex-Officio Members:
Jamar London

(Information items are listed numerically; action items are listed alphabetically)

I.   Call to Order and Approval of Agenda
II. Public Comments *(Two minutes is allotted to any member of the public who wishes to address the Committee.)*
III. Announcements
IV. Approval of Minutes 4
V.   Chair's Report

VI. Information Items

1. Redesign of the Student Experience

(Non-Substantial Changes)
2. CIS 30 Microsoft Excel
3. CIS 34 Advanced Excel with Visual Basic for Applications
4. CIS 50 Internet, HTML, and Web Design
5. <mark>CIS 51 HTML5, CSS3, and Accessibility</mark>
   <mark>*CIS 51 TOP code not changed; moved from substantial to non-substantial – only textbook update*</mark>
6. CS 5 Programming Logic
7. CS 53A iOS Development with Swift
8. CS 53B iOS Mobile App Development
9. CS 55 Java Programming
10. CS 56 Advanced Java Programming
11. CS 79A Introduction to Cloud Computing
12. CS 79B Database Essentials in Amazon Web Services
13. CS 79C Compute Engines in Amazon Web Services
14. CS 79D Security in Amazon Web Services

VII. Action Items

(Programs: New)

(Programs: Revisions)

- Formerly Networking Certificate of Achievement
- Decreased total units from 17 units to 14-15 units
- Added CS 84A to Required Courses
- Added CS 84B and CS 84C as electives ("Choose 1")
- Moved CS 41, CS 43, CS 75, and CS 78 from required courses to electives ("Choose 1")

cc. Changes to degrees and certificates as a result of courses considered on this agenda

VIII. New Business

IX.   Old Business
- Training
- Goals and Objectives

X.   Adjournment

Please notify Sheila Cordova or Jason Beardsley by email if you are unable to attend this meeting.

The next Curriculum Committee meeting will be on November 17, 2021.

SANTA MONICA COLLEGE
ACADEMIC SENATE

1900 Pico Boulevard Santa Monica, CA 90405
310.434.4611

Curriculum Committee Minutes
Wednesday, October 20, 2021, 3:00 p.m.
Zoom Meeting

Members Present:

Sheila Cordova, *Chair*	Walker Griffy	Jacqueline Monge	Redelia Shaw
Jason Beardsley, *Vice Chair*	Hafedh Herichi	Maria Muñoz	Briana Simmons
Bren Antrim	Alex Ibaraki	Estela Narrie	Esau Tovar
Fariba Bolandhemat	Sharlene Joachim	Patricia Ramos	Audra Wells
Susan Caggiano	Bradley Lane	Brandon Reilly	Dominic Prendergast (A.S.)
Lisa Collins	Emin Menachekanian		

Members Absent:

Lydia Strong	Denise White-Odimo (A.S.)

Others Present:

Joelle Adams	Guido Davis Del Piccolo	Ashley Mejia	Maxim Safioulline
Luis Andrade	Rachel Demski	Marisol Moreno	Christine Schultz
Lourdes Arévalo	Judith Douglas	Marissa Osato Moreno	Scott Silverman
Ciarán Brewster	Karen Huner	Rebecca Romo	Howard Stahl
Aurélie Chevant-Aksoy	Jing Liu	Elaine Roque	Dr. Carolyn Washington
Sang Chi	Jamar London		

(Information items are listed numerically; action items are listed alphabetically)

I. Call to Order and Approval of Agenda
The meeting was called to order at 3:02 pm. Motion to approve the agenda with no revisions.
Motion made by: Jason Beardsley; **Seconded by:** Audra Wells
The motion passed unanimously.

II. Public Comments
None

III. Announcements
Brandon Reilly announced the Global Citizenship Committee Teach-In "The New Fight for Human Rights in a Time of Perpetual Emergency" on November 4 (please see additional details on page 7). Please share this information with your fellow faculty and students! To participate, or if you have any questions, please send an email to Brandon at reilly_brandon@smc.edu

IV. Approval of Minutes
Motion to approve the minutes of October 6, 2021 with no revisions.
Motion made by: Jason Beardsley; **Seconded by:** Audra Wells

V. Chair's Report
- Joelle Adams: We are asking the Senate to create an ad-hoc Distance Education Modality committee, in order to ensure faculty voices and student perspectives are part of the conversation about DE. The vote at the Senate will likely happen next week; if the committee is approved, we'd like to invite Curriculum Committee members to attend meetings as interested parties. If you have questions,

comments, thoughts, please send an email to Joelle at adams_joelle@smc.edu

- New Workflows: META has been updated with all new workflows which will launch at the end of this week – it will not have an effect on any proposals already launched, but all course and program proposals going forward will see the following changes:

  o All workflows will now show the "post-Curriculum Committee" approval steps. Previously, after Curriculum Committee, courses and programs would remain at the "Pending Implementation" step until made active. Under the new workflows, you can now check where your course or program is in the approval process – pending Senate, pending Board of Trustees, pending UC/GE transfer approval, and pending Chancellor's Office approval.

  o The non-substantial and substantial workflows for courses and programs have been merged into singular "Course: Change" and "Program: Change" workflows. This is due to the subjective nature of what constitutes a substantial change (ex: substantial for the catalog, may be non-substantial for articulation and vice versa.) Also, if a non-substantial change became substantial through discussion, we no longer have to remove the proposal and start over in the corrected workflow in META. Whether a change is substantial will be determined at Tech Review.

- Reminder that the ASCCC 2021 Fall Curriculum Regional Meeting is being held this Thursday, October 21st from 1:00-4:00pm. The regional meeting provides great updates about Curriculum, and the regional meeting has no registration cost. For more information, and to register, go to: 2021 Fall Curriculum Regional Meeting

- The LAOCRC (Los Angeles Orange County Regional Consortium) will be the LARC (Los Angeles Regional Consortium) effective January 1, 2022.

VI. Information Items

1. Redesign of the Student Experience
   No updates

(Non-Substantial Changes)
2. CS 3 Introduction to Computer Systems
3. CS 7 Programming for Non-Computer Science Majors
4. CS 9A Technology Project Management I
5. CS 9B Technology Project Management II
6. CS 15 Visual Basic Programming
7. CS 17 Assembly Language Programming
8. CS 19 Advanced Visual Basic Programming
9. CS 20A Data Structures with C++
10. CS 20B Data Structures with Java
11. CS 33 C # Programming
12. CS 36 Fortran Programming
13. CS 42 Digital Logic
14. CS 51 Visual C++ Programming
15. CS 54 Object-Oriented Analysis and Design
16. CS 80 Internet Programming
17. CS 81 Javascript Programming
18. CS 83R Server-Side Ruby Web Programming
19. CS 85 PHP Programming
20. CS 87A Python Programming
21. KIN PE 45D Competitive Softball

VII. Action Items

(Consent Agenda: Emergency DE to Fully Online)
a.   DANCE 77 Navigating Careers in Dance
b.   FRENCH 1 Elementary French I
c.   FRENCH 2 Elementary French II
d.   FRENCH 3 Intermediate French I
e.   FRENCH 4 Intermediate French II
f.   KOREAN 1 Elementary Korean I
g.   KOREAN 2 Elementary Korean II
h.   KOREAN 3 Intermediate Korean I
i.   KOREAN 4 Intermediate Korean 2
j.   MATH 2 Precalculus
k.   MATH 3 Trigonometry with Applications
l.   MATH 4 College Algebra for STEM Majors
m.   SPAN 11 Spanish for Heritage Speakers I
Motion to approve Consent Agenda of DANCE 77 (VII. a.), FRENCH 1 (VII. b.), FRENCH 2 (VII. c.), FRENCH 3 (VII. d.), FRENCH 4 (VII. e.), KOREAN 1 (VII. f.), KOREAN 2 (VII. g.), KOREAN 3 (VII. h.), KOREAN 4 (VII. i.), MATH 2 (VII. j.), MATH 3 (VII. k.), MATH 4 (VII. l.), and SPAN 11(VII. m.) with no revisions.
Motion made by: Bradley Lane; **Seconded by:** Jason Beardsley
The motion passed unanimously.

(Consent Agenda: Program Maps)
n.   Cloud Computing AS/Certificate of Achievement
o.   Entrepreneurship Certificate of Achievement
p.   Graphic Design AS/Certificate of Achievement
Motion to approve Consent Agenda of Cloud Computing AS/Certificate of Achievement (VII. n.), and Entrepreneurship Certificate of Achievement (VII. o.). The Graphic Design (VII. p.) program map was pulled from the consent agenda to be passed following the program revisions.
Motion made by: Fariba Bolandhemat; **Seconded by:** Jason Beardsley
The motion passed unanimously.

Motion to approve Graphic Design AS/Certificate of Achievement (VII. p.) program map.
Motion made by: Walker Griffy; **Seconded by:** Dominic Prendergast
The motion passed unanimously.

(Courses: New)
q.   ETH ST 1 Introduction to Ethnic Studies
Motion to approve ETH ST 1 with no revisions.
Motion made by: Audra Wells; **Seconded by:** Brandon Reilly
The motion passed unanimously.

r.   KIN PE 29B Intermediate Pilates
Motion to approve KIN PE 29B with revision to proposed start semester to Spring 2023.
Motion made by: Susan Caggiano; **Seconded by:** Audra Wells
The motion passed unanimously.

s.   KIN PE 29C Advanced Pilates
Motion to approve KIN PE 29C with revision to proposed start semester to Spring 2023.
Motion made by: Susan Caggiano; **Seconded by:** Jason Beardsley
The motion passed unanimously.

(Courses: Substantial Changes)
t.   ANTHRO 1 Biological Anthropology (changed: course name – was "Physical Anthropology")
Motion to approve changes to ANTHRO 1 with additional revision to change all instances of "Physical Anthropology" to "Biological Anthropology" and update textbooks.
Motion made by: Susan Caggiano; **Seconded by:** Walker Griffy
The motion passed unanimously.

u.   ANTHRO 5 Biological Anthropology with Lab (changed: course name – was "Physical Anthropology with Lab")
Motion to approve changes to ANTHRO 5 with additional revision to change all instances of "Physical Anthropology" to "Biological Anthropology" and update textbooks.
Motion made by: Jason Beardsley; **Seconded by:** Audra Wells
The motion passed unanimously.

v.   DANCE 19A Beginning Ballroom Dance (American Style) (changed: course number – was 19; course name – was "Ballroom Dance"; course description; hours and units – was 3 lecture/0 lab/3 units, now 1 lecture/3 lab/2 units; SLOs, objectives, methods of evaluation, textbooks, and assignments)
Motion to approve changes to DANCE 19A with no additional revisions.
Motion made by: Susan Caggiano; **Seconded by:** Dominic Prendergast
The motion passed unanimously.

w.   GEOL 9/GEOG 9 Climate Change (changed: course number – was GEOL 7; addition of cross-listing (GEOG 9), catalog description, SLOs, objectives, course content, methods of evaluation)
Motion to approve changes to GEOL 9/GEOG 9 with additional revision to change proposed start date to Fall 2023.
Motion made by: Susan Caggiano; **Seconded by:** Jason Beardsley
The motion passed unanimously.

(Courses: Distance Education)
x.   ETH ST 1 Introduction to Ethnic Studies
Motion to approve distance education for ETH ST 1 with revisions to 4. Instructor's Technical Qualifications (changing first sentence to "The instructor should be knowledgeable of the learning management system in place and accessibility resources on and off-campus and be familiar with the LMS tools and willingness to stay current as technology changes every day.") and change any instances of "Canvas" to "LMS" and "Zoom" to "videoconferencing software"
Motion made by: Bradley Lane; **Seconded by:** Patricia Ramos
The motion passed unanimously.

y.   GEOL 9/GEOG 9 Climate Change
Motion to approve distance education for GEOL 9/GEOG 9 with revision to change any instances of "Canvas" to "LMS" and "Zoom" to "videoconferencing software".
Motion made by: Walker Griffy; **Seconded by:** Susan Caggiano
The motion passed unanimously.

z.   KIN PE 29B Intermediate Pilates
Motion to approve distance education for KIN PE 29B with revision to change any instances of "Canvas" to "LMS" and "Zoom" to "videoconferencing software".
Motion made by: Susan Caggiano; **Seconded by:** Bradley Lane
The motion passed unanimously.

aa.   KIN PE 29C Advanced Pilates
Motion to approve distance education for KIN PE 29C with revisions to 1d. Distance Ed-Interactions (change "Intermediate Matwork" to "Advanced Matwork."), 4. Instructors Technical Qualifications (remove "and" from "Knowledge of how to ensure that material is accessible ~~and~~ is also vital."), and to change any instances of "Canvas" to "LMS" and "Zoom" to "videoconferencing software".
Motion made by: Susan Caggiano; **Seconded by:** Audra Wells
The motion passed unanimously.

bb.   SOCIOL 32 Asian Americans in Contemporary Society
Motion to approve distance education for SOCIOL 32 with revision to change any instances of "Canvas" to "LMS" and "Zoom" to "videoconferencing software"..
Motion made by: Audra Wells; **Seconded by:** Jason Beardsley
The motion passed unanimously.

cc. WGS 20 Gender, Feminisms, and Social Movements: A Global Approach
Motion to approve distance education for WGS 20 with revision to change any instances of "Canvas" to "LMS" and "Zoom" to "videoconferencing software".ETH ST.
Motion made by: Susan Caggiano; **Seconded by:** Lisa Collins
The motion passed unanimously.

(Courses: Global Citizenship)
dd. ASL 1 American Sign Language 1
Motion to approve Global Citizenship for ASL 1 with no revisions.
Motion made by: Audra Wells; **Seconded by:** Estela Narrie
The motion passed unanimously.

ee. ASL 2 American Sign Language 2
Motion to approve Global Citizenship for ASL 2 with no revisions.
Motion made by: Audra Wells; **Seconded by:** Lisa Collins
The motion passed unanimously.

ff. GEOL 9/GEOG 9 Climate Change
Motion to approve Global Citizenship for GEOL 9/GEOG 9 with no revisions.
Motion made by: Dominic Prendergast; **Seconded by:** Jason Beardsley
The motion passed unanimously.

(Programs: New)
gg. Home Health Aide Pre-Certification Program Noncredit Certificate of Competency
Motion to approve Home Health Aide Pre-Certification Program Noncredit Certificate of Competency with no revisions.
Motion made by: Audra Wells; **Seconded by:** Lisa Collins
The motion passed unanimously.

hh. Nurse Assistant Pre-Certification Training Program Noncredit Certificate of Competency
Motion to approve Nurse Assistant Pre-Certification Training Program Noncredit Certificate of Competency with no revisions.
Motion made by: Jason Beardsley; **Seconded by:** Jacqueline Monge
The motion passed unanimously.

(Programs: Revisions)
ii. Art AA
Reduced major units from 24 units to 18 units
Added ART 13 to Required Core Courses (increasing required core from 6 units to 9 units)
Added "Select 1 Art History course (3 units)"
Added "Select 2 courses (6 units with a minimum of 3 units in Art)"
Added as electives: AHIS 11, 21, 22, 52, 71; ART 10A, 10C, 15, 17A, 17B, 20A, 20C, 21B, 30A, 30B, 30C, 31, 32, 33, 34A, 34B, 35, 40, 40C, 41A, 41B, 43A, 43B, 52B, 52C, 60, 60B, 61A, 61B, 62, 63
Motion to approve changes to Art AA with additional revision to remove ART 10A, ART 13, and ART 20A from "Select 2 courses" as they're already listed in the in "Required Core Courses."
Motion made by: Walker Griffy; **Seconded by:** Jason Beardsley
The motion passed unanimously.

jj. Graphic Design AS/Certificate of Achievement
Reduced major units from 40 units to 36 units
Increased "Required Courses" from 28 units to 36 units; removed "Required Concentration"
Added new courses DESIGN 21, 31, 32, 41, 42
Removed GR DES 34, 35, 38, 41, 44, 51, 60, 64, 65, 66, 67, 71, 75, 76
Motion to approve changes to Graphic Design AS/Certificate of Achievement with no additional revisions.
Motion made by: Audra Wells; **Seconded by:** Jason Beardsley

The motion passed unanimously.

kk.   Changes to degrees and certificates as a result of courses considered on this agenda
Motion to approve changes to degrees and certificates as a result of courses considered on this agenda.
Motion made by: Dominic Prendergast; **Seconded by:** Susan Caggiano
The motion passed unanimously.

VIII. New Business
- Distance Education Resolution – Presented by Jamar London (see page 8)
The senate wants to give departments adequate time to thoughtfully discuss possible conversions from "Emergency DE" to "Fully Online." As Emergency DE is expiring, we're working to define the "new normal." This resolution was presented to, and supported by, the department chairs. We would like to get the Curriculum Committee's support.

Requested Amendment to the Resolution:
"Resolved, the Academic Senate recommends that all emergency-only distance education authorizations shall continue through Summer 2022. After Summer 2022, any emergency-only distance education authorization will take effect only in the event of an appropriate emergency declaration by the District."

Jamar will present the amended resolution to the Senate Executive Committee – if there are additional substantial changes at Executive Committee, Jamar will bring the resolution back to the Curriculum Committee for a second reading/vote of support with the changes.

Motion of the Curriculum Committee to support the Distance Education Resolution as amended.
Motion made by: Dominic Prendergast; **Seconded by:** Jacqueline Monge
The motion passed with the following vote: Y: 19; N: 0; A: 1 (Susan Caggiano)

IX.   Old Business
- Training
Due to time constraints, Goals and Objectives have been moved to the November 3 agenda.

- Goals and Objectives
Due to time constraints, Goals and Objectives have been moved to the November 3 agenda.

X.   Adjournment
Motion to adjourn the meeting at 5:03 pm
Motion made by: Audra Wells; **Seconded by:** Lisa Collins
The motion passed unanimously.

<u>**SMC Community Teach-In Fall 2021**</u>

The New Fight for Human Rights in a Time of Perpetual Emergency
Thursday, November 4, 2021
1-3 pm on Zoom
Apply by Thursday, October 28 at noon
Sponsored by the Global Citizenship Committee

Since the adoption of the Universal Declaration of Human Rights in 1948, local communities, states, non-governmental organizations, and other entities have strived to make the world a safer, more humane place. Since then, the struggle for human rights has had its successes and shortcomings amidst the Cold War, decolonization, and the even-more rapidly changing international landscape of recent decades. The challenges of the current moment of rising authoritarianism; climate change; newer forms of racial, religious, sexual orientation-based discrimination; and more, take on renewed urgency as we struggle to unite to contain a global pandemic. Utilizing new ideas and forging new movements, we seek to rethink the politics of the possible.

The Global Citizenship Committee seeks presenters for its virtual Teach-In event centered on the theme **The New Fight for Human Rights in a Time of Perpetual Emergency**, this November 4, 2021 from 1.00-3.00 PM. Presenters can be Faculty or students. Presenters may apply to speak for 5-, 10-, or 15-minute slots. Speakers who are unable to attend the live event may submit pre-recorded versions of their presentation. Because our theme is purposefully broad, we welcome submissions on a wide variety of topics, including but not limited to:

• Human Rights: Governmental vs. Personal Responsibility
• Climate Change
• Housing as a Human Right
• Rising Authoritarianism and Political Extremism
• Global Health Disparities (e.g. COVID Vaccine Access)
• Access to Water as a Human Right
• Arts and Activism
• Education as a Human Right
• Safety vs. Risk-Taking/Who is Responsible for Keeping Us Safe?
• How Can the Individual Be Effective in Fighting for Human Rights?

To participate, please send an email to Brandon Reilly (reilly_brandon@smc.edu) no later than October 28th with the title "Teach-In" indicating: 1) Your proposed topic, possible presentation length, format (recorded or live) and your availability between 1.00-3.00 PM on November 4th, 2021
LET STUDENTS KNOW ABOUT THIS EVENT!

Academic Senate Resolution

Title: Emergency Distance Education Modality
Approval Date: ??????

Whereas, the declaration of an emergency due to the Covid-19 pandemic necessitated the immediate transition from an on-ground instructional modality to a remote instructional modality for all courses offered by the college;

Whereas, emergency-only distance education approval by the SMC Curriculum Committee authorizes those courses to be offered remotely only during a declared emergency;

Whereas, the Academic Senate officially recognized synchronous instruction as a fully-approved distance education modality on June 8 2021 and this change in allowed distance education modalities will result in departments re-examining whether courses approved for emergency-only distance education will be submitted for full distance education approval;

Whereas, department chairs are already engaged in scheduling for Spring 2022 and there is insufficient time for departments to discuss, investigate, propose, and seek approval for new fully online distance education before Spring 2022 schedules are set;

Whereas, the potential of an abrupt and unplanned end to emergency-only distance education approvals will cause serious damage to student educational progress and to the ability of departments to meet student need in this on-going pandemic;

Resolved, the Academic Senate recommends that in the Fall 2021 semester each discipline/department discuss and investigate the impact of the new distance education guidelines allowing for synchronous instruction, and decide whether they intend to convert any emergency-only approved distance education courses to fully approved.[1]

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[1] This will allow departments to submit rigorously developed applications for full distance education approval to the Curriculum Committee before *[insert date needed by Curriculum]* in order to be approved by the full Senate before its last meeting of Spring 2022. This will also allow departmental chairs to begin scheduling for Fall 2022 with full knowledge of the available modalities.

Resolved, the Academic Senate recommends that if the COVID-19 emergency is declared over, all emergency-only distance education authorizations shall continue through Summer 2022 or any already scheduled semester or intersession thereafter.[2]

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[2] The potential disruption to student educational progress due to an abrupt withdrawal of approval is enormous given that SMC schedules so far in advance of the first day of classes. The timeline provided in the first resolution will allow departments to prepare for future withdrawals of emergency-only approval once the emergency is declared over by determining which courses are appropriate for full distance education approval. This resolution also educates all parties that the declaration that the COVID-19 emergency is "over" has real consequences related to planning, curriculum, and educational advancement.

	Official Course Prefix and # (if RE: identify only the "category"; If GE, or EL: indicate as such)	Priority order of PR or RE course(s) within each semester (used to develop a part-time student ed plan)	Type of course PR: Program Requirement RE: Restricted Elective of Program GE: General Education EL: Elective (not in program) PREREQ ADVISORY	Satisfies GE Area and/or GC (specify area)	"Gateway" course? (based on definition)	# of Units	TOTAL weekly hours (full semester)	Course Advisory (must be in map prior); do NOT include "eligibility for English 1"	Course Prerequisites (P), Corequisite (C) (must be included in proper sequence)	Intersession Option? - YES -- (MAX of 8 units)	REVIEWER COMMENTS/NOTES: Also include HERE any recommendations made by mapping team for RE, GE, or EL identified in the original map OVERALL COMMENTS CAN BE MADE IN TEXT BOX AT BOTTOM OF SPREADSHEET
	Elementary Teacher Education - AAT							**CSU GE**			
SEMESTER 1	ENGL 1	1	PR / GE	A2		3	9				
	MATH 41	4	PR / GE	B4		3	9				
	EDUC 12	3	PR		YES	3	9				
	PSYCH 11	2	PR / GE	D		3	9			YES	
	COUNS 20		GE	E		3	9			YES	
	TOTAL Semester 1					**15**	**45**				
SEMESTER 2	BIOL 3	1	PR / GE	B2 / B3 (lab)		4	12				
	RE	2	RE / GE	A3		3	9		ENGL 1 (P)		Recommend ENGL 2
	COM ST 11	3	PR / GE	A1		3	9				
	POL SC 1	4	PR / GE	D		3	9			YES	CSU grad reqmt
	HIST 11	5	PR / GE	C2		3	9			YES	CSU grad reqmt
	TOTAL Semester 2					**16**	**48**				
SEMESTER 3	CHEM 9	1	PR / GE	B1		5	15				
	ENGL 18	2	PR / GE	C2		3	9		ENGL 1 (P)		
	GEOG/GLOBAL 11	3	PR / GE	D		3	9			YES	
	HIST 33	4	PR			3	9			YES	
	TOTAL Semester 3					**14**	**42**				
SEMESTER 4	GEOL 4	1	PR			4	12				
	PHYSCS 14	2	PR			4	12				
	RE	3	RE / GE	C1		3	9			YES	Choose 1: AHIS 1, 2, 11, 17; MUSIC 30, 31, 32; DANCE 5; TH ART 2, 5
	EL		EL			3	9			YES	
	EL		EL			1	3				
	TOTAL Semester 4					**15**	**45**				

	Elementary Teacher Education CoA							N/A			
	Official Course Prefix and # (if RE: identify only the "category"; If GE, or EL: indicate as such)	**Priority order of PR or RE course(s) within each semester (used to develop a part-time student ed plan)**	**Type of course** PR: Program Requirement RE: Restricted Elective of Program GE: General Education EL: Elective (not in program) PREREQ ADVISORY	**Satisfies GE Area and/or GC (specify area)**	**"Gateway" course? (based on definition)**	**# of Units**	**TOTAL weekly hours (full semester)**	**Course Advisory (must be in map prior); do NOT include "eligibility for English 1"**	**Course Prerequisites (P), Corequisite (C) (must be included in proper sequence)**	**Intersession Option? - YES -- (MAX of 8 units)**	**REVIEWER COMMENTS/NOTES: Also include HERE any recommendations made by mapping team for RE, GE, or EL identified in the original map OVERALL COMMENTS CAN BE MADE IN TEXT BOX AT BOTTOM OF SPREADSHEET**
SEMESTER 1	ENGL 1	1	PR			3	9				
	PSYCH 11	2	PR			3	9			YES	
	EDUC 12	3	PR		YES	3	9				
	TOTAL Semester 1					**9**	**27**				
SEMESTER 2	ENGL 18	1	PR			3	9		ENGL 1 (P)		
	COM ST 11	2	PR			3	9			YES	
	MATH 41	3	PR			3	9				
	TOTAL Semester 2					**9**	**27**				

Note: The cross-disciplinary courses that are part of this certificate serve as an introduction to the field of elementary teaching and fit into :Liberal Studies transfer curriculum.

New Course: COMPUTER SCIENCE 76A, Cryptocurrency and Cryptoassets

Units:	3.00
Total Instructional Hours (usually 18 per unit):	54.00
Hours per week (full semester equivalent) in Lecture:	3.00
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	108.00
Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Proposed Start:	Fall 2022
TOP/SAM Code:	070700 - Computer Software Development / C - Clearly Occupational
Grading:	Letter Grade or P/NP
Repeatability:	No
Library:	Library has adequate materials to support course
Minimum Qualification:	Computer Science
Program Impact:	Proposed for inclusion in a forthcoming degree or certificate • Blockchain Developer Certificate of Achievement

Rationale
This course is part of the new Blockchain Developer certificate which is being proposed as well. This course has been reviewed and supported by our CS Advisory Board. In many ways, it is a natural outgrowth of our AWS program.

I. **Catalog Description**
This course will cover the basic properties of cryptocurrencies and the underlying blockchain technology. Students will learn the origins of cryptocurrencies, how cryptocurrencies work as well as real world practical applications of cryptocurrencies. This course provides a broad overview of technologies required to purchase, store and mining cryptocurrencies. Students will learn how blockchain is being used to support cryptocurrencies and the advantages blockchain provides. Students will also gain an understanding of the various cryptoassets such as the various coin, tokens and crypto collectibles.

II. **Examples of Appropriate Text or Other Required Reading:**
(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
   1. Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction , 1, Arvind Narayanan and Joseph Bonneau , Princeton Press © 2019, ISBN: 978-0691171692
   2. Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World , Don Tapscott and Alex Tapscott , Portfolio Press © 2018, ISBN: 978-1101980132

III. **Course Objectives**
Upon completion of this course, the student will be able to:
   1. Students will learn the basic properties of blockchain technology
   2. Students will learn the origins of cryptocurrencies
   3. Students will work with the technologies required to purchase, store and mining cryptocurrencies
   4. Students will learn how to evaluate various cryptoassets including various coin, tokens and crypto collectibles.

IV. **Methods of Presentation:**
Discussion, Projects, Group Work, Lecture and Discussion, Distance Education

V. **Course Content**

% of Course	Topic
10.000%	Introduction to Blockchain Basics and use cases
10.000%	History of Cryptocurrency and Cryptoassets

20.000%	Cryptocurrency and Cryptoassets basics explained
20.000%	Cryptocurrency and Cryptoassets in practice
15.000%	Cryptocurrency Mining Application
10.000%	Secure Crypto in Wallets
15.000%	Encryption and Decryption of Cryptoassets
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
5%	Class Work
25%	Exams/Tests
20%	Final exam
25%	Homework
5%	Quizzes
20%	Simulation
100%	Total

VII. **Sample Assignments:**
Crypto Miners: Write a 2 – 4-page report on the main tasks performed by crypto miners. Your report should include such topics as why mining is important, how miner check transactions, what is a hash and how is it used.

Double Spending: Write a 1 – 2-page report. Write a research paper that covers how blockchain technology solves the problem of "Double spending" in digital currencies such as Bitcoin?

VIII. **Student Learning Outcomes:**
1. Students will learn how the fundamentals of cryptocurrency.
2. Students will learn how to work with distributed blockchain technologies

CS 76A Distance Education Application
☑ Fully Online
☑ Online/Classroom Hybrid (not a delivery option when campus is closed)

1a. Instructor - Student Interaction:
Students get feedback on their assignments, which are assigned every other week, including how to fix issues, improve efficiency and follow best practices. In the quizzes, which are assigned every other week, students get feedback on their error and get suggestions on how to better study. In the two midterm tests and the final exam, students get feedback and faculty share how to improve. In the weekly threaded discussions, students must post answers to given questions/prompts and they must provide unique answers. They get feedback on their answers, how complete they are and what they can improve on.

1b. Student - Student Interaction:
Every week, students must post responses to a state discussion prompt. They must comment on each other posting. Students are placed in groups to enable them to contribute as well as read all posted messages.

1c. Student - Content Interaction:
Each week, students get a lecture in the form of video and PDF files. They may also get additional videos to explain certain concepts. Additionally, there may be supporting files and documents added to each week's content.

1d. Distance Ed Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Threaded Discussions	Weekly Discussion board facilitate question/answering as well as providing feedback or commenting on postings. Each week students must address a main discussion topic.	20.00%
Other (describe)	Announcements will also be used to broadcast important information needing immediate attention.	10.00%
Online Lecture	Lectures in the format of PDF slides as well as videos from the web and instructor-recorded.	20.00%
Exams	Quizzes, a midterm and the final exam will be timed.	25.00%
Written assignments	Assignments are graded with added comments on what the student did well and what needs improvement.	25.00%

2. Organization of Content:

Using an online course management system, each week there will be a main home page which will lead students to other documents, and files in addition to the assigned work of a discussion message and a programming assignment/project or a quiz.

3. Assessments:

% of grade	Activity	Assessment Method
20.00%	Midterm	Feedback on where the student can improve and what topics to study more in addition to answer keys are provided.
20.00%	Quizzes	Quizzes provide feedback to the students on where they stand.
25.00%	Final Exam	Students complete a final exam
10.00%	Threaded Discussions	The Discussion board will facilitate questions and answers. Students may ask questions as well as answer them. Each week questions are posted in the Discussion board and each student is required to post a unique answer. Such answers are graded.
25.00%	Assignments	Assignments are graded with added comments on what the student did well and what needs improvement.

4. Instructor's Technical Qualifications:

Instructors must be well versed in the use of computers, the web, and course management systems (CMS) to interact with students through the CMS messaging boards, email, and online video and chat meetings.

5. Student Support Services:

Through the syllabus and services such as GPS and Direct Connect, faculty can place links to library, bookstore, financial aid, disabled students center and counseling resources

6. Accessibility Requirements:

The course management system, must be Section 508 complaint as well as any videos, images, tables must be properly captioned. All PDF's and other added files and documents must be Section 508 compliant.

7. Representative Online Lesson or Activity:

Based on this week's required reading and additional research, write a one-page report summarizing the origins of cryptocurrencies. Include details of Satoshi Nakamoto's whitepaper outlining the bitcoin ecosystem.

New Course: COMPUTER SCIENCE 76B, Fundamentals of Blockchain

Units:	3.00
Total Instructional Hours (usually 18 per unit):	54.00
Hours per week (full semester equivalent) in Lecture:	3.00
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	108.00
Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Proposed Start:	Fall 2022
TOP/SAM Code:	070700 - Computer Software Development / C - Clearly Occupational
Grading:	Letter Grade or P/NP
Repeatability:	No
Library:	Library has adequate materials to support course
Minimum Qualification:	Computer Science
Program Impact:	Proposed for inclusion in a forthcoming degree or certificate • Blockchain Developer Certificate of Achievement

Rationale
This course is part of the new Blockchain Developer certificate which is being proposed as well. This course has been reviewed and supported by our CS Advisory Board. In many ways, it is a natural outgrowth of our AWS program.

I. Catalog Description
This course covers Blockchain fundamentals including such topics as advantages and disadvantages of Blockchain, decentralized application design, different types of Blockchains and uses cases for Blockchain adoption. In this course, we will study basic algorithms and data structures used to build Blockchains. Including such topics as how to store a transaction in a block, nodes used to maintain consensus, and mining.

II. Examples of Appropriate Text or Other Required Reading:
(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
1. Mastering Blockchain: Unlocking the Power of Cryptocurrencies, Smart Contracts, and Decentralized Applications, 1, Lorne Lantz, O'Reilly Press © 2020, ISBN: 978-1492054702
2. Mastering Blockchain: A deep dive into distributed ledgers, consensus protocols, smart contracts, DApps, cryptocurrencies and Ethereum, 1, Imran Bashir, Packt Publishing © 2020, ISBN: 978-1839213199

III. Course Objectives
Upon completion of this course, the student will be able to:
1. Students will learn different types of blockchain and how to take advantage of this new technology
2. Students wil learn the algorithms and data structures used to build blockchains

IV. Methods of Presentation:
Distance Education, Discussion, Projects, Online instructor-provided resources, Lecture and Discussion

V. Course Content

% of Course	Topic
10.000%	Introduction to Blockchain
10.000%	Overview of consensus protocols
20.000%	Decentralized Apps and Blockchains
15.000%	Decentralized Apps and Blockchains
20.000%	Implementing Blockchain

%	Topic
10.000%	Blockchain Data Structures
10.000%	Control Structures and Smart Contracts
5.000%	Scaling the Blockchain
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
25%	Class Work
25%	Exams/Tests
20%	Final exam
25%	Homework
5%	Quizzes
100%	Total

VII. **Sample Assignments:**
Blockchain ledgers: Write 2 – 4 pages Research the features that distinguish databases from blockchain ledgers? Include a comparative analysis of the two technology and use cases for each.

Code a Dapp : Develop a decentralized system that storages debit and credit that occur between friends. Your app will keep a running record of who owes who money within a group of friends. Your blockchain should only have minimal gas fees. The blockchain will be stored on a public chain and it will be the single source of truth for the amounts owed. Your Dapp should have a user interface for easy use.

VIII. **Student Learning Outcomes:**
1. Students will learn different use cases for Blockchain technology
2. Student will learn algorithms and data structures used to build blockchains.
3. Students will learn how to secure their blockchain transactions.

CS 76B Distance Education Application
☑ Fully Online
☑ Online/Classroom Hybrid (not a delivery option when campus is closed)

1a. Instructor - Student Interaction:
Students get feedback on their assignments, which are assigned every other week, including how to fix issues, improve efficiency and follow best practices. In the quizzes, which are assigned every other week, students get feedback on their error and get suggestions on how to better study. In the two midterm tests and the final exam, students get feedback and faculty share how to improve. In the weekly threaded discussions, students must post answers to given questions/prompts and they must provide unique answers. They get feedback on their answers, how complete they are and what they can improve on.

1b. Student - Student Interaction:
Every week, students must post responses to a state discussion prompt. They must comment on each other posting. Students are placed in groups to enable them to contribute as well as read all posted messages.

1c. Student - Content Interaction:
Each week, students get a lecture in the form of video and PDF files. They may also get additional videos to explain certain concepts. Additionally, there may be supporting files and documents added to each week's content.

1d. Distance Ed Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Threaded Discussions	Weekly Discussion board facilitate question/answering as well as providing feedback or commenting on postings. Each week students must address a main discussion topic.	20.00%
Other (describe)	Announcements will also be used to broadcast important information needing immediate attention.	10.00%
Online Lecture	Lectures in the format of PDF slides as well as videos from the web and instructor-recorded.	20.00%
Exams	Quizzes, a midterm and the final exam will be timed.	25.00%
Written assignments	Assignments are graded with added comments on what the student did well and what needs improvement.	25.00%

2. Organization of Content:

Using an online course management system, each week there will be a main home page which will lead students to other documents, and files in addition to the assigned work of a discussion message and a programming assignment/project or a quiz.

3. Assessments:

% of grade	Activity	Assessment Method
20.00%	Midterm	Feedback on where the student can improve and what topics to study more in addition to answer keys are provided.
25.00%	Final Exam	Students complete a final exam
20.00%	Quizzes	Quizzes provide feedback to the students on where they stand.
10.00%	Threaded Discussions	The Discussion board will facilitate questions and answers. Students may ask questions as well as answer them. Each week questions are posted in the Discussion board and each student is required to post a unique answer. Such answers are graded.
25.00%	Assignments	Assignments are graded with added comments on what the student did well and what needs improvement.

4. Instructor's Technical Qualifications:

Instructors must be well versed in the use of computers, the web, and course management systems (CMS) to interact with students through the CMS messaging boards, email, and online video and chat meetings.

5. Student Support Services:

Through the syllabus and services such as GPS and Direct Connect, faculty can place links to library, bookstore, financial aid, disabled students center and counseling resources

6. Accessibility Requirements:

The course management system, must be Section 508 complaint as well as any videos, images, tables must be properly captioned. All PDF's and other added files and documents must be Section 508 compliant.

7. Representative Online Lesson or Activity:

Provide a recommendation on which type of blockchain should be used and why for a company that is interested in using blockchain to secure private company information. What benefits would blockchain technology offer in this scenario? Include examples of your recommendation.

New Course: COMPUTER SCIENCE 84A, Google IT Support Fundamentals I

Units:	3.00
Total Instructional Hours (usually 18 per unit):	54.00
Hours per week (full semester equivalent) in Lecture:	3.00
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	108.00
Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Proposed Start:	Fall 2022
TOP/SAM Code:	070820 - Computer Support / C - Clearly Occupational
Grading:	Letter Grade or P/NP
Repeatability:	No
Library:	Library has adequate materials to support course
Minimum Qualification:	Computer Science
Program Impact:	Proposed for inclusion in an existing degree or certificate • Networking Certificate of Achievement

Rationale

As a Career Education department at SMC, we regularly update and add to our curriculum to train our students with relevant IT job opportunities. The Google IT Support Professional Certificate is a hands-on, online program designed to prepare students for entry-level jobs in IT Support upon completion of the certificate, or continued education in the field. The program is exclusively developed by Google and covers all the fundamentals of IT support, including troubleshooting, customer service, networking, operating systems, system administration, and security. The goal of this program is to educate, enable, and empower students with the digital skills needed to benefit from the job placement opportunities of today and tomorrow.

I. Catalog Description

This course is the first of a three course series that aims to prepare students for a role as an entry-level IT Support Specialist. In this course, students will be introduced different facets of Information Technology. Topics covered include computer hardware and software, the Internet, computer networking, modern networking technologies, protocols, and troubleshooting. Students learn the Five Layer Network Model consists of Physical, Data Link, Network, Transport, and Application and how network devices communicate.

II. Examples of Appropriate Text or Other Required Reading:

(include all publication dates; for transferable courses at least one text should have been published within the last seven years)

1. Information Technology Essentials, 1st, Eric Frick, Independently published © 2019, ISBN: 978-1708175146

III. Course Objectives

Upon completion of this course, the student will be able to:

1. Install, configure and maintain different software tools such as a computer operating system and other software applications.
2. Choose and install an operating system on a computer.
3. Understand what the Internet is, how it works, and the impact it has in the modern world.
4. Describe the role played by each layer of the OSI Networking model. Identify and manipulate the protocols and interfaces that are part of each layer.
5. Describe computer networks in terms of a five-layer model.
6. Understand all of the standard protocols involved with TCP/IP communications.
7. Learn network services like DNS and DHCP that help make computer networks run.
8. Evaluate different cloud computing services such as cloud storage and compute platforms

IV. Methods of Presentation:

Distance Education, Lecture and Discussion, Discussion, Projects, Group Work, Observation and Demonstration, Online instructor-provided resources, Other Methods: Quizzes and Exams

V. **Course Content**

% of Course	Topic
5.000%	Introduction to IT
15.000%	Hardware
10.000%	Operating Systems
10.000%	Software
10.000%	Introduction to Networking
15.000%	The Network layer
15.000%	Networking Services
10.000%	Connecting to the Internet
10.000%	Troubleshooting
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
35%	Quizzes: weekly quizzes
15%	Class Participation
20%	Homework
20%	Class Work: Hands-on simulation assessments
10%	Final exam
100%	Total

VII. **Sample Assignments:**
Sample Assignment 1: Assignment 1: Documentation is an important part of IT Technical Support. It's vital to document processes and policies not only for yourself but for your teammates that may encounter the same issue. It helps students to get in the habit of writing good documentation. In this assignment students write a document to explain step-by-step process on troubleshooting user problem with opening the email program. You'll want to be detailed yet concise. Start off with a very specific and clear description of a problem which gives a good background information on what the issue is description of the problem and provide a solution detailed in a step-by-step manner. Remember always write documentation that makes it easy for the reader to follow.

Sample Assignment 2: Assignment 2: In this assignment, students are given a scenario about wireless channels and how to select the optical setup. Scenario: You are an IT Support Specialist that has setup three wireless channels for a company. As time goes on, neighboring companies have their own wireless networks coming into operation. This causes network interference between your networks and their network. Select the configuration with the least amount of network interference.

VIII. **Student Learning Outcomes:**
1. Students will learn different computer components and assemble a computer and install an operating system in simulation environment.
2. Students will learn how to write documentation to explain the process of describing the problem. Step-by-step solution to achieve the desired end result.
3. Students will learn different network devices, layers and protocols involved in sending data across the network in simulation environment.

CS 84A Distance Education Application

☑ Fully Online

1a. Instructor - Student Interaction:
Regular instructor-initiated contact with students using LMS communication tools and a clear explanation for students of when and how communication will happen. Instructor initiates welcome email a couple of weeks prior to class starting, followed by weekly announcements on grades postings and special notes and reminders. Instructor uses LMS Inbox for any class and/or individual student communication.

1b. Student - Student Interaction:
Weekly threaded discussions and chats will be available to students to discuss or work with topics along with classmates to learn and retain content better.

1c. Student - Content Interaction:
Course will be organized in weekly modules where students complete reading/lecture materials, take a quiz, work on assignment/s and participate in threaded discussions for answering instructor's questions and replying to other classmates postings.

1d. Distance Ed Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Discussion Boards	Discussion forums are initiated on a frequent basis by instructor. This will allow the student and instructor an opportunity to interact in the course. Instructor posts questions based on material covered in weekly modules as basis for the discussion. Discussion will be posted to promote student teacher interaction and student-to-student interaction on a variety of cultural concepts.	10.00%
Discussion Boards	Students will share topics over the discussion board.	10.00%
Online Lecture	Students will attend online lectures each week	30.00%
Exams	Student knowledge will be assessed regularly throughout the course	25.00%
Written assignments	Students will complete various homework assignments each week.	25.00%

2. Organization of Content:
Course topics are organized into weekly modules including readings, PowerPoint presentations, quizzes, assignments, videos, discussion board questions delivered in LMS.

3. Assessments:

% of grade	Activity	Assessment Method
15.00%	Online Discussions	Students will complete weekly discussion prompts.
35.00%	Quizzes	There will be regular student knowledge assessment as the course proceeds
20.00%	Homework Assignments	Each unit will include assigned homework to complete.
20.00%	Hands-on Simulation Assignments	Students will complete weekly hands-on simulation assignments
10.00%	Final Exam	Students will complete a final exam

4. Instructor's Technical Qualifications:
Instructor who delivers this course should have a working knowledge of the college LMS and its features, working knowledge in computer hardware, software, and networking, ability to troubleshoot the software in different platforms (Windows and Mac OS).

5. Student Support Services:
Services such as GPS, Department website, Campus Police, Library database, Health sciences counseling, Financial aid, Center for Wellness, Campus Police, Students with disabilities services, Title IX, links to professional organizations.

6. Accessibility Requirements:
Course content will be fully delivered in college LMS and videos will have proper captioning.

7. Representative Online Lesson or Activity:

Documentation is an important part of IT Technical Support. It's vital to document processes and policies not only for yourself but for your teammates that may encounter the same issue. It helps students to get in the habit of writing good documentation. In this assignment students write a document to explain step-by-step process on troubleshooting user problem with opening the email program. You'll want to be detailed yet concise. Start off with a very specific and clear description of a problem which gives a good background information on what the issue is description of the problem and provide a solution detailed in a step-by-step manner. Remember always write documentation that makes it easy for the reader to follow. This activity is submitted via LMS drop box.

New Course: COMPUTER SCIENCE 84B, Google IT Support Fundamentals II

Units:	3.00
Total Instructional Hours (usually 18 per unit):	54.00
Hours per week (full semester equivalent) in Lecture:	3.00
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	108.00
Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Prerequisite(s):	CS 84A
Proposed Start:	Fall 2022
TOP/SAM Code:	070820 - Computer Support / C - Clearly Occupational
Grading:	Letter Grade or P/NP
Repeatability:	No
Library:	Library has adequate materials to support course
Minimum Qualification:	Computer Science
Program Impact:	Proposed for inclusion in an existing degree or certificate • Networking Certificate of Achievement

Rationale

As a Career Education department at SMC, we regularly update and add to our curriculum to train our students with relevant IT job opportunities. The Google IT Support Professional Certificate is a hands-on, online program designed to prepare students for entry-level jobs in IT Support upon completion of the certificate, or continued education in the field. The program is exclusively developed by Google and covers all the fundamentals of IT support, including troubleshooting, customer service, networking, operating systems, system administration, and security. The goal of this program is to educate, enable, and empower students with the digital skills needed to benefit from the job placement opportunities of today and tomorrow.

I. **Catalog Description**

This course is the second in a three course series that aims to prepare students for a role as an entry-level IT Support Specialist. In this course, students learn the main components of an operating system via hands-on labs in Linux and Windows that practice critical administrative tasks to manage software, organize user accounts and configure hardware devices. Students will learn about the infrastructure services that keep all organizations, big and small, up and running. Students are introduced to the typical cloud infrastructure that manages cloud resources and learn various tools and techniques that can help to recover an organization's IT infrastructure in the event of a failure or disaster.

II. **Examples of Appropriate Text or Other Required Reading:**
(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
  1. <u>Networking for Systems Administrators</u>, 1st, Michael W. Lucas, Tilted Windmill Press © 2019, ISBN: 978-1642350333

III. **Course Objectives**

Upon completion of this course, the student will be able to:
  1. Navigate the windows and Linux file systems using a graphical user interface and command line interpreter.
  2. Set up users, groups, and permissions for account access.
  3. Practice installing, configuring, and removing software on the Windows and Linux operating systems. Also configure disk partitions and file systems.
  4. Understand how system processes work and how to manage them.
  5. Work with system logs and remote connection tools.
  6. Utilize operating system knowledge to troubleshoot common issues in an IT Support Specialist role.
  7. Identify best practices for choosing hardware, vendors, and services for an organization.
  8. Understand how the most common infrastructure services that keep an organization running work, and how to manage infrastructure servers.
  9. Understand how to make the most of the cloud in an organization.

10. Choose and manage the tools that your organization will use.

IV. **Methods of Presentation:**
Distance Education, Lecture and Discussion, Observation and Demonstration, Discussion, Projects, Group Work, Other, Online instructor-provided resources
Other Methods: Quizzes and Exams

V. **Course Content**

% of Course	Topic
10.000%	Basics of Windows and Linux Operating Systems
15.000%	Configure Users and Permissions
10.000%	Software Management in both Operating Systems
10.000%	Introduction to System Administration
10.000%	Network and Infrastructure Services
15.000%	Software and Platform Services
15.000%	Active Directory Services to Centrally Manage Networks of Computers
5.000%	Data Recovery and Backups
10.000%	Troubleshooting
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
35%	Quizzes: weekly quizzes
15%	Class Participation
20%	Homework
20%	Class Work: Hands-on simulation assessments
10%	Final exam
100%	Total

VII. **Sample Assignments:**
Assignment 1: In this assignment students install and configure Windows operating systems, install Microsoft Office suite, create two users and grant them permissions such that one user can access only Excel and the other one can access all the programs in MS Office.

Assignment 2: In this assignment, students are given a scenario to assess the IT infrastructure of three fictitious companies, and provide recommendations and advice about how to support their IT infrastructure.

VIII. **Student Learning Outcomes:**
1. Students will learn how to navigate, work, and troubleshoot common issues found in the Windows and Linux OS's and how to manage software applications setup.
2. Students will learn the responsibilities and role of a System administrator to support IT infrastructure which encompasses hardware, software, network and services required to operate in an organization.
3. Students will learn different skills and problem-solving techniques of a Systems Administrator in simulation environment.

CS 84B Distance Education Application

☑ Fully Online

1a. Instructor - Student Interaction:
Regular instructor-initiated contact with students using LMS communication tools and a clear explanation for students of when and how communication will happen. Instructor initiates welcome email a couple of weeks prior to class starting, followed by weekly announcements on grades postings and special notes and reminders. Instructor uses LMS Inbox for any class and/or individual student communication.

1b. Student - Student Interaction:
Weekly threaded discussions and chats will be available to students to discuss or work with topics along with classmates to learn and retain content better.

1c. Student - Content Interaction:
Course will be organized in weekly modules where students complete reading/lecture materials, take a quiz, work on assignment/s and participate in threaded discussions for answering instructor's questions and replying to other classmates postings.

1d. Distance Ed Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Discussion Boards	Discussion forums are initiated on fa frequent basis by instructor. This will allow the student and instructor an opportunity to interact in the course. Instructor posts questions base on material covered in weekly modules as basis for the discussion. Discussion will be posted to promote students teacher interaction and student-to-student interaction on a variety of cultural concepts.	10.00%
Discussion	Students will share topics over the discussion board.	10.00%
Online Lecture	Students will attend online lectures each week.	30.00%
Exams	Students knowledge will be assessed regularly throughout the course.	25.00%
Written assignments	Students will complete various homework assignments each week.	25.00%

2. Organization of Content:
Course topics are organized into weekly modules including readings, PowerPoint presentations, quizzes, assignments, videos, discussion board questions delivered in LMS.

3. Assessments:

% of grade	Activity	Assessment Method
15.00%	Online Discussions	Students will complete weekly discussion prompts.
35.00%	Quizzes	There will be regular student knowledge assessment as the course proceeds.
20.00%	Homework Assignments	Each unit will include assigned homework to complete.
20.00%	Hands-on Simulation Assignments	Students will complete weekly hands-on simulation assignments.
10.00%	Final Exam	Students will complete a final exam.

4. Instructor's Technical Qualifications:
Instructor who delivers this course should have a working knowledge of the college LMS and its features, working knowledge in computer hardware, software, and networking, ability to troubleshoot the software in different platforms (Windows and Mac OS).

5. Student Support Services:
Services such as GPS, Department website, Campus Police, Library database, Health sciences counseling, Financial aid, Center for Wellness, Campus Police, Students with disabilities services, Title IX, links to professional organizations.

6. Accessibility Requirements:
Course content will be fully delivered in college LMS and videos will have proper captioning.

7. Representative Online Lesson or Activity:

Documentation is an important part of IT Technical Support. It's vital to document processes and policies not only for yourself but for your teammates that may encounter the same issue. It helps students to get in the habit of writing good documentation. In this assignment students write a document to explain step-by-step process on troubleshooting user problem with opening the email program. You'll want to be detailed yet concise. Start off with a very specific and clear description of a problem which gives a good background information on what the issue is description of the problem and provide a solution detailed in a step-by-step manner. Remember always write documentation that makes it easy for the reader to follow. This activity is submitted via LMS drop box.

Prerequisite Checklist and Worksheet: CS 84B
Prerequisite: CS 84A; Google IT Support Fundamentals I

SECTION 1 - CONTENT REVIEW: If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	X	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	X	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY:

  X Type 2: Sequential within and across disciplines (e.g., Physics 7, 8, 9, …) **Complete the Prerequisite Worksheet**

ENTRANCE SKILLS FOR **(CS 84B)**
(What the student needs to be able to do or understand BEFORE entering the course in order to be successful)

A)	Identify computer components and how to assemble a computer from scratch.
B)	Choose and install an operating system on a computer.
C)	Describe computer networks in terms of a five-layer model.
D)	Understand all of the standard protocols involved with TCP/IP communications.
E)	Understand cloud computing, everything as a service, and cloud storage.
F)	Utilize common problem-solving methodologies and soft skills in an Information Technology setting.

EXIT SKILLS (objectives) FOR **(CS 84A)**
(What the student has the demonstrated ability to do or understand AFTER successful completion of this course)

1.	Identify computer components and how to assemble a computer from scratch.
2.	Choose and install an operating system on a computer.
3.	Describe computer networks in terms of a five-layer model.
4.	Understand all of the standard protocols involved with TCP/IP communications.
5.	Understand cloud computing, everything as a service, and cloud storage.
6.	Utilize common problem-solving methodologies and soft skills in an Information Technology setting.

		ENTRANCE SKILLS FOR (CS 84B)							
		A	B	C	D	E	F	G	H
EXIT SKILLS FOR (CS 84A)	1	x							
	2		x						
	3			x					
	4				x				
	5					x			
	6						x		
	7								
	8								

New Course: COMPUTER SCIENCE 84C, Google IT Support Fundamentals III

Units:	3.00
Total Instructional Hours (usually 18 per unit):	54.00
Hours per week (full semester equivalent) in Lecture:	3.00
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	108.00
Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Prerequisite(s):	CS 84B
Proposed Start:	Fall 2022
TOP/SAM Code:	070820 - Computer Support / C - Clearly Occupational
Grading:	Letter Grade or P/NP
Repeatability:	No
Library:	Library has adequate materials to support course
Minimum Qualification:	Computer Science
Program Impact:	Proposed for inclusion in an existing degree or certificate • Networking Certificate of Achievement

Rationale

As a Career Education department at SMC, we regularly update and add to our curriculum to train our students with relevant IT job opportunities. The Google IT Support Professional Certificate is a hands-on, online program designed to prepare students for entry-level jobs in IT Support upon completion of the certificate, or continued education in the field. The program is exclusively developed by Google and covers all the fundamentals of IT support, including troubleshooting, customer service, networking, operating systems, system administration, and security. The goal of this program is to educate, enable, and empower students with the digital skills needed to benefit from the job placement opportunities of today and tomorrow.

I. Catalog Description

This course is the third course in a three course series that aims to prepare students for a role as an entry-level IT Support Specialist. In this course, students learn a wide variety of IT security concepts, tools and, best practices. Common threats and attacks are described along with methods for reducing potential vulnerabilities. Encryption algorithms are discussed along with and how they can be used to safeguard data. Students also learn network security solutions, ranging from firewalls to Wifi encryption options and how to integrate a culture of security into an organization.

II. Examples of Appropriate Text or Other Required Reading:

(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
1. Cybersecurity Essentials , 1st, Charles J. Brooks, Christopher Grow, Philip Craig, Donald Short, Sybex; © 2018, ISBN: 978-1119362395

III. Course Objectives

Upon completion of this course, the student will be able to:
1. Understand various encryption algorithms and techniques work as well as their benefits and limitations.
2. Learn authentication systems and types.
3. Identify the difference between authentication and authorization.
4. Evaluate potential risks and recommend ways to reduce risk.
5. Choose best practices for securing a network.

IV. Methods of Presentation:

Distance Education, Lecture and Discussion, Discussion, Projects, Group Work, Online instructor-provided resources, Other, Observation and Demonstration
Other Methods: Quizzes and Exams

V. Course Content

% of Course	Topic
10.000%	Understanding Security Threats
15.000%	Encryption Methods
20.000%	Three A's in Cybersecurity
20.000%	Securing the Network
20.000%	Defense in Depth
15.000%	Creating a Culture for Security
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
35%	Quizzes: weekly quizzes
15%	Class Participation
20%	Homework
20%	Class Work: Hands-on simulation assessments
10%	Final exam
100%	Total

VII. **Sample Assignments:**
Assignment 1: In this assignment students are asked if they have ever been a victim of malicious software or identity theft? If so, share their experiences with fellow students. What type of malicious software or attack were they exposed to? Include any details about how they discovered the incident and what they did to resolve it.

Assignment 2: In this assignment, students reflect on their own security practices: What security protections do they currently use in their daily life? How could they improve their security habits for the future? Share their best (or worst!) security habits with their fellow students.

VIII. **Student Learning Outcomes:**
1. Students will learn to define and recognize security risks vulnerabilities and threats and identify the most common security attacks.
2. Students will learn best practices of securing a network by reducing its potential vulnerabilities through configuration.
3. Students will learn different authentication methods and level of access granted for users in simulated environment.

CS 84C Distance Education Application
☑ Fully Online

1a. Instructor - Student Interaction:
Regular instructor-initiated contact with students using LMS communication tools and a clear explanation for students of when and how communication will happen. Instructor initiates welcome email a couple of weeks prior to class starting, followed by weekly announcements on grades postings and special notes and reminders. Instructor uses LMS Inbox for any class and/or individual student communication.

1b. Student - Student Interaction:
Weekly threaded discussions and chats will be available to students to discuss or work with topics along with classmates to learn and retain content better.

1c. Student - Content Interaction:

Course will be organized in weekly modules where students complete reading/lecture materials, take a quiz, work on assignment/s and participate in threaded discussions for answering instructor's questions and replying to other classmates postings.

1d. Distance Ed Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Discussion Boards	Discussion forums are initiated on fa frequent basis by instructor. This will allow the student and instructor an opportunity to interact in the course. Instructor posts questions base on material covered in weekly modules as basis for the discussion. Discussion will be posted to promote students teacher interaction and student-to-student interaction on a variety of cultural concepts.	10.00%
Discussion	Students will share topics over the discussion board.	10.00%
Online Lecture	Students will attend online lectures each week.	30.00%
Exams	Students knowledge will be assessed regularly throughout the course.	25.00%
Written assignments	Students will complete various homework assignments each week.	25.00%

2. Organization of Content:
Course topics are organized into weekly modules including readings, PowerPoint presentations, quizzes, assignments, videos, discussion board questions delivered in LMS.

3. Assessments:

% of grade	Activity	Assessment Method
15.00%	Online Discussions	Students will complete weekly discussion prompts.
35.00%	Quizzes	There will be regular student knowledge assessment as the course proceeds.
20.00%	Homeword Assignments	Each unit will include assigned homework to complete.
20.00%	Hands-on Simulation Assignments	Students will complete weekly hands-on simulation assignments.
10.00%	Final Exam	Students will complete a final exam.

4. Instructor's Technical Qualifications:
Instructor who delivers this course should have a working knowledge of the college LMS and its features, working knowledge in computer hardware, software, and networking, ability to troubleshoot the software in different platforms (Windows and Mac OS).

5. Student Support Services:
Services such as GPS, Department website, Campus Police, Library database, Health sciences counseling, Financial aid, Center for Wellness, Campus Police, Students with disabilities services, Title IX, links to professional organizations.

6. Accessibility Requirements:
Course content will be fully delivered in college LMS and videos will have proper captioning.

7. Representative Online Lesson or Activity:
Documentation is an important part of IT Technical Support. It's vital to document processes and policies not only for yourself but for your teammates that may encounter the same issue. It helps students to get in the habit of writing good documentation. In this assignment students write a document to explain step-by-step process on troubleshooting user problem with opening the email program. You'll want to be detailed yet concise. Start off with a very specific and clear description of a problem which gives a good background information on what the issue is description of the problem and provide a solution detailed in a step-by-step manner. Remember always write documentation that makes it easy for the reader to follow. This activity is submitted via LMS drop box.

Prerequisite Checklist and Worksheet: CS 84C
Prerequisite: CS 84B; Google IT Support Fundamentals II

SECTION 1 - CONTENT REVIEW: If any criterion is not met, the prerequisite will be disallowed.

Criterion	Met	Not Met
1. Faculty with appropriate expertise have been involved in the determination of the prerequisite, corequisite or advisory.	X	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.	X	
3. Selection of this prerequisite, corequisite or advisory is based on tests, the type and number of examinations, and grading criteria.	X	
4. Selection of this prerequisite, corequisite or advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.	X	
5. The body of knowledge and/or skills which are necessary for success before and/or concurrent with enrollment have been specified in writing.	X	
6. The course materials presented in this prerequisite or corequisite have been reviewed and determined to teach knowledge or skills needed for success in the course requiring this prerequisite.	X	
7. The body of knowledge and/or skills necessary for success in the course have been matched with the knowledge and skills developed by the prerequisite, corequisite or advisory.	X	
8. The body of knowledge and/or skills taught in the prerequisite are not an instructional unit of the course requiring the prerequisite.	X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.	X	

SECTION II - ADDITIONAL LEVEL OF SCRUTINY:

  X Type 2: Sequential within and across disciplines (e.g., Physics 7, 8, 9, …) **Complete the Prerequisite Worksheet**

ENTRANCE SKILLS FOR **(CS 84C)**
(What the student needs to be able to do or understand BEFORE entering the course in order to be successful)

A)	Understand how system processes work and how to manage them.
B)	Utilize operating system knowledge to troubleshoot common issues in an IT Support Specialist role.
C)	Practice installing, configuring, and removing software on the Windows and Linux operating systems. Also configure disk partitions and filesystems.
D)	Understand how the most common infrastructure services that keep an organization running work, and how to manage infrastructure servers.

EXIT SKILLS (objectives) FOR **(CS 84B)**
(What the student has the demonstrated ability to do or understand AFTER successful completion of this course)

1.	Understand how system processes work and how to manage them.
2.	Utilize operating system knowledge to troubleshoot common issues in an IT Support Specialist role.
3.	Practice installing, configuring, and removing software on the Windows and Linux operating systems. Also configure disk partitions and filesystems.
4.	Understand how the most common infrastructure services that keep an organization running work, and how to manage infrastructure servers.

		ENTRANCE SKILLS FOR (CS 84C)							
		A	B	C	D	E	F	G	H
EXIT SKILLS FOR (CS 84B)	1	x							
	2		x						
	3			x					
	4				x				
	5								
	6								
	7								
	8								

New Course: ECE - NONCREDIT 922, Reflective Parenting with Exceptional Children

Units:	0.00
Total Instructional Hours (usually 18 per unit):	54.00
Hours per week (full semester equivalent) in Lecture:	3.00
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	108.00

Transferability:	None
Degree Applicability:	Noncredit
Proposed Start:	Fall 2022
TOP/SAM Code:	130500 - Child Development/Early Care and Education / D - Possibly Occupational
Grading:	Noncredit (No Progress Indicators)
Repeatability:	Yes
Library:	Library has adequate materials to support course
Minimum Qualification:	Child Development/Early Childhood Education
Program Impact:	None

Rationale

Research suggests that reflective parenting can increase parents' ability to understand themselves and their children and strengthen parent-child relationships. Research also suggests that parents of children who are diagnosed with a disability at birth or during early childhood face stressors and develop strengths in ways that differ from those experienced by parents of neurotypical children. For parents of children with exceptional needs, participation in an experiential learning community grounded in reflective parenting and tailored to their unique experiences can support self-efficacy, child advocacy, and foster mindsets that promote healthy parent-child relationships.

I. **Catalog Description**

In this experiential learning course, parents will consider child development and reflective parenting principles and apply them to parenting children with exceptional abilities and needs. Parents will learn about reflective practices and mindfulness and consider how they support positive parent-child interactions. Parents will examine parent and child rights, the IFSP and IEP process, decision-making, therapy options, accessing community supports and services, and advocacy, through a reflective lens. The course offers parents a forum to discuss the emotional aspects of parenting a child with exceptionalities and share resources. The skills learned in this class promote positive parenting attitudes and healthy parent-child relationships.

II. **Examples of Appropriate Text or Other Required Reading:**
(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
1. The Essentials: Supporting Young Children with Disabilities in the Classroom, Pamela Brillante, NAEYC © 2017

III. **Course Objectives**

Upon completion of this course, the student will be able to:
1. Identify developmental stages and milestones for young children.
2. Reflect on parent interactions that enhance the parent-child relationship within the context of other family relationships (e.g. siblings, partners, extended family members).
3. Apply principles of reflection and mindfulness to parenting an exceptional child.
4. Identify developmentally appropriate strategies, responses, and redirections to use during parent-child interactions.
5. Describe community-based supports and services available to support children with exceptionalities and their families and how to access them.

IV. **Methods of Presentation:**

Lecture and Discussion, Observation and Demonstration, Projects, Visiting Lecturers, Group Work, Discussion

V. **Course Content**

% of Course	Topic
15.000%	Stages of Child Development 1. Discuss typical developmental trajectories and milestones 2. Discuss atypical developmental trajectories
15.000%	Principles of Reflective Parenting 1. Discuss a range of parenting styles. 2. Reflect on personal parenting styles.
20.000%	Mindfulness 1. Discuss the practice of mindfulness. 2. Apply the principles of mindfulness to parenting.
30.000%	Developmentally Appropriate Responses and Environments 1. Identify developmentally appropriate responses and redirection. 2. Discuss behavior as a form of communication. 3. Discuss strategies, tools, and resources to address parenting challenges. 4. Describe how to set up developmentally supportive environments (i.e. home, school, childcare).
10.000%	Parent and Child Rights 1. Discuss parent and child rights under the Individuals with Disabilities Education Act and other legislation that addresses disability rights. 2. Demonstrate understanding of the IFSP and IEP and the differences between them.
10.000%	Community Based Services and Advocacy 1. Describe the role of Regional Center, developmental pediatricians, and other community resources for addressing developmental concerns. 2. Discuss community-based services and how to access them (e.g. speech and language therapy, occupational therapy, physical therapy, early intervention) 3.Discuss advocacy and what it looks like in practice.
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
50%	Class Participation: Threaded and small group discussion/projects
25%	Other: Reflective Journals/Written Assignments
25%	Final Project: Written Assignment/ Final Presentation
100%	Total

VII. **Sample Assignments:**

Journaling: Instead of weekly quizzes, you will be completing weekly journal reflections based on readings, videos, class discussions, and your own thoughts and feelings about the week's lessons. These loosely guided reflections are your opportunity to consider what you learned this week and make meaningful connections between course content and your parenting. This Week's Reflection Prompts: 1. How did class go for you this week? What questions or concerns would you like to share? 2. Identify 3 passages from this week's reading that were insightful or meaningful for you. One of your passages must come from your selected reading topic (e.g. special needs or linguistic diversity). Quote each passage and share why it was meaningful to you. 3. Describe how you might incorporate this week's content into your parenting? 4. What concepts from this week are still unclear for you? 5. What additional information would you like to know about this week's topic? 6. What other questions do you have or what information would you like me to know?

Final Assignment: Journey through the Course : Overview: Create a multi-media presentation to illustrate your learning journey in this class. After reviewing course articles, class notes, discussions and videos, apply course content to your parenting experiences. Complete this reflective project with as much depth and detail as possible. Instructions: Reflect on your learning in this course and how it relates to your own life and children. Create a stand-alone, self-explanatory presentation (PowerPoint, Keynote, Prezi, PDF, physical poster board, or display of your choice), that depicts a minimum of 10 applications of course content to your parenting journey. For each application, include a graphic representation and describe how it has influenced or manifested in your personal growth and development. Share your project as an attachment or web link. Recommendations:In keeping with our course commitment to active learning, critical thinking, and gender/cultural diversity, I strongly encourage creativity and independent thinking on this project. Don't be afraid to incorporate something new and unusual. Suggestions

include: song lyrics, pictures, letters, television or movie clips, toys, poems, artwork, cartoons, etc. Remember: Have fun and be creative!

VIII. **Student Learning Outcomes:**
1. Describe unique experiences, challenges, and successes associated with parenting children with exceptional abilities and needs.
2. Apply reflective parenting principles to parent-child interactions, planning interactions, and establishing goals.

ECE 922 Distance Education Application

☑ Online/Classroom Hybrid (not a delivery option when campus is closed)

1a. Instructor - Student Interaction:
The instructor will send out a pre-course welcome letter 1-2 weeks before the course begins with information about the course and how the instructor will communicate with the students. The instructor will provide on going feedback, comments, and suggestions to assist and improve student performance. The instructor will also provide instructions and support as needed for course navigation. The instructor will send reminders of assignment due dates. The instructor will post an announcement for each week's activities. The instructor will offer weekly check-ins and provide physical and/or virtual office hours along with a telephone option as needed.

1b. Student - Student Interaction:
Using asynchronous discussion activities students will communicate with their classmates throughout the course about course content and everyday life. Small group activities/discussions will take place 3-4 times during the course. Asynchronous Threaded Discussions will occur 1-2 times weekly. A Student Lounge Discussion Board will be available for discussion of non-course related topics.

1c. Student - Content Interaction:
Students will interact with course content on a weekly basis through readings, videos, discussions and/or reflective assignments.

1d. Distance Ed Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Discussion	Discussion / Discussion Boards: Weekly discussion topics/prompts will be posted to promote student-teacher interaction and student-to-student interaction on a variety of reflective parenting topics. Students are required to respond to peers' comments/posts. Small group discussions will be offered periodically throughout the course.	50.00%
Written assignments	Reflective assignments, observation assignments, and article reviews will provide opportunities for students to apply course content to their lives. Reflective assignments can be submitted using text, audio and/or video features in the LMS.	20.00%
Online Lecture	Online lectures will reinforce course content using illustrative examples and video commentary from the instructor and/or other relevant media sources.	15.00%
Videos	Students will view and reflect on videos related to course material, including illustrative video case studies.	15.00%

2. Organization of Content:
The course will be divided into weekly modules, including an assignment and objective page outlining weekly activities. Modules will include activities such as observations, readings, mini recorded lectures, reflective journaling, videos, and conducting web searches.

3. Assessments:

% of grade	Activity	Assessment Method
50.00%	Discussion/Discussion Boards	Students will share experiences and provide feedback to peers on discussion boards. A rubric with clear expectations for assessment will be provided.

25.00%	Journals/Reflective Assignments	Students will submit reflective assignments weekly. Rubrics with clear expectations for assessment will be provided.
25.00%	Final Project	Students will create a mulit-media presentation to illustrate their learning journey in the course.

4. Instructor's Technical Qualifications:

Instructors should be familiar with the college's learning management system (LMS). The instructor should be knowledgeable about accessibility resources on and off-campus, familiar with LMS tools and available supports, and willing to stay current as technology changes every day.

5. Student Support Services:

Links that may be integrated into the online course include:The department website, Center for Wellness and Well-Being, Campus Police, Office for Students with Disabilities, Title IX statement, Learning Environment Statement, SMC DREAM Program and DACA statement, Veteran Resource Center, ECE Teacher Resource Room, Child Development Training Consortium, Library Resources, Scholarships, Academic Counseling, Career Service Center, SMC Code of Ethics, NAEYC Code of Ethics, California Early Childhood Educator Competencies, SMC Reading Lab, and the SMC Writing Lab.

6. Accessibility Requirements:

Course design will adhere to California Community College Distance Education Guidelines, CA Code 11135 and Section 508 of the Rehabilitation Act. This includes closed captioning of all videos and video lectures, following principles for Universal Design when formatting LMS pages, PDFs and other web-based documents, using descriptive Alt-text for images and graphics, and ensuring links to external websites are descriptive and provide accurate information about the linked content. Consultation with accessibility experts from the Office of Students with Disabilities and/or Distance Education Team will occur when additional accommodations are needed or questions arise.

7. Representative Online Lesson or Activity:

Objective #4: Identify developmentally appropriate strategies, responses, and redirections to use during parent-child interactions.

Step One: Read the article on parenting exceptional children. Step Two: Watch the video on parenting challenges. Step Three: Post your response to 2 of the following prompts by Thursday: a. What kinds of parenting reflection happened in the video? b. How can parents plan ahead and be prepared to engage children spontaneously, particularly during children's play? c. What are different ways parents might respond to a child who is having difficulties with a daily activity? Step Four: Comment on 1 classmate's post by Sunday.

New Course: EMERITUS – HUMDEV E55, BrainFlex

Units:	0.00
Total Instructional Hours (usually 18 per unit):	23.94
Hours per week (full semester equivalent) in Lecture:	1.33
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	47.88
Transferability:	None
Degree Applicability:	Noncredit
Proposed Start:	Fall 2022
TOP/SAM Code:	083700 - Health Education / E - Non-Occupational
Grading:	Noncredit (No Progress Indicators)
Repeatability:	Yes
Library:	Library has adequate materials to support course
Minimum Qualification:	Health; Learning Disabilities: Specialist; Psychology; Speech Language Pathology
Program Impact:	None

Rationale
This course will be part of the existing Pathfinders Program, which are specialized classes for students who have had an Acquired Brain Injury. The current Pathfinders courses focus on physical exercise and communication, while a course related to cognitive skills did not exist, hence the development of the pilot.

I. Catalog Description
This course helps older adults who have sustained an acquired brain injury maintain or improve their functional cognition through individualized feedback offered in a group setting. Emphasis will be placed on maintenance of skills such as memory, verbal reasoning, and attention span. Participation in this class allows adults to develop compensatory techniques so that they can maintain their independence and safely participate in home and community tasks that promote self-reliance and active decision making.

II. Examples of Appropriate Text or Other Required Reading:
(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
1. None

III. Course Objectives
Upon completion of this course, the student will be able to:
1. Actively engage in exercises for stimulating cognitive function as defined by memory, attention, reasoning and executive function skills.
2. Acquire knowledge of brain injury and recovery sequelae.
3. Become familiar with and utilize a variety of strategies to enhance cognitive skills as related to activities of daily living.
4. Maintain or increase self-awareness and problem solving for community and personal activities.
5. Maintain or increase their independence through self-advocacy and by making their own choices regarding their participation in the community.
6. Demonstrate peer support for acquired brain injury survivors.

IV. Methods of Presentation:
Observation and Demonstration, Discussion, Visiting Lecturers, Individualized Instruction, Group Work, Online instructor-provided resources, Lecture and Discussion, Distance Education

V. Course Content

% of Course	Topic
25.000%	Principles of normal brain function, changes after injury and factors in recovery
25.000%	Self-identification and management of strategies to enhance function

25.000%	Guided practice for cognitive skills such as memory, attention, and abstract reasoning
25.000%	Review of cognitive compensatory techniques for home and community based activities to insure safety
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
50%	Class Participation
50%	Other: Instructor observation of student learning and implementation of strategies
100%	Total

VII. **Sample Assignments:**
Memory Strategy: Using spaced retrieval technique that was learned in class, choose a list or activity that you need to remember. Practice daily recalling the items using internal strategies that were discussed.

Attention Tracking: Use the provided tracking sheet, to observe when your attention is disrupted at least 3 times before our next class. Be sure to note what you were doing and what the distraction was. List any strategies you used to get yourself back on track.

VIII. **Student Learning Outcomes:**
1. Students will increase knowledge of acquired brain injury and recovery principles.
2. Students will develop strategies to assist with compensating for cognitive deficits in functional situations
3. Students will provide encouragement to peers and actively engage in group activities.

E HUMDEV E55 Distance Education Application
☑ Fully Online

1a. Instructor - Student Interaction:
Communication via college LMS announcements at least 2x/month for college or department updates and through emails if student is not attending class. Virtual office meetings can be made as student needs assistance and/or accommodations for regular academic classes.

1b. Student - Student Interaction:
Students interact during synchronous class meetings through discussions and break out rooms. This happens on a weekly basis.

1c. Student - Content Interaction:
Lecture slides are posted on college LMS or emailed to students as well as any supplemental material that can be used as a reference. As a non-credit class, there are no graded assignments so students interact with content for personal development.

1d. Distance Ed Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Discussion	Group Discussions	50.00%
Other (describe)	Think Pair Share	25.00%
Other (describe)	Facilitated Practice	25.00%

2. Organization of Content:
Methods of instruction include lecture, power point slides, written handouts, video supplementation (e.g. TED talk) and group discussion. Content will be listed on college LMS in module formats weekly.

3. Assessments:

% of grade	Activity	Assessment Method
50.00%	Class Participation	Participating in Class activities
50.00%	Implementation of Strategies	Instructor observation of student learning and implementation of strategies

4. Instructor's Technical Qualifications:
College LMS knowledge, CCCConfer, PowerPoint and relevant material for educating students on recovery from Acquired Brain Injury, especially as it relates to integrating into the academic setting

5. Student Support Services:
Links to Counseling, DSPS, Wellness Center and Tutoring Services would be beneficial

6. Accessibility Requirements:
Captions for video content, audio transcript available upon request as well as recording of lectures, PowerPoint slides to be presented and posted in pdf format, greater font size for handouts

7. Representative Online Lesson or Activity:
Student Learning Objective: propose an academic adjustment needed to be successful in course. Based on module of academic strategies, students will be able to identify a support service and/or accommodation that benefits their learning style. This is reviewed and detailed during a mid-semester meeting with instructor.

New Course: EMERITUS – TH ART E20, Improvisation

Units:	0.00
Total Instructional Hours (usually 18 per unit):	32.04
Hours per week (full semester equivalent) in Lecture:	1.78
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	64.08

Transferability:	None
Degree Applicability:	Noncredit
Proposed Start:	Fall 2022
TOP/SAM Code:	100700 - Dramatic Arts / E - Non-Occupational
Grading:	Noncredit (No Progress Indicators)
Repeatability:	Yes
Library:	Library has adequate materials to support course
Minimum Qualification:	Theater Arts
Program Impact:	None

Rationale

Improvisation is a skill that anyone can benefit from. Qualitative studies show that the basic outcomes of an improvisation course can increase life outlook and general mood. For older learners, benefits include: Increased positivity. An increased sense of comfort and ease with the unexpected. A sense of self-development and self-awareness. A feeling of acceptance by their social group. Overall, Improvisation is the perfect class for Emeritus students because it promotes solving abilities, spontaneity, and the tangible outcome of an expanded and closer-knit social circle.

I. Catalog Description

This course encourages older adults to awaken their childhood by introducing them to the fundamentals of theatre improvisation. Students will joyfully explore essential improvisation performance techniques like spontaneity, creating an environment, character development, and structuring a scene. Build community with classmates through exercises, games, and group activities while having fun developing transferable life skills like quick-thinking, playfulness, imagination, and self-discovery. No improv experience necessary.

II. Examples of Appropriate Text or Other Required Reading:

(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
1. None

III. Course Objectives

Upon completion of this course, the student will be able to:
1. Acquire knowledge of basic improvisation techniques: character creation, setting, and Yes-And.
2. Actively engage in exercises for stimulating cognitive function, creativity, critical thinking, and self-discovery.
3. Perform a short-form improv scene with classmates.
4. Maintain or increase self-awareness and collaboration in a communal setting.
5. Keep and maintain a journal of course progress and personal growth.
6. Demonstrate performance process in front of peers.

IV. Methods of Presentation:

Distance Education, Lecture and Discussion, Observation and Demonstration, Discussion, Projects, Other

V. Course Content

% of Course	Topic
50.000%	Participation in the practice of group improv games and exercises.
15.000%	Participation in group discussions and critical thinking activities.

10.000%	Final journal.
25.000%	Final short-form Improv performance.
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
50%	Class Participation
25%	Final Performance
25%	Homework
100%	Total

VII. **Sample Assignments:**

Video Review: Using the "Yes-And?" technique that was learned in class, watch the assigned YouTube video and identify three aspects of performance that you liked, noticed, and wondered.

Tracking Progress: Using the games and activities in class, journal during the week when you came across situations outside of class where your improv helped you or may have helped you.

VIII. **Student Learning Outcomes:**
1. Students will increase their knowledge of improvisational techniques for the theatre.
2. Students will develop the confidence and tools to perform a short-form improv skit.
3. Students will provide encouragement to peers and actively engage in group activities.

E TH ART E20 Distance Education Application

☑ Fully Online

1a. Instructor - Student Interaction:
Communication via LMS announcements at least 2x/month for college or department updates and through emails if student is not attending class. Virtual office meetings can be made as student needs assistance and/or accommodations for regular academic classes.

1b. Student - Student Interaction:
Students interact during synchronous class meetings through discussions and break-out rooms. This happens on a weekly basis.

1c. Student - Content Interaction:
Lecture slides are posted on LMS as well as any supplemental material that can be used as a reference. As a non-credit class, there are no graded assignments so students interact with content for personal development.

1d. Distance Ed Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Chat Rooms	In-class videos for review	0.10%
Discussion	Group discussion about games and activities	0.80%
Chat Rooms	Think-pair-shares	0.10%

2. Organization of Content:
Methods of instruction include lecture, power point slides, written handouts, video supplementation (e.g. TED talk) and group discussion. Content will be listed on LMS in module formats weekly.

3. Assessments:

% of grade	Activity	Assessment Method

50.00%	Class Participation	Participation in class activities
25.00%	Homework	Homework
25.00%	Final Performance	Participation in Final Performance

4. Instructor's Technical Qualifications:
Current LMS knowledge, CCCConfer, PowerPoint and relevant material for educating students on recovery from Acquired Brain Injury, especially as it relates to integrating into the academic setting

5. Student Support Services:
Links to Counseling, DSPS, Wellness Center and Tutoring Services would be beneficial

6. Accessibility Requirements:
Captions for video content, audio transcript available upon request as well as recording of lectures, PowerPoint slides to be presented and posted in pdf format, greater font size for handouts

7. Representative Online Lesson or Activity:
Student Learning Objective: propose an academic adjustment needed to be successful in course. Based on module of academic strategies, students will be able to identify a support service and/or accommodation that benefits their learning style. This is reviewed and detailed during a mid-semester meeting with instructor.

Substantial Change: COMPUTER APPLICATIONS 51, HTML5, CSS3, and Accessibility

Units:	3.00
Total Instructional Hours (usually 18 per unit):	54.00
Hours per week (full semester equivalent) in Lecture:	3.00
In-Class Lab:	0.00
Arranged:	0.00
Outside-of-Class Hours:	108.00
Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Skills Advisory(s):	CIS 50
Proposed Start:	Fall 2012
TOP/SAM Code:	061430 - Website Design and Development / C - Clearly Occupational

Rationale
Textbook update

I. **Catalog Description**
HTML5 is the next generation of HTML. This hands-on course will explore the differences between HTML5 and XHTML, validating pages to current Web standards and using Cascading Style Sheets (CSS) exclusively to control the look and feel of a site. Students will create and enhance Web pages with links, graphics, tables and forms. Proper use of HTML5 and CSS3 can provide true separation of content, structure and presentation in Web pages, making them structurally sound, easier to maintain, and more consistent with legal requirements for accessibility.

II. **Examples of Appropriate Text or Other Required Reading:**
(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
1. Web Development and Design Foundations with HTML5, 9th, Terry Felke-Morris, Addison-Wesley (Pearson) © 2019, ISBN: 9780134801360

III. **Course Objectives**
Upon completion of this course, the student will be able to:
1. Create Hypertext Markup Language (HTML) documents containing text, links, images, lists, tables and forms.
2. Identify usability and accessibility issues in Web design.
3. Design valid HTML and CSS code.
4. Apply CSS to separate style from content and allow for effective use of assistive technologies.
5. Create inline, embedded and linked style sheets applying the structure, rules and inheritance factors of CSS.
6. Validate Web pages and style sheets.
7. Publish Web pages to a server.

IV. **Methods of Presentation:**
Online instructor-provided resources, Projects, Lecture and Discussion, Observation and Demonstration, Other Methods: Classroom lecture, demonstration and discussion introduces students to each new topic. Hands-on practice, and continued questions and answers with the teacher during the hands-on portion of the class begin to familiarize the student with the topic. Projects and homework assignments will be assigned to review and practice the topics discussed in class.

V. **Course Content**

% of Course	Topic
5.000%	Web Standards and Accessibility, Markup Languages, Internet and Web Trends
10.000%	Overview: XHTML and HTML, HTML Basics, HTML Validation
10.000%	Overview of Cascading Style Sheets, Using Color on Web Pages, Configuring Text with CSS
10.000%	The Image Element, HTML Visual Elements, Background Images and Image Maps, CSS Visual Effects

5.000%	Web Design Basics: Color, Page Layout, Navigation
10.000%	The CSS Box Model, CSS Positioning, HTML Structural Elements
10.000%	More on Hyperlinks, Three-Column CSS Page Layout, CSS Styling for the Mobile Web
10.000%	Tables and cells Layout tables
10.000%	Overview of Forms, Input Element Form Controls, Accessibility and Forms, HTML Form Controls
5.000%	The Web Development Process, Domain Name Overview, Web Hosting
10.000%	Web Multimedia and Interactivity, HTML Audio & Video Elements
5.000%	Search Engine Overview, Designing Your Pages for Web Promotion
100.000%	Total

VI. **Methods of Evaluation**

% of Course	Topic
20%	Final exam
30%	Homework: 11 assignments
10%	Projects: Web Site Project
30%	Quizzes: 11 quizzes
10%	Class Participation
100%	Total

VII. **Sample Assignments:**

Sample 1: This assignment has two parts: 1. Web Research #1, page 23. Answer questions letters a – c. Make sure to identify each question with its corresponding letter. 2. Focus on Web Design, page 24. Answer questions letters a - h. Make sure to identify each question with its corresponding letter.

Sample 2: NOTE: This assignment is a continuation of assignment 1in Website Case Study at the end of chapter 2. As a reminder each of the case studies, starting in chapter 2, continues throughout most of the textbook. In this assignment you create an external CSS file for JavaJam Coffee House website and modify the two web pages: index and menu that you created in assignment 2. You will upload the modified two web pages and a CSS file you create this week inside of "JavaJamAssignment3" folder to your folders on CISWEBS. Review FTP upload instructions in Course Files area. To organize your assignments' files for each assignment, create a subfolder in CIS51 folder on your computer such that you save the assignments' file(s) into that subfolder. For example, create a subfolder for assignment 3 called "JavaJamAssignment3", then copy yourlastname-index.html and yourlastname-menu.html files from Assignment 2 folder into this subfolder. You will also save the external CSS file you create in "JavaJamAssignment3" folder. This will help with your web pages uploading process and keeps each week's assignment separate. NOTE: do not modify index and menu HTML files that you created in JavaJamAssignment2 folder. Each assignment has its own set of files that you create or modify. Complete JavaJam Coffee House from Website Case Study section, pages 123- 125. You create an external CSS file and modify the existing index and menu pages from assignment 2. Use Notepad, or a text editor, or Brackets, HTML editor (link to download this program is in Course Files), to create modify index and menu pages and create the CSS file. Follow the instructions for each page. When saving each file name them as: yourlastname-index.html, youerlastname-menu.html, and yourlastname-javajam.css.. To receive credit for this assignment, upload "JavaJamAssignment3" folder into your folder on CISWEBS at SMC server. Follow the FTPUpload Instructions in Course Files area. To view both web pages after uploading, open a browser window and type this URL: ciswebs.smc.edu/cis51/your smc login name/JavaJamAssignment3/yourlastname-index.html, you need to adjust this URL with your login name and your assignment 3 folder name and file name. Before uploading your page to your folder on CISWEBS, make sure to test each page for a complete display of the elements on the page.

VIII. **Student Learning Outcomes:**

1. Acting as a Web page developer, students will rewrite HTML which adheres to HTML5 standards, validate pages to current Web and accessibility standards, and use CSS to manage site-wide content in Web sites, making them easier to maintain and more accessible to everyone. As assessed by: quizzes and homework.
2. Given content information, students will use HTML5 documents, and create inline, embedded, and linked style sheets to control the separation of content, look, structure, and feel of a Web site. As assessed by: quizzes and homework.

Substantial Change: DESIGN 24, Web Design 1

Units:	3.00
Total Instructional Hours (usually 18 per unit):	90.00
Hours per week (full semester equivalent) in Lecture:	2.00
In-Class Lab:	1.00
Arranged:	2.00
Outside-of-Class Hours:	72.00
Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Skills Advisory(s):	DESIGN 13
Proposed Start:	Fall 2022
Program Impact:	Proposed for inclusion in a forthcoming degree or certificate • A.S. in Graphic Design as an elective, Digital Design Certificate as a requirement

Rationale
Substantial change includes updated units/hours, course content, objectives, and methods of evaluation.

I. **Catalog Description**
This course serves as an introduction to the fundamentals of web design for students with existing command of digital design tools. Students will learn about the history and the nature of the Web as a medium for visual communication, it's underlying structures, and the foundational principles and methods of design for the Web. The course focuses on core concepts like site structure, treatment of text and images, the separation of content and presentation, as well as introduction to layout and positioning and allows students to apply these skills in creation of their own Web pages and sites.

II. **Examples of Appropriate Text or Other Required Reading:**
(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
   1. The Principles of Beautiful Web Design, 4th Editon, Alex Walker, James George, Jason Beaird, SitePoint © 2020, ISBN: 978-1925836363

III. **Course Objectives**
Upon completion of this course, the student will be able to:
   1. Identify and apply basic design concepts and principles for web design.
   2. Apply grid, color, navigation, composition, and typography for contemporary web design effectively.
   3. Demonstrate a basic understanding of the anatomy of a web page.
   4. Demonstrate an understanding of the nature and the structure of the Web, including the basics of the HTTP schema
   5. Demonstrate understanding of wireframing in Web design process
   6. Demonstrate the working knowledge of media formats used in basic web design: marked-up text, style sheets, fonts and images
   7. Build a working multi-page website using text and images

IIIb. **Arranged Hours Objectives:**
Upon completion of this course, the student will be able to:
   1. Identify and apply a basic understanding of HTML and CSS coding.

IV. **Methods of Presentation:**
Critique, Lecture and Discussion, Observation and Demonstration, Projects

IVb. **Arranged Hours Instructional Activities:**
Other Methods: The student will participate in online video tutorials and recommended resources related to basic HTML/CSS.

V. **Course Content**

% of Course	Topic
15.000%	The Internet and the Web structure: History: ARPAnet, Email, TCP/IP, DNS and domains, HTTP format and structure: GET, POST, PUT, DELETE requests HTML structure and components: head and body File organization and tools: Web Inspector, Text Editor, page=file, site=folder Structure of the HTML document: Head and Body components Nested Structure and Ancestry Tree (into to DOM model) Element tags and content. Tag attributes (href, id, src). Headers, paragraphs, lists, images. Internal page anchors and external links. CSS in head of document, basic CSS addressing, color and background-color
25.000%	Intro to layout - box model: Borders, paddings, margins CSS shorthands Border-radius and image vignettes Centering elements, widths and nested structures Advanced layout and positioning: Static, fixed, absolute, relative and sticky positioning Floats and clear-fixes Persistent navigation elements: structure, style, positioning
35.000%	Typography: Web-safe fonts Font properties: size, weight, style, line-height, letter-spacing Text-alignment, text-decoration and text-transform Pseudo elements: first letter and first line External fonts (Google Fonts, etc.) Columns and column properties in CSS Images and display properties: Image formats, bitmap vs. vector, alpha channel Display block, inline, inline-block and none Widths by percentage and child-parent relations Multi-page site components: External fonts (Google Font) and external CSS files Multi-page site navigation and file organization CSS groupings via class attribute CSS addressing, pseudo classes - active, hover, focus
15.000%	HTML forms: Method and action Inputs, text area, checkboxes and radio buttons Selects, multi-selects and options Placeholders and values Labels and relationships with inputs via 'for' Submit process and validation CSS addressing, pseudo classes - before and after for radios/checkboxes HTML tables: Table elements: th, tbody, tr, td Multi-row and -column spans, borders/collapse, padding Alternating row colors, CSS addressing - Nth element pseudo classes
10.000%	Design tools, methods and practices: Prototypes and their fidelities: sketches, wireframes, mockups Using color and type to communicate mood and style Basic aesthetic principles: texture, structure, hierarchy, harmony Basic UX principles: target audience, main value proposition, iterative approach
100.000%	Total

Vb. **Lab Content**

% of Course	Topic
50.00%	Critiques
50.00%	Team Exercises
100.00%	Total

VI. **Methods of Evaluation**

% of Course	Topic
10%	Class Participation: Participation in critiques 10%
30%	Final exam
20%	Homework: Assignments
30%	Projects: Final Project
10%	Quizzes
100%	Total

VII. **Sample Assignments:**

E-vite page: Create a digital postcard with an invitation to an event. The e-vite should contain images and text and demonstrate centered layout with appropriate fonts and color for the topic of the event.

Portfolio site: Create a small website (3-4 pages) about yourself and your work. Separate the contents thematically into the following: Landing/Home page with a gallery of images Contact/About page some text about you and your work and a contact form. The form does not need to be functional, but it should be properly formatted. A blog/writing page with at least 3 small (1 image and 1 paragraph) posts about your current work or upcoming projects. Pay attention to typography here. A navbar that is always present in a browser window regardless on the scroll position.

VIII. **Student Learning Outcomes:**
1. Exhibit strong academic behaviors including regular attendance, timeliness, participation in class activities, and adherence to the College Honor Code.
2. Identify and apply an understanding of basic visual design concepts, typography, layout, and design process as these apply to Web design.
3. Design and build a simple website.

Advisory Checklist and Worksheet: DESIGN 24 Web Design 1
Proposed Advisory: DESIGN 13

SECTION 1 - CONTENT REVIEW:

Criterion	N/A	Yes	No
1. Faculty with appropriate expertise have been involved in the determination of the advisory.		X	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.		X	
3. Selection of this advisory is based on tests, the type and number of examinations, and grading criteria.		X	
4. Selection of this advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.		X	
5. The body of knowledge and/or skills which are recommended for success before enrollment have been specified in writing (see below).		X	
6. The course materials presented in this advisory have been reviewed and determined to teach knowledge or skills recommended for success in the course requiring this advisory.		X	
7. The body of knowledge and/or skills recommended for success in this course have been matched with the knowledge and skills developed by the advisory course.		X	
8. The body of knowledge and/or skills taught in the advisor are not an instructional unit of this course.		X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.		X	

ENTRANCE SKILLS RECOMMENDED FOR SUCCESS IN: DESIGN 24
(It is recommended that the student to be able to do or understand the following BEFORE entering the course)

A)	Recognize the differences between computer platforms and operating systems.
B)	Use basic file management techniques to help organize workflow.
C)	Use software for basic digital image editing and correcting.
D)	Adjust images size, resolution and determine color modes for print and web media.
E)	Create basic shapes and images with software.

EXIT SKILLS (objectives) FROM: DESIGN 13
(What the student has the demonstrated ability to do or understand AFTER successful completion of this course)

1.	Recognize the differences between computer platforms and operating systems.
2.	Use basic file management techniques to help organize workflow.
3.	Use software for basic digital image editing and correcting.
4.	Adjust images size, resolution and determine color modes for print and web media.
5.	Create basic shapes and images with software.

		ENTRANCE SKILLS FOR: DESIGN 24							
		A	B	C	D	E	F	G	H
EXIT SKILLS From: DESIGN 13	1	X							
	2		X						
	3			X					
	4				X				
	5					X			
	6								

Substantial Change: DESIGN 34, Web Design 2

Units:	3.00
Total Instructional Hours (usually 18 per unit):	90.00
Hours per week (full semester equivalent) in Lecture:	2.00
In-Class Lab:	1.00
Arranged:	2.00
Outside-of-Class Hours:	72.00
Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Skills Advisory(s):	DESIGN 24
Proposed Start:	Fall 2022
Program Impact:	Proposed for inclusion in a forthcoming degree or certificate • A.S. in Graphic Design as an elective, Web Design Essentials Certificate as a requirement

Rationale

Course has not been updated since 2007. This update includes more current material for the course.

I. **Catalog Description**

This course builds up on the web design fundamentals covered in Design 24 and is centered around the best practices for the use of design systems in web design and the introduction to the interactivity on the Web. Students explore concepts like grids and layouts and learn to apply various CSS strategies for the design of modern cross-platform responsive websites. They learn about engaging and delighting users with interactive components, and advanced application of typography and images and practice applying common interactive design strategies to the design of complex multi-page websites for real-world clients.

II. **Examples of Appropriate Text or Other Required Reading:**

(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
1. <u>Learning Web Design</u>, 5th Edition, Jennifer Niederst Robbins, O'Reilly © 2018, ISBN: 978-1-491-96020-2

III. **Course Objectives**

Upon completion of this course, the student will be able to:
1. Identify the role of prototyping in the design process
2. Prototype and publish their work on a publicly accessible URL
3. Select and implement optimal layout strategy in the context of web design
4. apply an existing design system to produce original design within a specific context
5. understand the role and application of interactive elements in web design
6. Demonstrate an understanding of how to be a self-learner and how to learn from others.
7. Demonstrate ability to effective critique and evaluate own design and other designers' work.

IIIb. **Arranged Hours Objectives:**

Upon completion of this course, the student will be able to:
1. create website prototypes using HTML, CSS and JavaScript

IV. **Methods of Presentation:**

Critique, Group Work, Lecture and Discussion, Projects

IVb. **Arranged Hours Instructional Activities:**

Other Methods: The student will participate in online video tutorials and recommended resources related to intermediate HTML/CSS.

V. **Course Content**

% of Course	Topic
10.000%	Design and Prototyping Process

% of Course	Topic
20.000%	Responsive Web Design
20.000%	Visual Design and Layout Strategies
10.000%	Interactivity on the web with JavaScript
30.000%	HTML5 and CSS3
10.000%	Presentation and critique of projects
100.000%	Total

Vb. **Lab Content**

% of Course	Topic
50.00%	Critiques
50.00%	Team exercises
100.00%	Total

VI. **Methods of Evaluation**

% of Course	Topic
10%	Class Participation
30%	Homework: Assignments
30%	Projects: Midterm Project
30%	Final Project
100%	Total

VII. **Sample Assignments:**

Web site for a start-up company: You will create a website for a fictitious business that has at least the following pages: Home: introduces the product, tells about the features, structure, selling points, etc. About: talks about the backstory, the idea, location/contact, etc... Team: people behind the product, who they are, why they are amazing (you can make all of them up) The following are the general requirements for the site as a whole: Implements a consistent design system with custom design elements (color scheme, typography, imagery) appropriate for the brand Presents a clear, compelling narrative to the visitor exposing the product and its background. Provides rich interactive experience with custom behaviors supporting the product narrative Fully responsive with appropriate modifications for different screen sizes.

Small e-commerce website: Please create a small e-commerce website. Think about a category of products you know well - apparel if you're into fashion, photo equipment if you're into photography, etc. You'll need to work in templates and create the following pages: landing page showcasing your products/offers/deals etc. product pages (at least 3, again think in templates to make it easier) checkout page with a checkout form: shipping, billing and credit card info Help/FAQ/contact page blog/education page showcasing at least 3 products The following requirement apply to all/any: custom typography and colors a shopping cart indicator that shows an updated number of products when new products are added - use custom icons, custom JavaScript. use of the following UI elements (on at least one of the pages as appropriate): modal carousel dismissable alert Make sure your design choices - layout, color, type, behaviors - are appropriate to the products you are selling.

VIII. **Student Learning Outcomes:**
1. Demonstrate in-depth understanding of responsive Web design strategies.
2. Show working knowledge of design systems in the context of Web design.
3. Exhibit familiarity with interactivity and multimedia on the Web.

ADVISORY Checklist and Worksheet: DESIGN 34 Web Design 2
Proposed Advisory: DESIGN 24 Web Design 1

SECTION 1 - CONTENT REVIEW:

Criterion	N/A	Yes	No
1. Faculty with appropriate expertise have been involved in the determination of the advisory.		x	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.		x	
3. Selection of this advisory is based on tests, the type and number of examinations, and grading criteria.		x	
4. Selection of this advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.		x	
5. The body of knowledge and/or skills which are recommended for success before enrollment have been specified in writing (see below).		x	
6. The course materials presented in this advisory have been reviewed and determined to teach knowledge or skills recommended for success in the course requiring this advisory.		x	
7. The body of knowledge and/or skills recommended for success in this course have been matched with the knowledge and skills developed by the advisory course.		x	
8. The body of knowledge and/or skills taught in the advisor are not an instructional unit of this course.		x	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.		x	

ENTRANCE SKILLS RECOMMENDED FOR SUCCESS IN: DESIGN 34
(It is recommended that the student to be able to do or understand the following BEFORE entering the course)

A)	Identify and apply basic design concepts and principles for web design.
B)	Apply grid, color, navigation, composition, and typography for contemporary web design effectively.
C)	Demonstrate a basic understanding of the anatomy of a web page.
D)	Demonstrate understanding of wireframing in Web design process
E)	Demonstrate the working knowledge of media formats used in basic web design
F)	Build a working multi-page website using text and images

EXIT SKILLS (objectives) FROM: DESIGN 24
(What the student has the demonstrated ability to do or understand AFTER successful completion of this course)

1.	Identify and apply basic design concepts and principles for web design.
2.	Apply grid, color, navigation, composition, and typography for contemporary web design effectively.
3.	Demonstrate a basic understanding of the anatomy of a web page.
4.	Demonstrate understanding of wireframing in Web design process
5.	Demonstrate the working knowledge of media formats used in basic web design
6.	Build a working multi-page website using text and images

		ENTRANCE SKILLS FOR: DESIGN 34							
		A	B	C	D	E	F	G	H
EXIT SKILLS From: DESIGN 24	1	X							
	2		X						
	3			X					
	4				X				
	5					X			
	6						X		

Substantial Change: DESIGN 44, Web Design 3

Units:	3.00
Total Instructional Hours (usually 18 per unit):	90.00
Hours per week (full semester equivalent) in Lecture:	2.00
In-Class Lab:	1.00
Arranged:	2.00
Outside-of-Class Hours:	72.00

Transferability:	Transfers to CSU
Degree Applicability:	Credit - Degree Applicable
Skills Advisory(s):	DESIGN 34
Proposed Start:	Fall 2022
Program Impact:	Proposed for inclusion in a forthcoming degree or certificate • Web Design Essentials Certificate as a requirement

Rationale

Substantial change includes updated units/hours, course content, objectives, and methods of evaluation. The updated course content reflects the current approach to web design.

I. **Catalog Description**

This advanced project-based web design course builds on the conceptual and technical framework acquired in Web Design 2 and focuses on designing for cutting-edge web technologies. Students will learn narrative strategies in web design and experiment with interactive graphics and mixed reality on the Web. They will go through rigorous design process, prototype and publishing their work, receive feedback and integrate through their designs. Students will learn how to evaluate emerging web technologies from the designer's perspective and adapt their skillset to remain on the cutting edge of web design.

II. **Examples of Appropriate Text or Other Required Reading:**

(include all publication dates; for transferable courses at least one text should have been published within the last seven years)
1. Expressive Design Systems, 1st, Yesenia Perez-Cruz, A Book Apart © 2019, ISBN: 978-1-937557-84-3

III. **Course Objectives**

Upon completion of this course, the student will be able to:
1. Work within brief requirements and develop their vision within a system of constraints.
2. Implement appropriate design and prototyping process.
3. Apply narrative design strategies to web design.
4. Interpret an existing brand identity within the context of an interactive web-based experience.
5. Implement custon animations using CSS.
6. Implement audio/video and animation on a website.
7. Prototype their design using emerging web technologies, like mixed reality, interactive graphics and others.
8. Demonstrate ability to effective critique and evaluate own design and other designers' work.

IIIb. **Arranged Hours Objectives:**

Upon completion of this course, the student will be able to:
1. Identify and apply an understanding of an experimental approach to interactive Web experiences.

IV. **Methods of Presentation:**

Lecture and Discussion, Observation and Demonstration, Projects, Critique, Group Work

IVb. **Arranged Hours Instructional Activities:**

Other Methods: The student will participate in online video tutorials and recommended resources related to advanced topics such as content management systems and frameworks.

V. **Course Content**

% of Course	Topic
20.000%	Design and prototyping process
10.000%	Using version control systems and publishing prototypes on publicly available URL
30.000%	Working with the Web as an interactive multimedia platform
20.000%	Creating custom animating in CSS
10.000%	Working with graphics and interaction libraries
10.000%	Presentation and critique of projects
100.000%	Total

Vb. **Lab Content**

% of Course	Topic
50.00%	Critiques
50.00%	Team exercises
100.00%	Total

VI. **Methods of Evaluation**

% of Course	Topic
10%	Class Participation
20%	Homework
30%	Projects: Midterm project
40%	Final Project
100%	Total

VII. **Sample Assignments:**
Assignment 1: Design and prototype a storytelling website presenting a new product to the market. Components:
- Github hosting and publishing - Prototyping/design process - Understanding Web as a multimedia platform - Custom CSS animations and JS interactivity Tools: - HTML/CSS/JavaScript - GitHub pages

Assignment 2: Design and prototype an interactive Web-based experience advertising a brand Components: - Github hosting and publishing - Working with graphics/interaction libraries (AFrame, p5js, ML5) - Experimental approach to Web experiences - Understanding principles of working with graphics and data in JS Tools: - HTML/CSS/JavaScript - GitHub pages - P5js/ML5

VIII. **Student Learning Outcomes:**
1. Demonstrate working knowledge of interactivity and animation on the Web
2. Exhibit familarity with designing for the emerging Web technologies: mixed reality, interactive graphics and others

Advisory Checklist and Worksheet: DESIGN 44 Web Design 3
Proposed Advisory: DESIGN 34 Web Design 2

SECTION 1 - CONTENT REVIEW:

Criterion	N/A	Yes	No
1. Faculty with appropriate expertise have been involved in the determination of the advisory.		X	
2. The department in which the course is (will be) taught has considered course objectives in accordance with accreditation standards.		X	
3. Selection of this advisory is based on tests, the type and number of examinations, and grading criteria.		X	
4. Selection of this advisory is based on a detailed course syllabus and outline of record, related instructional materials and course format.		X	
5. The body of knowledge and/or skills which are recommended for success before enrollment have been specified in writing (see below).		X	
6. The course materials presented in this advisory have been reviewed and determined to teach knowledge or skills recommended for success in the course requiring this advisory.		X	
7. The body of knowledge and/or skills recommended for success in this course have been matched with the knowledge and skills developed by the advisory course.		X	
8. The body of knowledge and/or skills taught in the advisor are not an instructional unit of this course.		X	
9. Written documentation that steps 1 to 8 above have been taken is readily available in departmental files.		X	

ENTRANCE SKILLS RECOMMENDED FOR SUCCESS IN: DESIGN 44
(It is recommended that the student to be able to do or understand the following BEFORE entering the course)

A)	Prototype and publish their work on a publicly accessible URL
B)	Select and implement optimal layout strategy in the context of web design
C)	Apply an existing design system to produce original design within a specific context
D)	Understand the role and application of interactive elements in web design
E)	Identify the role of prototyping in the design process
F)	Demonstrate ability to effectively critique and evaluate own design and other designers' work.

EXIT SKILLS (objectives) FROM: DESIGN 34
(What the student has the demonstrated ability to do or understand AFTER successful completion of this course)

1.	Prototype and publish their work on a publicly accessible URL
2.	Select and implement optimal layout strategy in the context of web design
3.	Apply an existing design system to produce original design within a specific context
4.	Understand the role and application of interactive elements in web design
5.	Identify the role of prototyping in the design process
6.	Demonstrate ability to effectively critique and evaluate own design and other designers' work.

		ENTRANCE SKILLS FOR: DESIGN 44							
		A	B	C	D	E	F	G	H
EXIT SKILLS From: DESIGN 34	1	X							
	2		X						
	3			X					
	4				X				
	5					X			
	6						X		

Santa Monica College
Program Of Study
Blockchain Developer Certificate of Achievement

Blockchain has always been synonymous with cryptocurrency, but its applications go far beyond financial transactions. Companies in every industry are finding value in understanding how to apply blockchain-based solutions to solve problems. In this certificate, students study the world of blockchain technology and the promise it holds. Students will learn how cryptocurrencies, like Bitcoin, make use of the blockchain to facilitate peer-to-peer digital transactions. Students will identify the problems blockchain technologies aim to solve as well as learn its underlying ability to facilitate a marketplace without traditional intermediaries, promoting widespread, transformational change. Students will design and code decentralized blockchain applications.

Program Learning Outcomes:
Upon completion of the program, students will demonstrate the ability to create and deploy blockchain technology to support different industries.

Required Courses:	**Units: 15.0**
CS 20A[DE] Data Structures with C++	3.0
OR	
CS 20B[DE] Data Structures with Java	3.0
OR	
CS 81[DE] Javascript Programming	3.0
OR	
CS 87B[DE] Advanced Python Programming	3.0
CS 73A[DE] Fundamentals of Computer Security	3.0
CS 76A Cryptocurrency and Cryptoassets	3.0
CS 76B Fundamentals of Blockchain	3.0
CS 79A[DE] Introduction to Cloud Computing	3.0

Total: 15.0

Blockchain Developer

1. Program Goals and Objectives

In response to direction from our Advisory Board and in response to student and industry demands, we have developed this new certificate. This new certification capitalizes on our Cloud Computing program. Many tools are provided by the AWS and Azure platforms to make use of blockchain technologies. Many well-paying jobs are available for developers with these skills.

2. Catalog Description

Blockchain has always been synonymous with cryptocurrency, but its applications go far beyond financial transactions. Companies in every industry are finding value in understanding how to apply blockchain-based solutions to solve problems. In this certificate, students study the world of blockchain technology and the promise it holds. Students will learn how cryptocurrencies, like Bitcoin, make use of the blockchain to facilitate peer-to-peer digital transactions. Students will identify the problems blockchain technologies aim to solve as well as learn its underlying ability to facilitate a marketplace without traditional intermediaries, promoting widespread, transformational change. Students will design and code decentralized blockchain applications.

3. Program Requirements

Required Courses – 12 units
CS 79A : Introduction to Cloud Computing
CS 73A : Fundamentals of Computer Security
CS 76A : Cryptocurrency and Cryptoassets
CS 76B : Fundamentals of Blockchain

Elective Courses – 3 units – Choose 1:
CS 81 : Javascript Programming OR
CS 87B : Advanced Python Programming OR
CS 20A : Data Structures with C++ OR
CS 20B : Data Structures with Java

4. Master Planning
This certificate fulfulls the need to provide students with an occupation with a living wage. The program draws students from our Computer Science and Cloud programs that may or may not be intested in transfer to a four-year university.

5. Enrollment and Completer Projections
100 students annually

6. Place of Program in Curriculum/Similar Program
This is a Certificate of Achievement.

7. Similar Programs at Other Colleges in Service Area
We are unaware of similar offerings with this particular focus at other local colleges

8. Transfer Preparation Information

Program Endorsement Brief: 0707.00 - Computer Software Development
Blockchain Developer
Los Angeles/Orange County Center of Excellence, April 2021

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met	☐	Endorsed: Some Criteria Met	☒	Not Endorsed	☐
Program Endorsement Criteria						
Supply Gap:	Yes ☐			No ☑ *(see comments below)*		
Living Wage: (Entry-Level, 25th)	Yes ☑			No ☐		
Education:	Yes ☑			No ☐		
Emerging Occupation(s)						
Yes ☑			*No* ☐			

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to the middle-skill occupation that is most closely aligned with the emerging field of blockchain – which is *web developers and digital interface designers* (15-1257). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.[1] This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupation.

While *software developers and software quality assurance analysts and testers* (15-1256) was the best-fit occupation, it was not included in this report because not only does it typically require a bachelor's degree, but further, only **14% of incumbent workers have an associate degree or less.**

Based on the available data, there does not appear to be a supply gap for *web developers and digital interface designers* in the region. However, the oversupply is due to the inclusion of various IT programs that have historically trained for the occupation of interest as well as many others, but this report focuses on only a single occupation. This occupation typically requires an associate degree, and entry-level wages exceed the living wage in both Los Angeles and Orange counties. **Therefore, due to some of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

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[1] The COE classifies middle-skill jobs as the following:
- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

Demand:

- *Supply Gap Criteria* **–** Over the next five years, there is projected to be **718 jobs available annually** in the region due to new job growth and replacements, **which is less than the 947 awards conferred annually** by educational institutions in the region.
- *Living Wage Criteria* **–** Entry-level *web developers and digital interface designers* typically earn between $21 and $23 per hour, which are above the Los Angeles and Orange County living wage.[2]
- **Employer Job Postings** – Over the past 12 months, there have been 506 online job postings with the keywords "blockchain" or "bitcoin" in the job description.
- *Educational Criteria* **–** The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for *web developers and digital interface designers*.
  - National-level educational attainment data indicates **23.4% of workers in the field have completed some college or an associate degree.**

Supply:

- There are **23 community colleges** in the LA/OC region that issue awards related to *web developers and digital interface designers*, conferring an average of **503 awards annually** between 2017 and 2020.
- Between 2014 and 2017, there was an average of **444 awards conferred annually** in related training programs by non-community college institutions.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for *web developers and digital interface designers* (15-1257). In Los Angeles/Orange County, the number of jobs related to this occupation is projected to increase by 4% through 2024. There will be nearly 720 job openings per year through 2024 due to job growth and replacements.

This report includes employment projection data by Emsi, which uses EDD information. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

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[2] Living wage data was pulled from California Family Needs Calculator on 4/14/2021. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties[3]

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	6,700	6,999	299	4%	520
Orange	2,602	2,693	91	3%	199
Total	**9,302**	**9,693**	**391**	**4%**	**718**

Wages

The labor market endorsement in this report considers the entry-level hourly wage for *web developers and digital interface designers* in Los Angeles County, as it relates to the county's living wage. Orange County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County: The typical entry-level hourly wage for *web developers and digital interface designers* is $22.53, which is above the living wage for one adult ($15.04 in Los Angeles County). Experienced workers can expect to earn $47.16, which is higher than the living wage estimate.

Orange County: The typical entry-level hourly wage for *web developers and digital interface designers* is $21.26, which is above the living wage for one adult ($17.36 in Orange County). Experienced workers can expect to earn $44.79, which is higher than the living wage estimate.

Job Postings

In order to quantify blockchain-related jobs in Los Angeles/Orange County, several filters were applied in Burning Glass, a software platform that provides real-time labor market information by scouring the web for job postings. Over the past 12 months, there have been 506 online job postings with the keywords "blockchain" or "bitcoin" in the job description. Only job postings listing a high school or vocational training, associate degree, or bachelor's degree were considered. The highest number of job postings were linked to software developers, applications; computer occupations, all other; and web developers. The top skills were blockchain, Internet of Things (IoT), business development, and python. The top employers, by number of job postings, in the region were IBM, Accenture, and Deloitte.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for *web developers and digital interface designers*. National-level educational attainment data indicates 23.4% of workers in the field have completed some college or an associate degree. Of the job postings listing a minimum education requirement in Los Angeles/Orange County, 6% (32)

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[3] Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

requested high school or vocational training, 1% (4) requested an associate degree, and 93% (470) requested a bachelor's degree.

Educational Supply

Community College Supply — Exhibit 2 shows the annual and three-year average number of awards conferred by community colleges in programs that have historically trained for *web developers and digital interface designers*. The colleges with the most completions in the region are Mt. San Antonio, Orange Coast, and Santa Monica. Over the past 12 months, there have not been any blockchain program recommendation requests from regional community colleges.

Exhibit 2: Regional community college awards (certificates and degrees), 2017-2020

TOP	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Yr Average
0614.30	Website Design and Development	LA Pierce	-	3	2	2
		Mt San Antonio	9	9	7	8
		Pasadena	-	-	1	0
		Santa Monica	-	-	2	1
		LA Subtotal	**9**	**12**	**12**	**11**
		Coastline	-	1	1	1
		Fullerton	-	3	-	1
		Irvine Valley	2	3	-	2
		Orange Coast	-	-	9	3
		Saddleback	4	7	2	4
		Santa Ana	1	-	2	1
		Santiago Canyon	9	24	3	12
		OC Subtotal	**16**	**38**	**17**	**24**
	Supply Subtotal/Average		**25**	**50**	**29**	**35**
0702.10	Software Applications	Cerritos	3	9	6	6
		LA City	-	-	1	0
		LA Mission	7	2	-	3
		LA Southwest	2	1	-	1
		Long Beach	-	-	7	2
		Mt San Antonio	3	1	2	2
		Santa Monica	10	18	13	14
		LA Subtotal	**25**	**31**	**29**	**28**
		Coastline	4	9	8	7
		Irvine Valley	22	39	48	36
		Saddleback	3	2	7	4
		OC Subtotal	**29**	**50**	**63**	**47**
	Supply Subtotal/Average		**54**	**81**	**92**	**76**
0707.00	Computer Software Development	LA City	-	1	-	0
		LA Subtotal	**-**	**1**	**-**	**0**
		Cypress	1	1	1	1

TOP	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Yr Average
		Golden West	3	4	2	3
		Orange Coast	7	7	2	5
		Saddleback	3	13	3	6
		OC Subtotal	**14**	**25**	**8**	**16**
		Supply Subtotal/Average	**14**	**26**	**8**	**16**
0707.10	Computer Programming	Cerritos	4	-	2	2
		Citrus	-	-	1	0
		East LA	6	8	4	6
		Glendale	2	2	3	2
		LA City	-	-	6	2
		LA Mission	5	6	4	5
		LA Pierce	9	18	4	10
		LA Southwest	1	-	1	1
		LA Valley	10	7	6	8
		Long Beach	2	4	5	4
		Mt San Antonio	62	119	114	98
		Pasadena	8	11	21	13
		Santa Monica	42	44	46	44
		West LA	-	1	-	0
		LA Subtotal	**151**	**220**	**217**	**196**
		Cypress	18	22	20	20
		Fullerton	-	16	28	15
		Irvine Valley	10	8	4	7
		Orange Coast	29	31	157	72
		Santa Ana	1	13	1	5
		Santiago Canyon	30	9	3	14
		OC Subtotal	**88**	**99**	**213**	**133**
		Supply Subtotal/Average	**239**	**319**	**430**	**329**
0709.00	World Wide Web Administration	Glendale	9	6	7	7
		LA Pierce	5	9	-	5
		Long Beach	4	22	24	17
		West LA	24	13	9	15
		LA Subtotal	**42**	**50**	**40**	**44**
		Saddleback	-	-	2	1
		OC Subtotal	**-**	**-**	**2**	**1**
		Supply Subtotal/Average	**42**	**50**	**42**	**45**
0709.10	E-Commerce (Technology emphasis)	East LA	-	1	1	1
		LA Subtotal	**-**	**1**	**1**	**1**
		Saddleback	-	6	1	2

TOP	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Yr Average
		OC Subtotal	-	6	1	2
		Supply Subtotal/Average	-	7	2	3
		Supply Total/Average	374	533	603	503

Non-Community College Supply — It is important to consider the supply from non-community college institutions in the region that provide relevant training programs. Exhibit 3 shows the annual and three-year average number of awards conferred by institutions in related programs. Due to different data collection periods, the most recent three-year period of available data is from 2014 to 2017. Between 2014 and 2017, non-community college institutions in the region conferred an average of 444 awards annually in related training programs.

Exhibit 3: Regional non-community college awards, 2014-2017

CIP	Program	Institution	2014-15 Awards	2015-16 Awards	2016-17 Awards	3-Yr Average
11.0201	Computer Programming / Programmer, General	ABCO Technology	6	12	18	12
		ITT Technical Institute-San Dimas	5	0	0	2
		University of Phoenix-California	68	62	43	58
11.0801	Web Page, Digital / Multimedia and Information Resources Design	Advanced Computing Institute	73	46	57	59
		Argosy University-The Art Institute of California-Hollywood	22	20	24	22
		Argosy University-The Art Institute of California-Los Angeles	15	23	24	21
		Argosy University-The Art Institute of California-Orange County	19	15	33	22
		DeVry University-California	91	69	36	65
		Fremont College	8	1	0	3
		University of Phoenix-California	5	6	1	4

CIP	Program	Institution	2014-15 Awards	2015-16 Awards	2016-17 Awards	3-Yr Average
11.1003	Computer and Information Systems Security / Information Assurance	Azusa Pacific University	8	4	3	5
		ITT Technical Institute-Orange	37	0	0	12
		ITT Technical Institute-San Dimas	23	0	0	8
		ITT Technical Institute-Sylmar	19	0	0	6
		ITT Technical Institute-Torrance	6	0	0	2
		Learnet Academy Inc	0	39	48	29
		Mt Sierra College	14	9	8	10
		University of Phoenix-California	111	74	71	85
11.1004	Web / Multimedia Management and Webmaster	ABCO Technology	7	9	12	9
		Pepperdine University	0	1	0	0
		University of Phoenix-California	7	5	4	5
52.0208	E-Commerce / Electronic Commerce	University of La Verne	5	3	0	3
		University of Phoenix-California	1	1	0	1
		Grand Total	**550**	**399**	**382**	**444**

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Web Developers and Digital Interface Designers (15-1257)	6,700	6,999	299	4%	520	$22.53	$33.68	$47.16
Total	**6,700**	**6,999**	**299**	**4%**	**520**			

Exhibit 5. Orange County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Web Developers and Digital Interface Designers (15-1257)	2,602	2,693	91	3%	199	$21.26	$31.88	$44.79
Total	**2,602**	**2,693**	**91**	**3%**	**199**			

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Web Developers and Digital Interface Designers (15-1257)	9,302	9,693	391	4%	718	Associate Degree
Total	**9,302**	**9,693**	**391**	**4%**	**718**	

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

Luke Meyer, Director
Los Angeles/Orange County Center of Excellence
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April 2021

Santa Monica College

Computer Science Information Systems

Computer Science Advisory Board

May 7, 2021

MINUTES

Attendees:

SMC Attendees: Howard Stahl (Chair), Afshin Amini, Scott Bishop, Fariba Bolandhemat, Nancy Cardenas, Hadi Dabbagh, Jinan Darwiche, Mark Edmonds, Mary Eshaghian, Joan Kang, Sasha King, Keith Kurtz, Ann Marie Leahy, Ashley Mehia, David Morgan, Vicky Seno

Non-SMC Attendees: Charlotte Augenstein (State Chancellor's Office ICT Sector Navigator), Matt Gray (Honey), Richard Korf (UCLA Computer Science), Cord Thomas (RAND Corporation), Paul Hill (Job Search Intelligence)

Call to order: via Zoom - 9:30 AM

Following quick introductions, the following topics were discussed:

Department Review and Dashboard Indicators

Howard shared various data points with the committee. Highlights included:

- A growth in WTH of nearly 50% since 2016-17, growth of 110% since 2009-2010
- A growth in student headcount of more than 100% since 2014-2015
- A growth in awarded certificates of more than 400% since 2014-2015
- No increase in full-time faculty in this discipline since 2001. Attendees commented that more growth is possible if the department had the people-power to make it happen.

Existing Courses and Programs

Howard shared information about our existing classes, certificates and degrees. Attendees commented on the vibrancy and innovation being displayed in our ongoing efforts to stay in line with industry and employment trends. New courses recently approved were discussed including CS 82A-Introduction to Data Science, CS 82B-Principles of Data Science, CS 82C-R Programming and CS 79X-Data Science on Azure.

Plans for the Future

Howard shared information regarding a certificate in BlockChain Developer and related technologies.

MOTION: The Computer Science Advisory Board supports the creation and development of a certificate in BlockChain Developer and related technologies. Made by: Stahl Seconded by:

Korf. FOR-22 AGAINST-0 ABSTAIN-0 Attendees support this degree and voted unanimously to support it.

Open Discussion

Various additional topics were discussed including the value of digital badging, the GO Programming language, roles of a Data Engineer and the emerging fields of "Data Operations", Zero Trust networks and electronic and mechanical robotics.

Meeting Adjourned: 10:59 AM

Santa Monica College
Program Of Study
Data Analyst Department Certificate

Data science is an applied field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from both structured and unstructured data sources. Data science incorporates data mining, machine learning and big data to make predictions and identify actions that organizations can take to be more effective. Data scientists are responsible for breaking down big data into usable information and creating software and algorithms that help companies and organizations determine optimal operations. This certificate will prepare students for jobs in this field by providing students with skills in different technologies and techniques that are used for data science and machine learning. Students may also choose to transfer to four-year universities with established undergraduate programs in Data Science.

Program Learning Outcomes:
Upon completion of the program, students will be able to analyze data and employ different software tools to make certain predictions and optimize organizational operations.

Required Courses	Units: 9.0
CS 82A Introduction to Data Science	3.0
CS 82B Principles of Data Science	3.0
CIS 30T Tableau Desktop Essentials	3.0

Choose 1 Course	Units: 3.0
CS 87A Python Programming	3.0
CS 82C R Programming	3.0

Total: 12.0

Data Analyst Department Certificate

1. **Program Goals and Objectives**
   - Data science is an applied field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from both structured and unstructured data sources. Data science incorporates data mining, machine learning and big data to make predictions and identify actions that organizations can take to be more effective. Data scientists are responsible for breaking down big data into usable information and creating software and algorithms that help companies and organizations determine optimal operations. This certificate will prepare students for jobs in this field by providing students with skills in different technologies and techniques that are used for data science and machine learning. Students may also choose to transfer to four-year universities with established undergraduate programs in Data Science.
   - Upon completion of the program, students will be able to analyze data and employ different software tools to make certain predictions and optimize organizational operations.

2. **Catalog Description**
   - Data science is an applied field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from both structured and unstructured data sources. Data science incorporates data mining, machine learning and big data to make predictions and identify actions that organizations can take to be more effective. Data scientists are responsible for breaking down big data into usable information and creating software and algorithms that help companies and organizations determine optimal operations. This certificate will prepare students for jobs in this field by providing students with skills in different technologies and techniques that are used for data science and machine learning. Students may also choose to transfer to four-year universities with established undergraduate programs in Data Science.
   - Upon completion of the program, students will be able to analyze data and employ different software tools to make certain predictions and optimize organizational operations.

3. **Program Requirements**
   - Required Courses
     CIS 30T : Tableau Desktop Essentials
     CS 82A : Introduction to Data Science
     CS 82B : Principles of Data Science
   - Choose 1 Course
     CS 82C : R Programming
     CS 87A : Python Programming AND CS 87B : Advanced Python Programming

4. **Master Planning**
   - This degree fulfills the need to provide students with an occupation with a living wage and builds upon our existing certficates in cloud computing. In Los Angeles County, labor market data shows 5,000 job openings that include Cloud skills and Data Science in particular. In the region, major cloud computing employers include Deloitte, Amazon, Costar Realty Information, Raytheon, Northrop Grumman, Aerospace Corporation, KPMG, SMCI and Accenture. The program draws students from our Computer Science program that may or may not be interested in transfer to a four-year university

5. **Enrollment and Completer Projections**
   - We are expecting 90 completers annually. All of the students who have been taking the Cloud classes (79A, 79B, 79C, 79D, 79E, 79F, 79Y and 79Z) are likely to enroll as it quite a popular specialty now in industry.

6. **Place of Program in Curriculum/Similar Program**
   - This program is a natural outgrowth of our popular Cloud program. Both Azure and AWS offer popular data science tools and certification in this area. Students have been asking for a program like this.

7. **Similar Programs at Other Colleges in Service Area**
    - Coastline Community College

8. **Transfer Preparation Information**
    - Numerous UCs and CSUs have developed undergraduate programs in Data Science. Many of the proposed courses will articulate with various undergraduate classes offered at certain UCs. Student will be able to transfer into these majors after completing our certificate.

Program Endorsement Brief: 0707.30/Computer Systems Analysis
Data Science
Los Angeles/Orange County Center of Excellence, October 2020

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met	☒	Endorsed: Some Criteria Met	☐	Not Endorsed	☐
Program Endorsement Criteria						
Supply Gap:	Yes ☑			No ☐		
Living Wage: (Entry-Level, 25th)	Yes ☑			No ☐		
Education:	Yes ☑			No ☐		
Emerging Occupation(s)						
Yes ☐				No ☑		

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to two middle-skill occupations: *computer user support specialists* (15-1151), and *computer network support specialists* (15-1152). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree,[1] and are highlighted in this report to show which data science occupations are immediately accessible to community college-level award earners. However, the field of data science is comprised of many occupations that typically require workers to obtain a bachelor's degree. Therefore, above middle-skill occupations are included in this report to illuminate a pathway for students who continue their education past the community college level. The above middle-skill data science occupations in this report include *computer systems analysts* (15-1121), *information security analysts* (15-1122) and *operations research analysts* (15-2031).

This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations. While demand data for above middle-skill data science occupations are included in this report, the program endorsement only takes into account the middle-skill data science occupations when considering the local supply and demand.

Based on the available data, there appears to be a supply gap for these middle-skill data science occupations in the region. Furthermore, all of the annual openings for these occupations typically require an associate degree or some college, and entry-level wages exceed the living

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[1] The COE classifies middle-skill jobs as the following:
- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

wage in both Los Angeles and Orange counties. **Therefore, due to all of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:
- *Supply Gap Criteria –* Over the next five years, there is projected to be **3,333 jobs available annually** in the region due to new job growth and replacements, **which is more than the 634 awards conferred annually** by educational institutions in the region.
- *Living Wage Criteria –* Within Los Angeles County, **all of the annual job openings** for these middle-skill data science occupations have **entry-level wages above the California Family Needs Calculator living wage** ($15.04/hour).[2]
- *Educational Criteria –* Within the LA/OC region, **all of the annual job openings** for these middle-skill data science occupations **typically require an associate degree or some college.**
  - Furthermore, the national-level educational attainment data indicates **41% of workers in the field have completed some college or an associate degree.**

Supply:
- There are **17 community colleges** in the LA/OC region that issue awards related to data science, conferring an average of **129 awards annually** between 2016 and 2019.
- Between 2014 and 2017, there was an average of **505 awards conferred annually** in related training programs by non-community college institutions throughout the region.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these middle-skill data science occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 6% through 2024. There will be more than 3,300 job openings per year through 2024 due to job growth and replacements.

Exhibit 1: Middle-skill occupational demand in Los Angeles and Orange Counties[3]

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	24,121	25,603	1,482	6%	2,333
Orange	10,239	10,901	662	6%	999
Total	**34,360**	**36,505**	**2,145**	**6%**	**3,333**

Exhibit 2 shows the five-year occupational demand projections for the above middle-skill group of data science occupations. In Los Angeles/Orange County, the number of jobs related to these

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[2] Living wage data was pulled from California Family Needs Calculator on 10/2/20. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.
[3] Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

occupations is projected to increase by 7% through 2024. There will be more than 2,300 job openings per year through 2024 due to retirements and workers leaving the field.

This report includes employment projection data by Emsi which uses EDD information. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

Exhibit 2: Above middle-skill occupational demand in Los Angeles and Orange Counties

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	18,271	19,489	1,218	7%	1,581
Orange	8,533	9,190	657	8%	760
Total	**26,804**	**28,679**	**1,875**	**7%**	**2,341**

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these data science occupations in Los Angeles County as they relate to the county's living wage. Orange County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County—All of the annual openings for these data science occupations have entry-level wages above the living wage for one adult ($15.04 in Los Angeles County).[4] For the middle-skill occupations, typical entry-level hourly wages are in a range between $21.25 and $25.56. For the above middle-skill occupations, typical entry-level hourly wages are in a range between $32.59 and $36.27. Experienced workers can expect to earn wages between $34.98 and $61.08, which are higher than the living wage estimate. Los Angeles County's average wages are below the average statewide wage of $41.15 for these occupations.

Orange County—All of the annual openings for these data science occupations have entry-level wages above the living wage for one adult ($17.36 in Los Angeles County).[5] For the middle-skill occupations, typical entry-level hourly wages are in a range between $20.69 and $24.89. For the above middle-skill occupations, typical entry-level hourly wages are in a range between $31.27 and $34.84. Experienced workers can expect to earn wages between $53.87 and $58.67, which are higher than the living wage estimate. Orange County's average wages are below the average statewide wage of $41.15 for these occupations.

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[4] Living wage data was pulled from California Family Needs Calculator on 10/2/2020. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.
[5] Living wage data was pulled from California Family Needs Calculator on 10/2/2020. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.

Job Postings

There were 10,945 online job postings related to middle-skill data science occupations listed in the past 12 months. The highest number of job postings were for help desk analysts, desktop support, desktop support technicians, help desk technicians, and IT support specialists. The top skills were: technical support, customer service, help desk support, repair, and Microsoft Active Directory. The top three employers, by number of job postings, in the region were: Best Buy, IBM and Northrop Grumman.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for these data science occupations:

- **Bachelor's degree:** Computer Systems Analysts, Information Security Analysts, and Operations Research Analysts
- **Associate degree:** Computer Network Support Specialists
- **Some college/no degree:** Computer User Support Specialists

In the LA/OC region, all of the annual job openings for these middle-skill data science occupations typically require an associate degree or some college. Furthermore, the national-level educational attainment data indicates 41% of workers in the field have completed some college or an associate degree. Of the 26% of middle-skill data science job postings listing a minimum education requirement in Los Angeles/Orange County, 72% (2,044) requested a high school diploma and 28% (812) requested an associate degree.

Educational Supply

Community College Supply—Exhibit 3 shows the three-year average number of awards conferred by community colleges in the related TOP codes: Computer Information Systems (0702.00) and Computer Systems Analysis (0707.30). The colleges with the most completions in the region are Rio Hondo, East LA, El Comino and LA Trade-Tech. Over the past 12 months, there were six other related program recommendation requests from regional community colleges.

Exhibit 3: Regional community college awards (certificates and degrees), 2016-2019

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
0702.00	Computer Information Systems	Citrus	5	7	5	6
		Compton	1	-	1	1
		East LA	14	16	19	16
		El Camino	15	18	14	16
		Glendale	2	-	-	1
		LA City	3	4	1	3

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
		LA Mission	3	9	5	6
		LA Trade	23	14	8	15
		Pasadena	2	1	-	1
		Rio Hondo	10	19	21	17
		West LA	13	6	8	9
		LA Subtotal	**91**	**94**	**82**	**89**
		Cypress	5	8	5	6
		Fullerton	7	20	15	14
		Orange Coast		3	4	2
		Santa Ana	18	6	4	9
		Santiago Canyon	2	2	3	2
		OC Subtotal	**32**	**39**	**31**	**34**
		Supply Subtotal/Average	**123**	**133**	**113**	**123**
0707.30	Computer Systems Analysis	Cerritos	6	4	2	4
		LA Subtotal	**6**	**4**	**2**	**4**
		Cypress	-	5	2	2
		OC Subtotal	**0**	**5**	**2**	**2**
		Supply Subtotal/Average	**6**	**9**	**4**	**6**
		Supply Total/Average	**129**	**142**	**117**	**129**

Exhibit 4 displays the Strong Workforce Program (SWP) metrics for the Computer Systems Analysis (0707.30) programs in the region.

Exhibit 4: Strong Workforce Program metrics for LA/OC Computer Systems Analysis (0707.30) programs

Strong Workforce Program Metrics (2017-18, unless noted otherwise)	Los Angeles/ Orange County	California
Unduplicated count of enrolled students (2018-19)	201	1,153
Median annual earnings	$36,080	$32,354
Median change in earnings	24%	30%
Students who attained the living wage	56%	58%
Job closely related to field of study (2016-17)	67%	63%

Non-Community College Supply—It is important to consider the supply from other institutions in the region that provide training programs for data science. Exhibit 5 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Codes: Information Technology (11.0103), Computer Systems Analysis/Analyst (11.0501), and Computer Technology/Computer Systems Technology (15.1202). Due to different data collection periods, the most recent three-year period of available data is from 2014 to 2017. Between 2014 and 2017, four-year colleges in the region conferred an average of 505 awards annually in related training programs.

Exhibit 5: Regional non-community college awards, 2014-2017

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
11.0103	Information Technology	Argosy University-Orange County	-	1	-	0
		Bethesda University	1	1	-	1
		Brand College	55	42	28	42
		California Intercontinental University	-	-	1	0
		California State University-Los Angeles	102	92	117	104
		California State University-Northridge	49	48	43	47
		Stanbridge University	29	21	25	25
		Trident University International	96	77	74	82
		University of Phoenix-California	2	3	16	7
11.0501	Computer Systems Analysis/ Analyst	Brand College	1	2	4	2
		DeVry University-California	110	103	94	102
		University of Phoenix-California	9	8	4	7
15.1202	Computer Technology/ Computer Systems Technology	Advanced Computing Institute	67	74	92	78
		Learnet Academy Inc	-	13	11	8
	Supply Total/Average		**521**	**485**	**509**	**505**

Appendix A: Occupational demand and wage data by county

Exhibit 5. Los Angeles County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Computer User Support Specialists (15-1151)	19,263	20,531	1,268	7%	1,884	$21.25	$27.19	$34.98
Computer Network Support Specialists (15-1152)	4,858	5,072	214	4%	450	$25.56	$32.71	$42.68
Middle-Skill Subtotal	**24,121**	**25,603**	**1,482**	**6%**	**2,333**			
Computer Systems Analysts (15-1121)	13,806	14,467	661	5%	1,151	$34.26	$45.60	$58.38
Information Security Analysts (15-1122)	1,816	2,085	269	15%	191	$36.27	$48.91	$61.08
Operations Research Analysts (15-2031)	2,649	2,937	288	11%	239	$32.59	$43.85	$56.16
Above Middle-Skill Subtotal	**18,271**	**19,489**	**1,218**	**7%**	**1,581**			
Total	**42,392**	**45,092**	**2,700**	**6%**	**3,915**			

Exhibit 6. Orange County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Computer User Support Specialists (15-1151)	8,258	8,832	574	7%	815	$20.69	$26.49	$34.10
Computer Network Support Specialists (15-1152)	1,980	2,069	89	4%	184	$24.89	$31.88	$41.64
Middle-Skill Subtotal	**10,239**	**10,901**	**662**	**6%**	**999**			
Computer Systems Analysts (15-1121)	6,472	6,841	369	6%	554	$33.08	$43.99	$56.30
Information Security Analysts (15-1122)	862	1,013	151	18%	96	$34.84	$46.98	$58.67
Operations Research Analysts (15-2031)	1,200	1,336	136	11%	109	$31.27	$42.07	$53.87
Above Middle-Skill Subtotal	**8,533**	**9,190**	**657**	**8%**	**760**			
Total	**18,772**	**20,092**	**1,320**	**7%**	**1,759**			

Exhibit 7. Los Angeles and Orange Counties

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education	On-The-Job Training & Work Experience
Computer User Support Specialists (15-1151)	27,521	29,363	1,842	7%	2,699	Some college/ no degree	None & None
Computer Network Support Specialists (15-1152)	6,838	7,141	303	4%	634	Associate degree	None & None
Middle-Skill Subtotal	**34,360**	**36,505**	**2,145**	**6%**	**3,333**		
Computer Systems Analysts (15-1121)	20,277	21,308	1,031	5%	1,705	Bachelor's degree	None & None
Information Security Analysts (15-1122)	2,678	3,098	420	16%	288	Bachelor's degree	None & Less than 5 Years
Operations Research Analysts (15-2031)	3,849	4,273	424	11%	348	Bachelor's degree	None & None
Above Middle-Skill Subtotal	**26,804**	**28,679**	**1,875**	**7%**	**2,341**		
Total	**61,164**	**65,184**	**4,020**	**7%**	**5,673**		

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

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Los Angeles/Orange County Center of Excellence
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October 2020

C·O·E
CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH

Santa Monica College
Program Of Study
Elementary Teacher Education Associate in Arts for Transfer (AA-T)

The Associate in Arts in Elementary Teacher Education for Transfer is intended for students who plan to transfer and complete a Liberal Studies degree and / or a Multiple Subject Teaching Credential to prepare them for elementary school teaching.

Successful completion of the AA-T in Elementary Teacher Education satisfies lower- division preparation for a degree in Liberal Studies.

The Associate in Arts in Elementary Teacher Education is geared towards students who plan to transfer to a bachelor's degree in Integrated Teacher Education, Liberal Studies or a similar major.

Students who seek to become teachers in primary, secondary, bilingual, or special education will find this as one possible pathway. This pathway focuses on building the knowledge, skills, and hopefully the disposition that prepare professionals to work with children grades TK to twelve.

In this program, students will learn how to promote healthy development and learning in individually, culturally, and linguistically responsive ways.

NOTE: Students who plan to transfer to CSU or UC must take an approved math course in CSUGE Area B4 or IGETC Area 2 to meet GE, Associate Degree for Transfer and admission requirement in math.

Program Learning Outcomes:
Upon completion, students will be able to analyze models and methods of effective teaching, especially in relation to the needs of a diverse student body. Students will be able to describe the concepts and issues related to teaching diverse learners in today's contemporary schools. Students will demonstrate introductory subject matter competency for the Multiple Subject California Subject Examination for Teacher (CSET) Students will be able to evaluate elements of diversity and diverse learning styles in student populations and analyze how teachers and schools can promote learning for all students.

Required Core Courses	Units: 47.0
BIOL 3 Fundamentals of Biology	4.0
CHEM 9 Everyday Chemistry	5.0
COM ST 11 Elements Of Public Speaking	3.0
EDUC 12 Introduction to Elementary Classroom Teaching & Field Experiences	3.0
ENGL 1 Reading and Composition 1	3.0
ENGL 18 Children's Literature	3.0
GEOG 11 World Geography: Introduction to Global Studies *(same as GLOBAL 11)*	3.0
GEOL 4 Physical Geology with Lab	4.0
HIST 11 United States History Through Reconstruction	3.0
HIST 33 World Civilizations I	3.0
MATH 41 Mathematics for Elementary School Teachers	3.0
PHYSCS 14 Introductory Physics with Lab	4.0
POL SC 1 National and California Government	3.0
PSYCH 11 Child Growth and Development	3.0

List A: Select one course	Units: 3.0
ENGL 2 Critical Analysis and Intermediate Composition	3.0

List B: Select one course	Units: 3.0
AHIS 1 Western Art History I	3.0
AHIS 2 Western Art History II	3.0
AHIS 11 Art Appreciation: Introduction to Global Visual Culture	3.0

AHIS 17 Arts Of Asia - Prehistory To 1900	3.0
DANCE 5 Dance History	3.0
MUSIC 30 Music History I	3.0
MUSIC 31 Music History II	3.0
MUSIC 32 Appreciation of Music	3.0
TH ART 2 Introduction to the Theatre	3.0
TH ART 5 History of World Theatre	3.0

Total: 53.0

Elementary Teacher Education AA-T

Item 1. Statement of Program Goals and Objectives
Upon completion, students will be able to analyze models and methods of effective teaching, especially in relation to the needs of a diverse student body. Students will be able to describe the concepts and issues related to teaching diverse learners in today's contemporary schools. Students will demonstrate introductory subject matter competency for the Multiple Subject California Subject Examination for Teacher (CSET) Students will be able to evaluate elements of diversity and diverse learning styles in student populations and analyze how teachers and schools can promote learning for all students.

Upon completion of the Elementary Teacher Education AA-T, students will have a strong academic foundation in the field and be prepared for upper division baccalaureate study. Students who have completed the Elementary Teacher Education AA-T will have satisfied the lower division requirements for transfer into Elementary Teacher Education or similar major for many campuses in the California State University system. This degree complies with the Student Transfer Achievement Reform Act (California Education Code 66746).

Item 2. Catalog Description
The Associate in Arts in Elementary Teacher Education for Transfer is intended for students who plan to transfer and complete a Liberal Studies degree and / or a Multiple Subject Teaching Credential to prepare them for elementary school teaching.

Successful completion of the AA-T in Elementary Teacher Education satisfies lower- division preparation for a degree in Liberal Studies.

The Associate in Arts in Elementary Teacher Education is geared towards students who plan to transfer to a bachelor's degree in Integrated Teacher Education, Liberal Studies or a similar major.

Students who seek to become teachers in primary, secondary, bilingual, or special education will find this as one possible pathway. This pathway focuses on building the knowledge, skills, and hopefully the disposition that prepare professionals to work with children grades TK to twelve.

In this program, students will learn how to promote healthy development and learning in individually, culturally, and linguistically responsive ways.

The Elementary Teacher Education AA-T is designed to prepare students for transfer into the CSU system to complete a baccalaureate degree in Elementary Teacher Education a similar major. Upon completion of this degree, students will have a strong academic foundation in the field and be prepared for upper division baccalaureate study. Students who have completed the Elementary Teacher Education AA-T will have satisfied the lower division requirements for transfer into Elementary Teacher Education or similar major for many campuses in the California State University system. This degree complies with the Student Transfer Achievement Reform Act (California Education Code 66746).

Students must complete the following Associate Degree for Transfer requirements:

(1) Completion of 60 semester units (or 90 quarter units) that are eligible for transfer to the California State University, including both of the following:
> (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
> (B) A minimum of 18 semester units (or 27 quarter units) in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

(3) Obtainment of a grade of C or higher in each course in the Area of Emphasis, or with a P if the course was taken on a Pass/No Pass basis, and the P is equal to a C or higher (Title 5 §55063).

Item 3. Program Requirements:

Required Core (47 units)	Units:
BIOL 3 Fundamentals of Biology	4.0
CHEM 9 Everyday Chemistry	5.0
COM ST 11 Elements Of Public Speaking	3.0
EDUC 12 Introduction to Elementary Classroom Teaching & Field Experiences	3.0
ENGL 1 Reading and Composition 1	3.0
ENGL 18 Children's Literature	3.0
GEOG 11 World Geography: Introduction to Global Studies *(same as GLOBAL 11)*	3.0
GEOL 4 Physical Geology with Lab	4.0
HIST 11 United States History Through Reconstruction	3.0
HIST 33 World Civilizations I	3.0
MATH 41 Mathematics for Elementary School Teachers	3.0
PHYSCS 14 Introductory Physics with Lab	4.0
POL SC 1 National and California Government	3.0
PSYCH 11 Child Growth and Development	3.0
List A: Select one (3 units)	
ENGL 2 Critical Analysis and Intermediate Composition	3.0
HIST 47 The Practice of History	3.0
List B: Select one (3 units)	
AHIS 1 Western Art History I	3.0
AHIS 2 Western Art History II	3.0
AHIS 11 Art Appreciation: Introduction to Global Visual Culture	3.0
AHIS 17 Arts Of Asia - Prehistory To 1900	3.0
DANCE 5 Dance History	3.0
MUSIC 30 Music History I	3.0
MUSIC 31 Music History II	3.0
MUSIC 32 Appreciation of Music	3.0
TH ART 2 Introduction to the Theatre	3.0
TH ART 5 History of World Theatre	3.0
Double-Counted (CSU GE / IGETC)	35-36/35-36
CSU GE / IGETC Breadth:	39 / 37
Electives:	3-4/5-6
Degree Total	60

Transfer Model Curriculum (TMC) Template for Elementary Teacher Education
CCC Major or Area of Emphasis: Elementary Teacher Education
TOP Code: 490120
CSU Major(s): Liberal Studies; Integrated Teacher Education Programs
Total Units: 48 *(all units are minimum semester units)*

In the four columns to the right under the **College Program Requirements**, enter the college's course identifier, title and the number of units comparable to the course indicated for the TMC. If the course may be double-counted with either CSU-GE or IGETC, enter the GE Area to which the course is articulated. To review the GE Areas and associated unit requirements, please go to Chancellor's Office Academic Affairs page, RESOURCE section located at:
http://extranet.cccco.edu/Divisions/AcademicAffairs/CurriculumandInstructionUnit/TransferModelCurriculum.aspx
or the ASSIST website: http://web1.assist.org/web-assist/help/help-csu_ge.html.

The units indicated in the template are the **minimum** semester units required for the prescribed course or list. All courses must be CSU transferable. ***All courses with an identified C-ID Descriptor must be submitted to C-ID prior to submission of the Associate Degree for Transfer (ADT) proposal to the Chancellor's Office.***

Where no reference **C-ID Descriptor** is indicated, discipline faculty should compare their existing course to the example course(s) provided in the TMC at:

http://www.c-id.net/degreereview.html

Attach the appropriate ASSIST documentation as follows:
- *Articulation Agreement by Major* (**AAM**) demonstrating lower division preparation at a CSU,
- *CSU Baccalaureate Level Course List by Department* (**BCT**) for the transfer courses, and/or
- *CSU GE Certification Course List by Area* (**GECC**).

The acronyms **AAM, BCT,** and **GECC** will appear in **C-ID Descriptor** column directly next to the course to indicate which report will need to be attached to the proposal to support the course's inclusion in the transfer degree. To access ASSIST, please go to http://www.assist.org.

Associate in Arts in Elementary Teacher Education for Transfer Degree College Name: Santa Monica College						
TRANSFER MODEL CURRICULUM (TMC)		**COLLEGE PROGRAM REQUIREMENTS**				
Course Title (units)	**C-ID Descriptor**	**Course ID**	**Course Title**	**Units**	**GE Area**	
					CSU	**IGETC**
REQUIRED CORE: (42 units)						
Introduction to Elementary Classroom Teaching (3)	EDUC 200	EDUC 12	Introduction to Elementary Classroom Teaching & Field Experiences	3.0		
Child Growth and Development (3)	CDEV 100	PSYCH 11	Child Growth and Development	3.0	D9, E	4I
Biology for Educators (4) **OR** General Biology with Lab (4)	*AAM* **OR** *AAM*	BIOL 3	Fundamentals of Biology	4.0	B2	5B
Survey of Chemistry and Physics (4) **OR** Physical Sciences for Educators (4) **OR** Introduction to Chemistry (5) **AND** Introduction to Physics (4)	CHEM 140/ PHYS 140 **OR** *AAM* **OR** *AAM* **AND** *AAM*	CHEM 9 PHYSCS 14	Everyday Chemistry Introductory Physics with Lab	5.0 4.0	B1 B1	5A 5A
Earth Science (3) **AND** Earth Science Laboratory (1) **OR** Earth Science with Lab (4)	GEOL 120 **AND** GEOL 120L **OR** GEOL 121					

OR Earth Science for Educators (4)	OR *AAM*	GEOL 4	Physical Geology with Lab	4.0	B1	5A
Mathematical Concepts for Elementary School Teachers - Number Systems (3)	MATH 120	MATH 41	Mathematics for Elementary School Teachers	3.0		
Public Speaking (3)	COMM 110	COM ST 11	Elements Of Public Speaking	3.0	A1	1C
College Composition (3)	ENGL 100	ENGL 1	Reading and Composition 1	3.0	A2	1A
Introduction to Literature (3)	ENGL 120	ENGL 18	Children's Literature	3.0	C2	
World Regional Geography (3)	GEOG 125	GEOG 11/ GLOBAL 11	World Geography: Introduction to Global Studies	3.0	D5	4E
World History to 1500 (3)	HIST 150	HIST 33	World Civilizations I	3.0	C2, D6	3B
United States History to 1877 (3)	HIST 130	HIST 11	United States History Through Reconstruction	3.0	C2, D6	3B, 4F
Introduction to American Government and Politics (3)	POLS 110	POL SC 1	National and California Government	3.0	D8	4H
LIST A: Select one (3-4 units)						
Any course articulated as fulfilling CSU GE Area A3 with Freshman Composition as a prerequisite.	*GECC*	ENGL 2	Critical Analysis and Intermediate Composition	3.0	A3, C2	1B, 3B
LIST B: Select one (3 units)						
Art Appreciation (3)	ARTH 100					
Dance History and Appreciation or Introduction to Dance (3)	*AAM*	DANCE 5	Dance History	3.0	C1	3A
Music Appreciation (3)	MUS 100					
Introduction to Theatre (3)	THTR 111	TH ART 2	Introduction to the Theatre	3.0	C1	3A
Survey of the Arts (3)	*AAM*	AHIS 1 OR	Western Art History I	3.0	C1	3A
		AHIS 2 OR	Western Art History II	3.0	C1	3A
		AHIS 11 OR	Art Appreciation: Introduction to Global Visual Culture	3.0	C1	3A
		AHIS 17 OR	Arts Of Asia - Prehistory To 1900	3.0	C1	3A
		MUSIC 30 OR	Music History I	3.0	C1	3A
		MUSIC 31 OR	Music History II	3.0	C1	3A
		MUSIC 32 OR	Appreciation of Music	3.0	C1	3A
		TH ART 5	History of World Theatre	3.0	C1	3A
LIST C: (0-12 additional units)						
Any course(s) not already used above and/or any course articulated as lower division preparation in the Liberal Studies, Integrated Teacher Education, or other similar major at a CSU.	*AAM*					
Total Units for the Major:	**48**		**Total Units for the Major:**	53		

Total Units that may be double-counted (*The transfer GE Area limits must <u>not</u> be exceeded*)	35-36	35-36
General Education (CSU-GE or IGETC) Units	**39**	**37**
Elective (CSU Transferable) Units	0	1-2
Total Degree Units (maximum)	**60**	

NOTE:

1. Additional requirements for the Elementary Teacher Education major vary at each CSU campus. It is highly recommended that counselors at community colleges discuss other possible courses that are part of the major preparation at a local CSU campus and encourage students to take some of these additional courses prior to transfer.
2. This TMC has been designed to meet the introductory content area subject matter requirements for teaching at the elementary school level. Careful consideration was given to identify a specific match to CSU general education requirements for transfer.

3. Due to considerable overlap between the major requirements and general education (GE), this TMC presumes that all courses in the TMC do fill the indicated CSU-GE requirement. If the courses at a given college do not currently fill all the indicated GE requirements, colleges may want to pursue further CSU-GE approval, or a TMC-aligned degree may not be possible within the SB 1440-mandated 60 unit maximum for the total degree.

Santa Monica College
Program Of Study
Elementary Teacher Education Certificate of Achievement

The cross-disciplinary courses that are part of this certificate serve as an introduction to the field of teaching. Courses seek to inspire and prepare future educators to teach in urban classrooms, to learn essential professional knowledge including professional teaching standards and ethics, to conduct fieldwork in order to learn how to meet the diverse needs of students and roles of the teacher, and to gain a foundation of knowledge across some of the disciplines that will be necessary for teaching elementary students. Students also develop critical reading, writing, and thinking skills that are pertinent to working in the era of standards-based classroom instruction.

Program Learning Outcomes:
Upon completion of the program, students will demonstrate critical thinking skills, specifically in relation to a liberal arts curriculum, and demonstrate an understanding of content from the CA Common Core State Standards for Mathematics and English Language Arts.

Required Courses	Units: 18.0
COM ST 11 Elements of Public Speaking	3.0
EDUC 12 Introduction to Elementary Classroom Teaching & Field Experiences	3.0
ENGL 1 Reading and Composition 1	3.0
ENGL 18 Children's Literature	3.0
MATH 41 Mathematics for Elementary School Teachers	3.0
PSYCH 11 Child Growth and Development	3.0

Total: 18.0

Santa Monica College
Program Of Study
QuickBooks Virtual Enterprise Certificate of Achievement

The QuickBooks Virtual Enterprise certificate prepares students with specific skills to become QuickBooks ProAdvisor. This program provides students with the skill set to support small businesses with the setup and customization of their QuickBooks to meet the company's needs, train company employees on how to use the QuickBooks features, and provide assistance with small routine bookkeeping tasks.

Program Learning Outcomes:
Upon completion of the program, students will demonstrate proficiency and self-confidence in using QuickBooks Desktop, QuickBooks Online, and Excel, as well as the accounting foundation to needed to use these programs.

Upon completion of the program, students will apply self-discipline and professional communication techniques in an office environment.

Upon completion of the program, students will employ interpersonal and critical thinking skills as well as problem-solving.

Select one course from this group:	**Units: 3.0-5.0**
ACCTG 1[DE] Introduction to Financial Accounting	5.0
ACCTG 21[DE] Business Bookkeeping	3.0

Select one course from this group:	**Units: 3.0**
ACCTG 31A[DE] Excel for Accounting	3.0
OR	
ACCTG 31B[DE] Advanced Excel for Accounting	3.0
OR	
CIS 30[DE] Microsoft Excel	3.0

BUS 60[DE] Design Thinking for the Entrepreneur	1.0
CIS 35B[DE] QuickBooks Online	3.0
CIS 35A[DE] QuickBooks Desktop	3.0

Total: 13.0-15.0

QuickBooks Virtual Enterprise

1. **Program Goals and Objectives**

The QuickBooks Virtual Enterprise certificate prepares students with specific skills to become QuickBooks ProAdvisor. This program provides students with the skill set to support small businesses with the setup and customization of their QuickBooks to meet the company's needs, train company employees on how to use the QuickBooks features and provide assistance with small routine bookkeeping tasks. This program is designed to assist students in becoming QuickBooks ProAdvisor and QuickBooks Certified Users.

Upon completion of the program, students will:
1) Demonstrate proficiency and self-confidence in using QuickBooks Desktop, QuickBooks Online, and Excel, as well as the accounting foundation to needed to use these programs.
2) Apply self-discipline and professional communication techniques in an office environment.
3) Employ interpersonal and critical thinking skills as well as problem-solving.

2. **Catalog Description**

The QuickBooks Virtual Enterprise certificate prepares students with specific skills to become QuickBooks ProAdvisor. This program provides students with the skill set to support small businesses with the setup and customization of their QuickBooks to meet the company's needs, train company employees on how to use the QuickBooks features and provide assistance with small routine bookkeeping tasks.

Upon completion of the program, students will:
1) Demonstrate proficiency and self-confidence in using QuickBooks Desktop, QuickBooks Online, and Excel, as well as the accounting foundation to needed to use these programs.
2) Apply self-discipline and professional communication techniques in an office environment.
3) Employ interpersonal and critical thinking skills as well as problem-solving.

3. **Program Requirements**

Students completing this certification will be equipped to become QuickBooks Certified Users. In addition, students will be equipped to pass the QuickBooks ProAdvisor Certifications.

Complete BI Specialist pathway courses:
ACCTG 1 – Introduction to Financial Accounting (5 units) OR
ACCTG 21 – Business Bookkeeping (3 units)

BUS 60 – Design for Delight for the Entrepreneur (3 units)
CIS 35A – QuickBooks Desktop (3 units)
CIS 35B – QuickBooks Online (3 units)

CIS 30 – Microsoft Excel (3 units) OR
ACCTG 31A – Excel for Accounting (3 units) OR
ACCTG 31B – Advanced Excel for Accounting (3 units)

This is the sequence suggested for these courses:

Course	Title	Units	Year/Semester (Y1 or S1)
ACCTG 1 or	Introduction to Financial Accounting	5	S1
Accounting 21	Business Bookkeeping	3	S1
BUS 60	Design for Delight for the Entrepreneur	3	S1
CIS 35A	QuickBooks Desktop	3	S2
CIS 30 or	Microsoft Excel	3	S2
ACCTG 31A or	Excel for Accounting	3	S2
ACCTG 31B	Advanced Excel for Accounting	3	S2
CIS 35B	QuickBooks Online	3	S2/S3

Santa Monica College
Computer Science Information Systems
Computer Information Systems Advisory Board
May 14, 2021
MINUTES

Attendees:
SMC Attendees: Howard Stahl (Chair), Fariba Bolandhemat, Nancy Cardenas, Maral Hyelar, Gina Jerry, Naja El-Khoury, Joan Kang, Ashley Mejia, Brenda Rothaupt, Jacqueline Scott, Antoinette Simmonds, Odemaris Valdivia

Non-SMC Attendees: Theodore Dahle (Branding consultant), Wayne Fernandez (magicBoxLA – former student), Manuel Gomez (Lucielle Ball Foundation), Shawnee Rios (student), Elsie Sanchez, (Capital Group) Maria Sim (Social Entrepreneur – former student)
Call to order: via Zoom - 9:30 AM

Following quick introductions, the following topics were discussed:
Department Review and Dashboard Indicators
Howard shared various data points with the committee. Highlights included:
- Remote instruction has been underway since Spring 2021. Although parts of the college plan to return in the

Fall, CIS will not return until Spring 2022.
- The number of students served by CIS courses has increased during the pandemic
- The number of course sections have remained flat during the pandemic

Existing Courses and Programs
Howard shared information about our existing classes, certificates and degrees. Attendees commented on the vibrancy and innovation being displayed in our ongoing efforts to stay in line with industry and employment trends.

Plans for the Future
Howard shared information regarding three new certificates proposed by CIS faculty including QuickBooks Virtual Enterprise, Business Information Specialist and Business Information Worker

– Data Analytics Applications. Following much discussion and after answer all board questions regarding these programs, the following motions were presented:

MOTION: The Computer Information System Advisory Board supports the creation and development of the QuickBooks Virtual Enterprise certificate. Made by: Stahl Seconded by: Bolandhemat. FOR-18 AGAINST-0 ABSTAIN-0 Attendees support this degree and voted unanimously to support it.

MOTION: The Computer Information System Advisory Board supports the creation and development of the Business Information Specialist certificate. Made by: Stahl Seconded by: Bolandhemat. FOR-18 AGAINST-0 ABSTAIN-0 Attendees support this degree and voted unanimously to support it.

MOTION: The Computer Information System Advisory Board supports the creation and development of the Business Information Worker – Data Analytics certificate. Made by: Stahl Seconded by: Bolandhemat. FOR-18 AGAINST-0 ABSTAIN-0 Attendees support this degree and voted unanimously to support it.
Open Discussion
Various additional topics were discussed including the value of analytics and entrepreneurship.

4. **Master Planning**

The Computer Science Information System Department at Santa Monica College advocate to include the QuickBooks Virtual Enterprise Certificate of Achievement. Santa Monica College is committed to be a leader and innovator in learning and achievement. This program supports the mission, vision, and values of Santa Monica College. This Certificate of Achievement promotes commitment to lifelong learning among students and the community it serves. The College's mission is to support students learning and to contribute to the local and global community as they develop an understanding of their relationship to diverse social, cultural, political, economic, technological, and natural environments.

The Computer Science Information System department at Santa Monica College has been working with local industry advisors to create and maintain effective curriculum that represents the needs and the current industry standards. There is an increasing number of businesses that are depending on the virtual services from QuickBooks ProAdvisors. This program will prepare students with the skill set needed to support small businesses remotely. Santa Monica College current strategic planning includes expanding Career and Technical Education program by enhancing and developing programs that meet the current and future needs of local and regional industry and business.

5. **Enrollment and Completer Projections**

Enrollment Completer Projections: 20

6. **Place of Program in Curriculum/Similar Program**

This program will be listed as a CSIS program under the catalog. This is stand alone certificate. This program is based on the specific skills and knowledge required in diverse fields according to the industry.

7. **Similar Programs at Other Colleges in Service Area**

Similar programs at other colleges in the Los Angeles and Orange County Region
Santa Monica College is one district college developing this certificate. Other colleges offering similar programs are as follow: Cerritos Community College Coastline College, Citrus City College Compton College Cypress City College East Los Angeles College, El Camino City College Glendale Community College Irvine Community College Long Beach City College Los Angeles Harbor College Los Angeles Mission College Los Angeles Pierce College Los

Angeles Trade-Tech College Los Angeles Southwest College Los Angeles Valley College Mt San Antonio College Pasadena City College, Santa Ana College Santiago Canyon College West Los Angeles College.

8. Transfer Preparation Information

- <mark>TRANSFER DEGREES ONLY: Provide information on transfer preparation</mark>

Program Endorsement Brief: 0502.00/Accounting
QuickBooks Virtual Enterprise
Los Angeles/Orange County Center of Excellence, April 2021

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met	☒	Endorsed: Some Criteria Met	☐	Not Endorsed	☐
Program Endorsement Criteria						
Supply Gap:	Yes	☑	No	☐		
Living Wage: (Entry-Level, 25th)	Yes	☑	No	☐		
Education:	Yes	☑	No	☐		
Emerging Occupation(s)						
Yes ☐					*No* ☑	

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to two middle-skill occupations: *bookkeeping, accounting, and auditing clerks* (43-3031) and *payroll and timekeeping clerks* (43-3051). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.[1] This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations.

Based on the available data, there appears to be a supply gap for middle-skill accounting occupations in the LA/OC region. Furthermore, the majority of annual openings for the occupations in this report typically require some college/no degree, and entry-level wages are exceed the living wage in Los Angeles County. **Therefore, due to all the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:
- *Supply Gap Criteria -* Over the next five years, there are projected to be **10,018 jobs available annually** in the LA/OC region due to replacements, **which is more than the 2,462 awards conferred annually** by educational institutions in the region.
- *Living Wage Criteria -* Within Los Angeles County, **all of the annual job openings** for these middle-skill accounting occupations have **entry-level wages above the county's living wage** ($15.04/hour).[2]

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[1] The COE classifies middle-skill jobs as the following:
- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

[2] Living wage data was pulled from California Family Needs Calculator on 3/30/2021. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.

- *Education Criteria -* Within the LA/OC region, **91% of the annual job openings** for occupations related to accounting **typically require some college, but no degree.**
  - Furthermore, national-level educational attainment data indicates **between 48.5% and 48.9% of workers in the field have completed some college or an associate degree.**

Supply:
- All **28 community colleges** in the LA/OC region that issue awards related to accounting, conferring an average of **1,547 awards annually** between 2016 and 2019.
- Between 2014 and 2017, there was an average of **915 awards conferred annually** in related training programs by non-community college institutions throughout the LA/OC region.

Occupational Demand

Exhibit 1 displays the five-year occupational demand projections for middle-skill accounting occupations. In Los Angeles/Orange County, the number of new jobs related to these occupations is projected to decrease by 1% through 2024. However, there will be more than 10,000 job openings per year through 2024 due to job replacements in the LA/OC region.

This report includes employment projection data by Emsi, which uses EDD information. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties[3]

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	62,033	61,217	(816)	(1%)	7,228
Orange	23,951	23,749	(202)	(1%)	2,790
Total	**85,984**	**84,966**	**(1,018)**	**(1%)**	**10,018**

Wages—The labor market endorsement in this report considers the entry-level hourly wages for these middle-skill accounting occupations in Los Angeles County, as they relate to the county's living wage. Orange County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

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[3] Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Los Angeles County—All of the annual openings for these occupations have entry-level wages above the living wage for one adult ($15.04 in Los Angeles County).[4] Typical entry-level hourly wages are in a range between $17.46 and $20.55. Experienced workers can expect to earn wages between $28.05 and $30.72, which are higher than the living wage estimate.

Orange County—All of the annual openings for these occupations have entry-level wages above the living wage for one adult ($17.36 in Orange County). Typical entry-level hourly wages are in a range between $17.55 and $20.08. Experienced workers can expect to earn hourly wages between $28.12 and $29.99, which are higher than the living wage in Orange County.

Job Postings—Over the last 12 months, there were 8,683 job postings for occupations related to accounting in the region. The job titles with the most postings were bookkeepers, accounting clerks, accounts payable clerks, accounts payable specialists, and accounting assistants. The top skills were accounting, accounts payable/accounts receivable, bookkeeping, data entry, and QuickBooks. While QuickBooks is one of the top skills requested for payroll and accounting job postings, it is worth nothing that fewer than 50 postings requested the QuickBooks Certification by name. The top employers, by the number of job postings, in the region were Anthem, Inc., Marriott International, Sprouts Farmers Markets, Orange County, and El Super.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Educational Attainment—The Bureau of Labor Statistics (BLS) lists a high school diploma as the typical entry-level education for *payroll and timekeeping clerks* and some college/no degree as the typical entry-level education for *bookkeeping, accounting, and auditing clerks*. In the LA/OC region, the majority of job openings (91%) typically require some college/no degree. Furthermore, the national-level educational attainment data indicates between 48.5% and 48.9% of workers in the field have completed some college or an associate degree. Of the 50% of payroll accounting job postings listing a minimum education requirement in Los Angeles/Orange County, 75% (3,220) requested a high school diploma and 25% (1,096) requested an associate degree.

Educational Supply
Community College Supply—Exhibit 2 displays the annual and three-year average number of awards conferred by LA/OC regional community colleges in the related TOP code: Accounting (0502.00). The colleges with the most completions in the region are East LA, Irvine, and Mt. San Antonio. Over the past 12 months, there were six other related program recommendation requests from LA/OC regional community colleges.

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[4] Living wage data was pulled from California Family Needs Calculator on 3/30/2021. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.

Exhibit 2: Regional community college awards (certificates and degrees), 2016-2019

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
0502.00	Accounting	Cerritos	25	26	29	27
		Citrus	16	20	18	18
		Compton	4	-	1	2
		East LA	346	397	635	459
		El Camino	15	8	16	13
		Glendale	55	52	63	57
		LA City	17	16	5	13
		LA Harbor	8	4	8	7
		LA Mission	10	8	8	9
		LA Pierce	12	5	29	15
		LA Southwest	2	-	1	1
		LA Trade-Tech	25	26	21	24
		LA Valley	80	45	34	53
		Long Beach	27	36	42	35
		Mt San Antonio	103	114	174	130
		Pasadena	20	30	23	24
		Rio Hondo	11	17	14	14
		Santa Monica	52	169	78	100
		West LA	17	7	15	13
		LA Subtotal	**845**	**980**	**1,214**	**1,013**
		Coastline	63	43	49	52
		Cypress	4	5	8	6
		Fullerton	14	18	17	16
		Golden West	17	19	36	24
		Irvine	169	142	201	171
		Orange Coast	22	112	104	79
		Saddleback	42	32	38	37
		Santa Ana	95	86	198	126
		Santiago Canyon	6	55	7	23
		OC Subtotal	**432**	**512**	**658**	**534**
		Supply Total/Average	**1,277**	**1,492**	**1,872**	**1,547**

Non-Community College Supply—For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs related to middle-skill accounting occupations. Exhibit 3 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Codes: Accounting (52.0301) and Accounting Technology/Technician and Bookkeeping (52.0302).

Due to different data collection periods, the most recent three-year period of available data is from 2014 to 2017. Between 2014 and 2017, non-community colleges in the region conferred an average of 915 awards annually in related training programs.

Exhibit 3: Regional non-community college awards, 2014-2017

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
52.0301	Accounting	Advanced College	2	3	2	2
		Azusa Pacific University	29	25	40	31
		Biola University	-	17	29	15
		California State University-Northridge	196	250	285	244
		Chapman University	54	53	55	54
		Claremont McKenna College	25	24	23	24
		DeVry University-California	30	41	36	36
		Los Angeles ORT College-Los Angeles Campus	17	6	23	15
		Los Angeles ORT College-Van Nuys Campus	15	14	21	17
		Loyola Marymount University	60	59	62	60
		Mount Saint Mary's University	16	13	20	16
		Pepperdine University	19	30	26	25
		Pitzer College	-	-	2	1
		Pomona Unified School District Adult and Career Education	4	3	3	3
		Scripps College	-	2	1	1
		Southern California Institute of Technology	1	-	-	0
		University of La Verne	16	34	41	30
		University of Phoenix-California	42	38	19	33
		University of Southern California	262	222	217	234
		Vanguard University of Southern California	8	6	3	6
		Woodbury University	22	27	17	22

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
52.0302	Accounting Technology/ Technician and Bookkeeping	Hacienda La Puente Adult Education	28	26	28	27
		InterCoast Colleges-Anaheim	12	4	4	7
		Premiere Career College	8	8	2	6
		Southern California Institute of Technology	13	-	-	4
		University of Phoenix-California	-	-	1	0
		Total/Average	**879**	**905**	**960**	**915**

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	56,241	55,509	(732)	(1%)	6,591	$17.46	$22.60	$28.05
Payroll and Timekeeping Clerks (43-3051)	5,792	5,708	(84)	(1%)	637	$20.55	$26.11	$30.72
Total	**62,033**	**61,217**	**(816)**	**(1%)**	**7,228**			

Exhibit 5. Orange County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	21,752	21,575	(177)	(1%)	2,548	$17.55	$22.67	$28.12
Payroll and Timekeeping Clerks (43-3051)	2,199	2,174	(25)	(1%)	242	$20.08	$25.50	$29.99
Total	**23,951**	**23,749**	**(202)**	**(1%)**	**2,790**			

Exhibit 6. Los Angeles and Orange counties

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	77,993	77,083	(910)	(1%)	9,139	Some college, no degree
Payroll and Timekeeping Clerks (43-3051)	7,991	7,882	(109)	(1%)	879	HS diploma or equivalent
Total	**85,984**	**84,966**	**(1,018)**	**(1%)**	**10,018**	

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

Luke Meyer, Director
Los Angeles/Orange County Center of Excellence
lmeyer7@mtsac.edu

April 2021

C·O·E
CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH

Los Angeles Orange County Regional Consortium College Resource Leadership Council Business Meeting

Minutes: June 17, 2021

8:30 a.m.-9:45 a.m.

Zoom Video-Call Details
LAOCRC is inviting you to a scheduled Zoom meeting.

Topic: June 2021 Program Recommendation (CRLC Business Meeting)
Time: Jun 17, 2021 8:30 AM Pacific Time (US and Canada)

Join from PC, Mac, Linux, iOS or Android: https://cccconfer.zoom.us/j/98336645001

Or iPhone one-tap (US Toll): +16699006833,98336645001# or +13462487799,98336645001#

Telephone / Dial:
+1 669 900 6833 (US Toll)
+1 346 248 7799 (US Toll)
+1 253 215 8782 (US Toll)
+1 301 715 8592 (US Toll)
+1 312 626 6799 (US Toll)
+1 646 876 9923 (US Toll)
Meeting ID: 983 3664 5001
International numbers available: https://cccconfer.zoom.us/u/aEND98Uax

Skype for Business (Lync): SIP:98336645001@lync.zoom.us

Voting Members present:
- Rick Miranda (Alternate), Cerritos Community College
- Michael Wangler, Citrus College
- Merry Kim, Coastline Community College
- Lynell Wiggins (Alternate), Compton College
- Kathleen Reiland, Cypress College
- Kendra Madrid, East Los Angeles College
- Ken Starkman, Fullerton College
- Freddy Saucedo, Glendale Community College
- Rick Hodge (Alternate), Los Angeles Southwest College
- Marcia Wilson, Los Angeles Trade-Tech College
- Jennifer Galbraith, Mt. San Antonio College
- Lisa Knuppel, Orange Coast College
- Salvatrice Cummo, Pasadena City College

- Dorsie Brooks (Alternate), Golden West College
- Debbie Vanschoelandt, Irvine Valley College
- Anthony Pagan (Alternate), Long Beach City College
- Armando Rivera-Figueroa, Los Angeles City College
- Mercy Yanez, Los Angeles Harbor College
- Marla Uliana, Los Angeles Mission College
- Mon Khat, Los Angeles Pierce College

- Mike Slavich, Rio Hondo College
- Anthony Teng, Saddleback College
- Kimberly Mathews (Alternate), Santa Ana College
- Sasha King (Alternate), Santa Monica College
- Elizabeth Arteaga, Santiago Canyon College

Voting Members absent:
- Paul Flor, Compton College
- Carmen Dones, West Los Angeles College

I. **Call to Order – Meeting called to order at 8:31 a.m. by Dr. Marcia Wilson, CRLC Chair and Dean Resource Associate Chair, LAOCRC**

II. **CRLC Member Roll Call – Ms. Lupe Aramburo, Administrative Secretary, called roll – a Quorum of Voting Members was verified.**

III. **Minutes from the June 17, 2021 CRLC Business Meeting were Approved**

    a. **Motion:** Mon Khat, Los Angeles Pierce College; **Second**: Mercy Yanez, Los Angeles Harbor College; **APPROVED**

IV. **Informational Items**

    a. **Program Data Requests**

Program Title	Top Code	College	Contact
1. Digital Photography Technician	1012	Glendale Community College	Freddy Saucedo fsaucedo@glendale.edu
2. Drone Photography	N/A	Glendale Community College	Freddy Saucedo fsaucedo@glendale.edu
3. Photographic Lighting	1012	Glendale Community College	Freddy Saucedo fsaucedo@glendale.edu
4. Traditional Photography	1012	Glendale Community College	Freddy Saucedo fsaucedo@glendale.edu
5. Digital Art and Production Certificate	0614.00	Golden West College	Dorsie Brooks dbrooks28@gwc.cccd.edu
6. Digital Art Associate of Science	0614.00	Golden West College	Dorsie Brooks dbrooks28@gwc.cccd.edu

	Code	College	Contact
7. Graphic Design Foundation Certificate	0614.00	Golden West College	Dorsie Brooks dbrooks28@gwc.cccd.edu
8. Investing and Finance Certificate	0504.00	Golden West College	Dorsie Brooks dbrooks28@gwc.cccd.edu
9. UX and Web Design Certificate	0614.00	Golden West College	Dorsie Brooks dbrooks28@gwc.cccd.edu
10. Biotechnology AS Transfer Degree	0430.00	Irvine Valley College	Emalee Mackenzie emackenzie@ivc.edu
11. Child and Adolescent ADT	1305.1	Los Angeles Southwest College	Rick Hodge hodgerl@lasc.edu
12. Child Development Certificate of Achievement	1305.1	Los Angeles Southwest College	Rick Hodge hodgerl@lasc.edu
13. Early Childhood Mental Health Certificate of Achievement	1305.1	Los Angeles Southwest College	Rick Hodge hodgerl@lasc.edu
14. Family Child Care Certificate of Achievement	1305.1	Los Angeles Southwest College	Rick Hodge hodgerl@lasc.edu
15. Social-Emotional Learning Certificate of Achievement	1305.1	Los Angeles Southwest College	Rick Hodge hodgerl@lasc.edu
16. Transitional Kindergarten Certificate	1305.1	Los Angeles Southwest College	Rick Hodge hodgerl@lasc.edu
17. Environmental Studies Certificate	0303	Mt. San Antonio College	James Stone jstone@mtsac.edu
18. Surveying Engineering Technology	0924	Mt. San Antonio College	Eugene Mahmoud emahmoud@mtsac.edu

	Code	College	Contact
19. Administrative Assistant, Office Assistant, Business Software Specialist	0514	Pasadena City College	Shelley Gaskin slgaskin@pasadena.edu
20. Advanced Pharmacy Technician	1221	Pasadena City College	Sebrenia Law salaw@pasadena.edu
21. Graphic Communications Technology	0936	Pasadena City College	Lynora Rogacs larogacs@pasadena.edu
22. Biotechnology	0430	Santa Monica College	Andria Denmon denmon_andria@smc.edu
23. Business Information Worker - Data Analytics Applications	0702.1	Santa Monica College	Fariba Bolandhemat bolandhemat_fariba@smc.edu
24. Geospatial Technology	2206.10	Santa Monica College	Jing Liu liu_jing@smc.edu
25. Avionics Certificate of Achievement	0950.40	West Los Angeles College	Edmond Guzman Guzmane@wlac.edu
26. Dialysis Administrator Certificate of Achievement	1208.3	West Los Angeles College	Carlos Sermeno Sermend@wlac.edu

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Existing Low-Unit, Local Certificates For State Chaptering			
1. Computer Hardware Repair Certificate of Achievement	0708	Long Beach City College	Gene Carbonaro gcarbonaro@lbcc.edu
2. Digital and Social Media Certificate of Achievement	0514	Long Beach City College	Miriam Lynch mlynch@lbcc.edu
3. Microsoft Essentials Certificate of Achievement	0514	Long Beach City College	Miriam Lynch mlynch@lbcc.edu
4. Microsoft Windows Networking Technician Certificate of Achievement	0708.1	Long Beach City College	Miriam Lynch mlynch@lbcc.edu
5. PHP Web Programmer Certificate of Achievement	0614.3	Long Beach City College	Miriam Lynch mlynch@lbcc.edu
6. Unix Network Administrator Certificate of Achievement	0708	Long Beach City College	Miriam Lynch mlynch@lbcc.edu
7. Web Developer Certificate of Achievement	0614.3	Long Beach City College	Miriam Lynch mlynch@lbcc.edu
8. Human Resource Management Certificate	0506.00	Santa Ana College	Gabriel Shweiri shweiri_gabriel@sac.edu

b. Mr. Anthony Pagan asked what next steps are for local certificates for state chaptering. Mrs. Lupe Aramburo mentioned that the same process is used as that of new programs. She added a program application will need to be submitted for recommendation eligibility. Dr. Gustavo Chamorro added that if it is a local certificate, the Chancellors Office has no record of it, so it is considered a new program. He clarified that the reason they are separated when listed under program data requests is for the region to see which programs are new and which ones are existing.

V. **Action Items**   *Dr. Marcia Wilson, CRLC Chair and Dean Resource Associate Chair, LAOCRC*

   a. **Program Recommendation**; **Motion: Mike Slavich, Rio Hondo College; Second: Mercy Yanez, Los Angeles Harbor College; Recommended: APPROVED**

Program Title	TOP Code	College	Contact	Type of LMI Endorsement	LMI Criteria			Eme r-ging *
					Supply Gap	Wages	Educ. Attain.	
1. Construction Health and Safety Specialist	095700	Citrus College	Michael Wangler mwangler@citruscollege.edu	EA	✓	✓	✓	
2. Special Inspection - Reinforced Concrete	095700	Citrus College	Michael Wangler mwangler@citruscollege.edu	EA	✓	✓	✓	
3. Advanced Technical Theatre Certificate	100600	Fullerton College	Kenneth Starkman kstarkman@fullcoll.edu	ES	✓		✓	
4. Assistant Stage Manager Certificate	100600	Fullerton College	Kenneth Starkman kstarkman@fullcoll.edu	ES	✓		✓	
5. Dietary Manager Certificate	130600	Fullerton College	Kenneth Starkman kstarkman@fullcoll.edu	ES	✓		✓	
6. Geospatial Technologies Certificate	220610	Fullerton College	Kenneth Starkman kstarkman@fullcoll.edu	ES	✓	✓		✓
7. Resort and Facilities Management Certificate	050600	Fullerton College	Kenneth Starkman kstarkman@fullcoll.edu	ES		✓	✓	
8. Information Technology Technician II (ITTP) Certificate of Achievement	070800	Los Angeles Harbor College	Mercy Yanez yanezm@lahc.edu	EA	✓	✓	✓	
9. Sales Engineering	092400	Mt. San Antonio College	Jennifer Galbraith jgalbraith@mtsac.edu	ES	✓	✓		
10. Technical Sales	092400	Mt. San Antonio College	Jennifer Galbraith jgalbraith@mtsac.edu	ES	✓	✓		
11. Advanced Materials Nanotechnology	099900	Pasadena City College	Salvatrice Cummo scummo@pasadena.edu	EA	✓	✓	✓	✓
12. Business Administration and Entrepreneurship	050500	Pasadena City College	Salvatrice Cummo scummo@pasadena.edu	ES				

#	Program	Code	College	Contact	Endorsement				
13.	**Entry Network Technician**	070810	Rio Hondo College	Mike Slavich mslavich@riohondo.edu	ES	✓	✓		
14.	**Workplace Readiness Certificate of Achievement**	050600	Saddleback College	Anthony Teng ateng@saddleback.edu	ES	✓		✓	
15.	**Business Information Specialist**	051400	Santa Monica College	Patricia Ramos ramos_patricia@smc.edu	EA	✓	✓	✓	
16.	**Digital Marketing Certificate**	050900	Santa Monica College	Patricia Ramos ramos_patricia@smc.edu	EA	✓	✓	✓	✓
17.	**QuickBooks Virtual Enterprise**	050200	Santa Monica College	Patricia Ramos ramos_patricia@smc.edu	EA	✓	✓	✓	
18.	**Santa Monica College Respiratory Care Program**	121000	Santa Monica College	Patricia Ramos ramos_patricia@smc.edu	EA	✓	✓	✓	
19.	**Public Administration and Policy Program (Associate of Science & Certificate)**	210200	Santiago Canyon College	Elizabeth Arteaga arteaga_elizabeth@sccollege.edu	ES	✓			
20.	**Water System Automation**	095800	Santiago Canyon College	Elizabeth Arteaga arteaga_elizabeth@sccollege.edu	ES		✓	✓	

Key:	NOTE: A check mark (✓) denotes that specific LMI Criteria was met.
EA = Endorsed: All Criteria Met	*Emerging denotes there are gaps in the traditional labor market information.
ES = Endorsed: Some Criteria Met	
NE = Not Endorsed	
PA = Pre-Approved	

- Action Items: Ms. Dorsie Brooks asked if Glendale's Traditional Photography Program is still in CTE. She added that Golden West's Photography Program has been resistant to transition to CTE, and asked if that was a faculty move out in Glendale. Mr. Freddy Saucedo shared that at Glendale, it has been reverse, where there has been interest at times to move out of CTE. He added that he understands one top code is vocational and the other is not, but they understand that if they choose to stay vocational, everything that comes with it in terms of advisories and LMI. Ms. Jennifer Galbraith indicated that there are some programs where departments choose to make them vocational/CTE because of the funding that comes with it.

b. **Modified Programs**; Motion: Mike Slavich, Rio Hondo College; Second: Mercy Yanez, Los Angeles Harbor College; Recommended: APPROVED

1. **Associate in Science Degree in Accounting**, Los Angeles Harbor College

- Faculty submitted curricular modification to bring degree into better alignment with Chancellor's Office guidelines at 60-degree applicable units.

2. **Certificate of Achievement in Accounting**, Los Angeles Harbor College

   - Faculty requested curricular modification to make certificate more viable for students by removing electives as identified in CTE Portal to reduce units from 31 to 22.

3. **Personal Care Aide**, LA Trade-Tech College

   - Change in the certificate title from Senior Care to Personal Care Aide. The title meets industry job title for goals and objectives of the program.

4. **Associate in Arts, Radio/Television Broadcast News**, Long Beach City College

   - Modified to streamline the process for students to be successful in attaining their desired degree/award.
   - The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

5. **Associate in Arts, Radio/Television Producer**, Long Beach City College

   - Modified to streamline the process for students to be successful in attaining their desired degree/award.

   - The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

6. **Associate in Arts, Radio/Television Sports Broadcasting**, Long Beach City College

   - Modified to streamline the process for students to be successful in attaining their desired degree/award.

   - The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

7. **Associates of Arts, Radio/Television Performance**, Long Beach City College

   - Modified to streamline the process for students to be successful in attaining their desired degree/award.

   - The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

8. **Certificate of Achievement, Radio/Television Broadcast News**, Long Beach City College

   - Modified to streamline the process for students to be successful in attaining their desired degree/award.

   - The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

9. **Certificate of Achievement, Radio/Television Multimedia Production**, Long Beach City College

   - Modified to streamline the process for students to be successful in attaining their desired degree/award.

- The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

10. **Certificate of Achievement, Radio/Television Performance**, Long Beach City College

    - Modified to streamline the process for students to be successful in attaining their desired degree/award.

    - The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

11. **Certificate of Achievement, Radio/Television Producer**, Long Beach City College
    - Modified to streamline the process for students to be successful in attaining their desired degree/award.

    - The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

12. **Certificate of Achievement, Radio/Television Sports Broadcasting**, Long Beach City College

    - Modified to streamline the process for students to be successful in attaining their desired degree/award.

    - The unit counts were adjusted as well as updating specific courses to better reflect what students should be learning to better support job growth within radio, television, and other forms of electronic media.

13. **Animation for Commercial Applications**, Santa Ana, College

    - Changes to the courses, some were deleted and others were added.

    - This program has been realigned to fall within our new Digital Media Department (formerly it was included as part of our Art Department).

    - Modified Programs: Dr. Marcia Wilson asked why only one out of the 4 programs requested was included on the modified programs list. She was under the impression that LMI was not required when modifying programs, and she told her faculty not to request LMI. Mrs. Marbella Ruiz clarified that there was only one program application submitted, and that is the only program that moved forward to the application. Dr. Chamorro added that the Chancellor's Office refers back to the process, and that includes the complete process of requesting LMI and submitting an application for modifications/substantial changes. Mr. Freddy Saucedo also shared that when Glendale contacted the Chancellor's Office, they referred them back to the local process. Ms. Marla Uliana pointed out that there has been a lot of back and forth regarding program modifications, and the region needs a process in writing. She added that it is frustrating to have to go through a complete process of waiting for LMI, for a simple modification. Mr. Mike Slavich indicated that if there is not a new control number, and there are just changes, why go through the complete process again. Ms. Kendra Madrid had similar issues, and she was referred to the PCAH, and wants to make sure the memos from the Chancellor's Office align to the PCAH. Mr. Mike Slavich shared that the Curriculum Institute is this summer and to get clarification then.

VI. **Update, Discussion, and/or Action Item**

    a. CRLC Business Meeting 2021/2022 Calendar Approval   *Dr. Marcia Wilson, CRLC Chair and Dean Resource Associate Chair, LAOCRC*

      1. **Motion: Mike Slavich, Rio Hondo College**; **Second: Jennifer Galbraith, Mt. San Antonio College**; **Approved**

    b. CRLC Subcommittee Discussion   *Jennifer Galbraith, Dean, Business Division Mt. San Antonio College*

- Three issues were discussed that the CRLC needs to work on going forward, it was what the committee wanted the group to look at. Many discussed the prior notice of intent process where there should be a discussion for each program was to be made ahead of time, but not adding time to the process. Another issue brought up was the approval process for minutes. Lastly, the issue regarding the frequency in which the agenda structure changes. The advisory minutes also came up along with questions on what is required.

    c. 2021-2022 CRLC Business Meetings – Virtual?   *Dr. Marcia Wilson, CRLC Chair and Dean Resource Associate Chair, LAOCRC*

- Ms. Jennifer Galbraith asked where the discussion is for possibly going back to in-person meetings. She added, even if the meeting is in-person for those interested and available in Zoom as well. Dr. Davis requested that each college advices if they prefer Zoom or in-person. The group shared that it would be best to change the meeting start-time to 9am, considering the voting members that are farther out. Mr. Freddy Saucedo suggested the hybrid option, as it would be helpful to have the meeting in-person, but also stream it via Zoom. Dr. Davis will bring it up to the DRA and they can decide what option would be best for the group, and all the recommendations today will be considered.

VII. **Updates**

    c. Districts
        i. Cerritos
        ii. Citrus
        iii. Coastline
        iv. Compton
        v. Cypress
        vi. East Los Angeles

vii. El Camino

viii. Fullerton

ix. Glendale

x. Golden West

xi. Irvine Valley

xii. Long Beach

xiii. Los Angeles City

xiv. Los Angeles Harbor

xv. Los Angeles Mission

xvi. Los Angeles Pierce

xvii. Los Angeles Southwest

xviii. Los Angeles Trade-Technical

xix. Los Angeles Valley

xx. Mt. SAC

xxi. Orange Coast

xxii. Pasadena City

xxiii. Rio Hondo

xxiv. Saddleback

xxv. Santa Ana

xxvi. Santa Monica

xxvii. Santiago Canyon

xxviii. West Los Angeles

VIII. **Adjourn**

The next CRLC Meeting will be on ==September 16, 2021==, from 8:30 A.M. – 9:45 A.M.

Santa Monica College

Computer Science Information Systems

Computer Information Systems Advisory Board

May 14, 2021

MINUTES

Attendees:

SMC Attendees: Howard Stahl (Chair), Fariba Bolandhemat, Nancy Cardenas, Maral Hyelar, Gina Jerry, Naja El-Khoury, Joan Kang, Ashley Mejia, Brenda Rothaupt, Jacqueline Scott, Antoinette Simmonds, Odemaris Valdivia

Non-SMC Attendees: Theodore Dahle (Branding consultant), Wayne Fernandez (magicBoxLA – former student), Manuel Gomez (Lucielle Ball Foundation), Shawnee Rios (student), Elsie Sanchez, (Capital Group) Maria Sim (Social Entrepreneur – former student)

Call to order: via Zoom - 9:30 AM

Following quick introductions, the following topics were discussed:

Department Review and Dashboard Indicators

Howard shared various data points with the committee. Highlights included:

- Remote instruction has been underway since Spring 2021. Although parts of the college plan to return in the Fall, CIS will not return until Spring 2022.
- The number of students served by CIS courses has increased during the pandemic
- The number of course sections has remained flat during the pandemic

Existing Courses and Programs

Howard shared information about our existing classes, certificates and degrees. Attendees commented on the vibrancy and innovation being displayed in our ongoing efforts to stay in line with industry and employment trends.

Plans for the Future

Howard shared information regarding three new certificates proposed by CIS faculty including QuickBooks Virtual Enterprise, Business Information Specialist and Business Information Worker – Data Analytics Applications. Following much discussion and after answer all board questions regarding these programs, the following motions were presented:

MOTION: The Computer Information System Advisory Board supports the creation and development of the QuickBooks Virtual Enterprise certificate. Made by: Stahl Seconded by: Bolandhemat. FOR-18 AGAINST-0 ABSTAIN-0 Attendees support this degree and voted unanimously to support it.

MOTION: The Computer Information System Advisory Board supports the creation and development of the Business Information Specialist certificate. Made by: Stahl Seconded by: Bolandhemat. FOR-18 AGAINST-0 ABSTAIN-0 Attendees support this degree and voted unanimously to support it.

MOTION: The Computer Information System Advisory Board supports the creation and development of the Business Information Worker – Data Analytics certificate. Made by: Stahl Seconded by: Bolandhemat. FOR-18 AGAINST-0 ABSTAIN-0 Attendees support this degree and voted unanimously to support it.

Open Discussion

Various additional topics were discussed including the value of analytics and entrepreneurship.

Meeting Adjourned: 10:59 AM

Santa Monica College
Program Of Study
System Administrator Certificate of Achievement

The IT world is integrated by networks of connected devices, each secured and properly configured. Success in IT disciplines like database, website, or e-commerce development demands a supporting grasp of the network environment. Major technologies are the networks themselves, their fit within the operating platforms they connect to, specific network applications, and measures to achieve networks security. System administrators and other qualified IT specialists must understand the various protocols, programs' interfaces, how networks are presented and managed on Unix and Windows platforms, specific server programs and their clients, and what the inherent risks are.

Program Learning Outcomes:
Design and implement computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. Perform network modeling, analysis, and planning; design network security measures; research and recommend network and data communications hardware and software.

Required Courses	**Units: 9.0**
CS 9A Technology Project Management I (same as CIS 9A)	3.0
CS 70 Network Fundamentals and Architecture	3.0
CS 84A Google IT Support Fundamentals I	3.0

Choose 1	**Units: 3.0**
CS 41 Linux Workstation Administration	3.0
CS 43 Windows Network Administration	3.0
CS 84B Google IT Support Fundamentals II	3.0

Choose 1	**Units: 2.0-3.0**
CS 75 Network Protocols and Analysis	2.0
CS 78 Secure Server Installation and Administration	3.0
CS 84C Google IT Support Fundamentals III	3.0

Total: 14.0-15.0