# College Curriculum Committee Meeting Agenda Tuesday, April 20, 2021 2:00 p.m. – 3:30 p.m. Meeting will be held virtually via ConferZoom

Item	Time*	Action	Attachment(s)	Presenter(s)
1. Minutes: March 16, 2021	2 min.	Action	#4/20/21-1	Kuehnl
2. Report Out from Division Reps	5 min.	Discussion		All
3. Public Comment on Items Not on Agenda (CCC cannot discuss or take action)	5 min.	Information		
<ul> <li>4. Announcements <ul> <li>a. New Course Proposals</li> <li>b. Notification of Proposed Requisites</li> <li>c. CORs for Update 2022-23 (Title 5 list)</li> <li>d. Foothill GE List for 2021-22</li> <li>e. Pharmacy Technician &amp; Sheet Metal Apprenticeship CA Approvals</li> </ul> </li> </ul>	5 min.	Information	#4/20/21-2-7 #4/20/21-8 #4/20/21-9 #4/20/21-10-11	CCC Team
5. Consent Calendar a. GE Applications	5 min.	Action	#4/20/21-12-13	Kuehnl
6. New Program Application: Cybersecurity CA	10 min.	2nd Read/ Action	#4/20/21-14	Kuehnl
7. New Program Application: IT Support CA		2nd Read/ Action	#4/20/21-15	Kuehnl
8. New Program Application: English as a Second Language for College and Careers (High-Intermediate) Noncredit Certificate		2nd Read/ Action	#4/20/21-16	Kuehnl
9. New Program Application: English as a Second Language for College and Careers (Advanced) Noncredit Certificate		2nd Read/ Action	#4/20/21-17	Kuehnl
10. Stand Alone Approval Request: R T 70B	2 min.	2nd Read/ Action	#4/20/21-18	Kuehnl
11. Stand Alone Approval Request: D A 65	3 min.	1st Read	#4/20/21-19	Kuehnl
12. Stand Alone Approval Request: D A 66		1st Read	#4/20/21-20	Kuehnl
13. Stand Alone Approval Request: D A 200L		1st Read	#4/20/21-21	Kuehnl
14. Program Creation Process Ad Hoc Group	15 min.	1st Read	#4/20/21-22	Kuehnl
15. Guided Pathways Mapping Approval Process	15 min.	Discussion		Kuehnl
16. Local Apprenticeship AS Degree	15 min.	Discussion		Kuehnl
17. Good of the Order	5 min.			Kuehnl
18. Adjournment				Kuehnl

\*Times listed are approximate

# Consent Calendar:

<u>Foothill General Education</u> (attachments #4/20/21-12-13) *Area I—Humanities:* BUSI 70 *Area VII—Lifelong Learning:* Plumbing Technology Apprenticeship Program

# Attachments:

- #4/20/21-1 Draft Minutes: March 16, 2021
- #4/20/21-2 New Course Proposal: D A 67
- #4/20/21-3 New Course Proposal: ENGL 12A
- #4/20/21-4 New Course Proposal: KINS 49
- #4/20/21-5 New Course Proposal: MTEC 57C
- #4/20/21-6 New Course Proposal: MTEC 90A
- #4/20/21-7 New Course Proposal: NCBS 448A
- #4/20/21-8 CCC Notification of Proposed Requisites
- #4/20/21-9 COR Required Updates for 2022-23
- #4/20/21-10 Foothill General Education 2021-22-or view in CourseLeaf
- #4/20/21-11 Foothill GE Changes for 2021-22
- #4/20/21-14 New Program Application: Cybersecurity CA (updated Narrative & LMI)
- #4/20/21-15 New Program Application: IT Support CA (updated Narrative)
- #4/20/21-16 New Program Application: English as a Second Language for College and Careers (High-Intermediate) Noncredit Certificate
- #4/20/21-17 New Program Application: English as a Second Language for College and Careers (Advanced) Noncredit Certificate
- #4/20/21-18 Stand Alone Course Approval Request: R T 70B-or view in CourseLeaf
- #4/20/21-19 Stand Alone Course Approval Request: D A 65-or view in CourseLeaf
- #4/20/21-20 Stand Alone Course Approval Request: D A 66-or view in CourseLeaf
- #4/20/21-21 Stand Alone Course Approval Request: D A 200L-or view in CourseLeaf
- #4/20/21-22 Proposal to Create New Ad Hoc Committee: Instructional Program Creation Process (draft)

# 2020-2021 Curriculum Committee Meetings:

Winter 2021 Quarter	Spring 2021 Quarter
<del>1/19/21</del>	4/20/21
<del>2/2/21</del>	5/4/21
<del>2/16/21</del>	5/18/21
<del>3/2/21</del>	6/1/21
<del>3/16/21</del>	6/15/21
	<del>1/19/21</del> <del>2/2/21</del> <del>2/16/21</del> <del>3/2/21</del>

Standing reminder: Items for inclusion on the CCC agenda are due no later than one week before the meeting.

# 2020-2021 Curriculum Deadlines:

- 12/1/20 Deadline to submit courses to CSU for CSU GE approval (Articulation Office).
- 12/1/20 Deadline to submit courses to UC/CSU for IGETC approval (Articulation Office).
- 2/16/21 Deadline to submit local GE applications for 2021-22 catalog (Faculty/Divisions).
- 4/23/21 Curriculum Sheet updates for 2021-22 catalog (Faculty/Divisions).
- 6/1/21 Deadline to submit new/revised courses to UCOP for UC transferability (Articulation Office).
- 6/18/21 Deadline to submit <u>all</u> new courses and certain types of course updates for 2022-23 catalog—<u>see PDF for details</u> (Faculty/Divisions).
- 11/5/21 Deadline to submit certain types of course updates for 2022-23 catalog—<u>see</u> <u>PDF for details</u> (Faculty/Divisions).
- *Ongoing* Submission of courses for C-ID approval and course-to-course articulation with individual colleges and universities (Articulation Office).

### Distribution:

Micaela Agyare (LIBR), Chris Allen (Dean, APPR), Ben Armerding (LA), Rachelle Campbell (BH), Zachary Cembellin (PSME), Anthony Cervantes (Dean, Enrollment Services), Mark Ferrer (SRC), Owen Flannery (KA), Valerie Fong (Interim Dean—LA), Marnie Francisco (PSME), Evan Gilstrap (Articulation Officer), Hilary Gomes (FA), Allison Herman (LA), Kurt Hueg (Administrator Co-Chair), Maritza Jackson Sandoval (CNSL), Eric Kuehnl (Faculty Co-Chair), Andy Lee (CNSL), Debbie Lee (Acting Dean—FA & KA), Laurence Lew (BSS), Kristy Lisle (VP Instruction), Don Mac Neil (KA), Kathryn Maurer (AS President), Kent McGee (Evaluations), Michelle McNeary (LA), Ché Meneses (FA), Brian Murphy (APPR), Teresa Ong (AVP Workforce), Ron Painter (PSME), Kas Pereira (BSS), Katy Ripp (KA), Lisa Schultheis (BH), Ram Subramaniam (Dean—BH & PSME), Mary Vanatta (Curriculum Coordinator), Priya Vasu (ASFC), Anand Venkataraman (PSME)

# COLLEGE CURRICULUM COMMITTEE

Committee Members - 2020-21

# Meeting Date: <u>4/20/21</u>

Co-Ch	airs (2)				
<ul> <li></li> </ul>	Eric Kuehnl	7479	Vice President, Academic Senate (tiebreaker vote only)		
			kuehnleric@fhda.edu		
<b>v</b>	Kurt Hueg	7179	Interim Associate Vice-President of Instruction		
			huegkurt@fhda.edu		
· · · ·					
	Membership (1 vote per divis				
<ul> <li></li> </ul>	Micaela Agyare	7086	Library	agyaremicaela@fhda.edu	
	Rachelle Campbell	7469	BH	campbellrachelle@fhda.edu	
<u> </u>	Zachary Cembellin	7383	PSME	cembellinzachary@fhda.edu	
·	Mark Ferrer		SRC	ferrermark@fhda.edu	
	Owen Flannery	7213	KA	flanneryowen@fhda.edu	
<u> </u>	Valerie Fong	7135	Interim Dean—LA	A fongvalerie@fhda.edu	
<u> </u>	Marnie Francisco	7420	PSME	franciscomarnie@fhda.edu	
<b>/</b>	Evan Gilstrap	7675	Articulation	gilstrapevan@fhda.edu	
<u> </u>	Hilary Gomes	7585	FA	gomeshilary@fhda.edu	
<ul> <li>✓</li> </ul>	Allison Herman	7460	LA	hermanallison@fhda.edu	
<ul> <li>✓</li> </ul>	Maritza Jackson Sandoval	7409	CNSL	jacksonsandovalmaritza@fhda.edu	
<b>v</b>	Andy Lee	7783	CNSL	leeandrew@fhda.edu	
~	Debbie Lee	7497	Acting Dean–FA, KA	leedebbie@fhda.edu	
	Laurence Lew	6138	BSS	lewlaurence@fhda.edu	
~	Don Mac Neil	7248	KA	macneildon@fhda.edu	
~	Ché Meneses	7015	FA	menesesche@fhda.edu	
<b>v</b>	Brian Murphy		APPR	brian@pttc.edu	
~	Ron Painter		PSME	painterron@fhda.edu	
<b>v</b>	Kas Pereira	7319	BSS	pereira cassandra @fhda.edu	
✓	Lisa Schultheis	7780	BH	schultheislisa@fhda.edu	
~	Kella Svetich	7924	LA	svetichkella@fhda.edu	
~	Anand Venkataraman	7495	PSME	venkataramananand@fhda.edu	
Non-V	oting Membership (4)				
	Priya Vasu		ASFC Rep.	asfc.priyav@gmail.com	
<u> </u>	Mary Vanatta	7439	Curr. Coordinator	vanattamary@fhda.edu	
<u>v</u>	Kent McGee	7298	Evaluations	mcgeekent@fhda.edu	
		1270	SLO Coordinator	<b>.</b> .	

<u>Visitors</u>

Chris Allen, Kathryn Maurer, Paul Starer, Ram Subramaniam

# College Curriculum Committee Meeting Minutes Tuesday, March 16, 2021 2:00 p.m. – 3:30 p.m. Meeting held virtually via ConferZoom

Item	Discussion
1. Minutes: March 2, 2021	Approved by consensus.
2. Report Out from Division Reps	Speaker: All PSME: Working on curriculum sheets.
	Library: Rep asked group to remind students to return any checked-out materials to Sunnyvale location by end of quarter; will begin charging fines again.
	Language Arts: Working on curriculum sheets. English dept. prompted by Guided Pathways to reflect on entire literature grid, and focus on equity language. Discussing seat counts. Kuehnl noted many discussions occurring about seat counts, which hasn't been brought back to CCC for additional discussion due to Faculty Association (FA) component—CCC Team trying to figure out how to have meaningful conversation at CCC; likely requires including other stakeholders (e.g., FA).
	Kinesiology: Working on curriculum sheets. Creating new course on meditation. Updating SLOs.
	Fine Arts: No updates to report.
	Counseling: Updating CRLP 71: updating content, changing from P/NP to letter grade, hoping to get course approved as UC transferable.
	BSS: No updates to report.
	Bio Health: No updates to report.
	Apprenticeship: Working on curriculum sheets.
	Articulation: Attended Region 4 meeting on Friday; discussed Ethnic Studies and IGETC. Still don't know what IGETC is planning—might be adding new Area 7 (similar to new CSU GE Area F) or adding requirement to existing Area 4. Likely won't know final decision until late May or June, which makes it tricky for our catalog publication deadline.
	Vanatta asked the group about timing of Title 5 list—list is almost ready to share, but wants to be mindful of finals week, spring break, etc., and doesn't want to pile on more work for those updating curriculum sheets. On the other hand, does not want to delay anyone who wants to get started. PSME rep suggested sharing it when it's ready, and reps can decide when to forward to faculty; will allow them to choose when they want to start working on their updates. Vanatta will share the list by the end of the week.
	Hueg commented on seat count topic, agreeing it would be useful for FA to be involved in discussion at CCC, as topic is related to working conditions. Mentioned proposal to drop 50 seat count classes to 40 (and 40 to 35), and to leave all others as-is—FA will be discussing with district over next few months. Noted several proposals came forward during recent negotiations. Kuehnl asked if enrollment minimums would be affected—Hueg believes <i>de</i>

Draft Minutes, March 16, 2021	
	<i>facto</i> minimum of 20 will stay the same. Added that FA proposal intends that no classes will be cut as a result; part of negotiations. Kuehnl asked if proposal is public, for reps to be able to review—it was a verbal proposal. D. Lee believes it was mentioned in recent FA Newsletter.
3. Public Comment on Items Not on Agenda	No comments.
4. Announcements a. New Course Proposal	Speakers: CCC Team The following proposal was presented: CHEM 81. Please share with your constituents. No comments.
b. Curriculum Sheet Deadline for 2021-22	This year's deadline will be Friday, April 23rd—sheets must be approved by division CC and submitted to Vanatta in CourseLeaf. As with previous years, even if no changes being made to sheet, still need to submit.
c. Spring Plenary Resolutions	Resolutions packet was attached as info item; will be discussed at upcoming Area meetings. Reach out to Kuehnl, Kathryn Maurer, or Isaac Escoto with any questions or feedback.
5. Consent Calendar a. GE Application	<b>Speaker: Eric Kuehnl</b> The following GE application was presented: Area I—KINS 5. No comments.
	Motion to approve <b>M/S</b> (Venkataraman, Cembellin). <b>Approved.</b>
6. Addition to Credit by Examination List: KINS 16A	<b>Speaker: Eric Kuehnl</b> Kinesiology has approved this course as available for credit by examination. No comments.
7. Changes to Course Families: Art Dept. (Fine Arts & Communication)	Speaker: Eric Kuehnl Second read of changes to course families for Art dept. courses, for 2021- 22 catalog. No comments.
	Motion to approve M/S (Meneses, Herman). Approved.
8. New Program Application: Cybersecurity CA	<b>Speaker: Eric Kuehnl</b> First read of new Cybersecurity Certificate of Achievement. Ong noted that, on both this and IT Support CA, narrative and LMI don't list the same TOP Code—Vanatta will follow up with faculty to confirm correct TOP Code.
	Second read and possible action will occur at next meeting.
9. New Program Application: IT Support CA	Speaker: Eric Kuehnl First read of new IT Support Certificate of Achievement. See item 8 for comment.
	Second read and possible action will occur at next meeting.
10. New Program Application: English as a Second Language for College and Careers (High-Intermediate) Noncredit Certificate	<b>Speaker: Eric Kuehnl</b> First read of new English as a Second Language for College and Careers (High-Intermediate) Noncredit Certificate. No comments related to program.
	Language Arts rep asked when temporary program creation process will be re-evaluated—Kuehnl noted discussions are scheduled to occur soon, and CCC will be involved in drafting new process. Rep pointed out that many new programs coming to CCC don't receive any feedback from governance groups, and wondered how effective this part of the process is. Kuehnl mentioned timing, as some groups only meet once a month, but we don't want to delay programs from moving forward. D. Lee mentioned resources aspects of a program, in addition to curriculum aspects, and wondered how these will work in conjunction. Pointed out that program applications usually state no new resources required, but faculty do need to teach the classes, which is a resource. Kuehnl noted many new programs use courses that are already being offered by existing faculty, but doesn't know how this may affect resources. Agreed that including Revenue & Resources group (R&R)

is important.

	is important.
	Lisle emphasized importance of faculty working closely with division dean, AVP Instruction, and VP Instruction, to determine feasibility of running new program or course, since R&R doesn't necessarily have the knowledge specific to the dept./division. Noted such conversations can be difficult, but are necessary to set expectations. Library rep pointed out program applications usually state no requests for additional library resources. Other Language Arts rep noted temporary process created when governance structure was quite new, and was based on predictions related to roles of governance groups. Added that the step of sending program to various groups also important for information sharing purposes. Kuehnl noted that we have a flexible timeline of allowing for new program proposals throughout the year; other colleges (e.g., De Anza) require proposals be submitted in fall, which allows more time for feedback/review. PSME rep pointed out that two-week timeframe is a minimum, and nothing is stopping faculty from allowing governance groups more time to respond, if they want to wait for feedback. D. Lee summarized reps' comments, as well as feedback heard from governance groups, as need for clarity and guidelines for everyone involved.
	Maurer mentioned upcoming planning meeting; hopes workgroup will be created, and would like CCC to take lead on drafting new process. Hueg agreed with Lisle re: importance of conversation with dean about funding of new program, before sharing with governance groups. Lisle mentioned can be tough for governance groups to provide feedback, since intimate knowledge of discipline courses (e.g., scheduling concerns) necessary.
	Second read and possible action will occur at next meeting.
11. New Program Application: English as a Second Language for College and Careers (Advanced) Noncredit Certificate	<b>Speaker: Eric Kuehnl</b> First read of new English as a Second Language for College and Careers (Advanced) Noncredit Certificate. No comments.
	Second read and possible action will occur at next meeting. No comments specific to program.
12. Stand Alone Approval Request: R T 70B	Speaker: Eric Kuehnl First read of Stand Alone Approval Request for R T 70B. Will be permanently Stand Alone. No comments.
	Second read and possible action will occur at next meeting.
13. Guided Pathways Mapping Approval Process	<b>Speaker: Eric Kuehnl</b> Guest presenters: Isaac Escoto and Fatima Jinnah. Jinnah presented intro to Guided Pathways (GP) mapping at previous meeting; today's discussion about process for formal approval of Program Maps. Escoto shared current structure for GP: steering committee within Equity & Education Council (E&E), comprised of four teams. E&E has discussed operational aspect of approving Maps and would like CCC to be involved in determining steps, as Maps are related to curriculum.
	Jinnah explained mapping process. Counseling faculty drafts Map and sends to dept. chair of the program. Chair meets with GP team (may also include other dept. faculty), and edits may be made. Map then shared with all faculty in dept. for feedback; chair notifies GP team when Map has been approved at dept. level—this is where the process has stopped. Initially, plan was for E&E to review/approve all Maps, but E&E would like CCC to weigh in on determining final approval process. Escoto shared sample Map; Jinnah explained that courses come from curriculum sheet and GE pattern, and if there's space for electives the faculty determine what those should be. Escoto emphasized that many sets of eyes are on Map before it gets to

the point that it's ready for formal approval. Language Arts rep believes it would be appropriate for division CC to approve Map, similar to process for curriculum sheets; asked Escoto and Jinnah their thoughts on which groups to include as FYI. Escoto believes important to at least share Map as info item to CCC because of division CC structure; for example, if another division's course is listed on Map, would be opportunity for visibility.

Jinnah noted these Maps are round one, for current academic year-will need to edit Maps for upcoming year. Maps will be put in Canvas, to allow for transparency across depts./divisions. Once all Maps have been created, can have broader conversations across campus. Agreed with Escoto that info item to CCC likely sufficient for Maps, but round two will include metamajors, which may require change in approval process. PSME rep pointed out that curriculum sheets don't come to CCC as info items, but do go through dean and division CC, not just dept. Believes same would be good for Maps, and agreed that info item to CCC would be good for visibility. Escoto mentioned recent discussions about Maps being created for pedagogical reasons vs. scheduling concerns, with consensus ultimately around pedagogy. Other Language Arts rep mentioned English dept.'s recent conversations and finding that other depts. requiring English courses, which affects scheduling and has prompted them to reach out to those other depts. Would like to process for Maps to allow cross-dept. communication.

Escoto noted differences in how each division CC operates and communicates with colleagues, and need to envision how approval could look at the division CC level. PSME rep asked about deadlines related to catalog, or if approval would be ongoing throughout the year. Jinnah noted that other colleges have deadlines around the catalog, but this hasn't been determined yet for Foothill. Current Maps will not be ready for publication in upcoming catalog; plan is for next year's updated Maps to be ready in time to be in catalog. Hueg mentioned importance of scheduling component, and need to ensure classes will be available for students, especially courses that haven't been regularly offered but which students need to complete program requirements. Jinnah suggested coming up with approval process to use immediately for this year, then perhaps building on that to determine process for next year; as soon as Maps approved for this year, editing will begin on next year's Maps. Fong asked if there will be Maps for the learning communities-not at this time; right now, mapping ADTs, AA/AS degrees, and CAs. Does not mean learning communities won't be included in future; planning to include integrated student support, hopefully with meta-majors. Fong noted certain learning communities require specific literature classes to be offered during specific quarters.

Escoto mentioned challenge in creating Maps, as they cannot be everything<br/>for everyone—hope is for Maps to be helpful for most people, but will<br/>always be unique situations for certain students. Asked if the reps would<br/>like to bring topic back to constituents for discussion. Noted that GP funding<br/>ends in June, 2022, but hopes this work will continue. Kuehnl would like<br/>CCC to formally decide where we'd like approval to happen (e.g., division<br/>CCs, depts., etc.). Discussion will continue at next meeting, with hope to<br/>make a formal decision.14. Good of the OrderLanguage Arts rep asked if program creation process could be agendized<br/>for next meeting. Kuehnl suggested determining GP process first, which<br/>could inform program process—and because it is more urgent—but agreed<br/>with need to agendize program process soon.15. Adjournment3:31 PM

### Draft Minutes, March 16, 2021

Attendees: Micaela Agyare (LIBR), Chris Allen (Dean, APPR), Ben Armerding (LA), Zach Cembellin (PSME), Anthony Cervantes (Dean, Enrollment Services), Isaac Escoto (CNSL), Owen Flannery (KA), Valerie Fong (Acting Dean, LA), Marnie Francisco (PSME), Evan Gilstrap (Articulation Officer), Hilary Gomes (FA), Allison Herman (LA), Kurt Hueg (Administrator Co-Chair), Maritza Jackson Sandoval (CNSL), Fatima Jinnah (CNSL), Eric Kuehnl (Faculty Co-Chair), Andy Lee (CNSL), Debbie Lee (Acting Dean, FA & KA), Laurence Lew (BSS), Kristy Lisle (VP Instruction), Don Mac Neal (KA), Kathryn Maurer (AS President), Ché Meneses (FA), Brian Murphy (APPR), Teresa Ong (AVP Workforce), Ron Painter (PSME), Kas Pereira (BSS), Ram Subramaniam (Dean, BH & PSME), Mary Vanatta (Curriculum Coordinator), Priya Vasu (ASFC), Anand Venkataraman (PSME)

Minutes Recorded by: M. Vanatta

**New Course Proposal** In Workflow Date Submitted: 02/03/21 1:59 pm 1. 1BH Curriculum Viewing: D A F067. : RADIATION SAFETY COURSE Rep 2. Curriculum Last edit: 03/25/21 10:38 am Coordinator Changes proposed by: Cara Miyasaki (10538632) 3. Activation **Course Proposal Form Approval Path** Faculty Author Cara Miyasaki 1. 02/25/21 8:49 pm Lisa Schultheis Effective Term Summer 2022 (schultheislisa): Approved for 1BH Subject Dental Assisting (D A) **Course Number** F067. Curriculum Rep Department Dental Assisting (D A) 2. 03/25/21 10:40 Biological and Health Sciences (1BH) Division am Mary Vanatta Units 1.5 (vanattamary): 1 hour lecture and 2 hours lab Hours Approved for Curriculum Course Title RADIATION SAFETY COURSE Coordinator Short Title

Proposed Transferability	CSU Only
Proposed Description and Requisites:	This course covers the principles of dental radiology. Topics include theory and techniques, operation of the x-ray machine, biological effects, safety practices, and the practical application of utilizing appropriate infection control while exposing, processing, mounting, and evaluating intraoral dental images.
Proposed Discipline	Dental Technology
To which Degree(s)	or Certificate(s) would this course potentially be added? Stand Alone temporarily, then part of a Certificate of Achievement
Are there any other this course?	departments that may be impacted from the addition of
	No

Comments & Other Relevant Information for Discussion:

This course will be part of a series of courses for the dental assisting apprenticeship pathway. We will not apply for program accreditation from the Commission on Dental Accreditation, however, it will follow the Dental Board of California's work experience guidelines to apply for a California dental assisting license (Registered Dental Assistant).

Reviewer Comments

Key: 8714

# **New Course Proposal**

In Workflow

Rep 2. Curriculum

1. 1LA Curriculum

Coordinator 3. Activation

Key: 8721

Preview Bridge Why Did This Not Sync?

Date Submitted: 04/12/21 2:09 pm

# Viewing: ENGL F012A : SURVEY OF LITERATURE OF THE BLACK PANTHER PARTY

### Last edit: 04/12/21 3:50 pm

Changes proposed by: Samuel White (10946982)

	1 Fauna		Approval Path			
Course Proposa Faculty Author	samuel white		1. 04/12/21 2:11 pm Ben Armerding (armerdingbenjami			
Effective Term	Summer 2022		Approved for 1LA Curriculum Rep			
Subject	English (ENGL)	Course Number F012A	2. 04/12/21 3:52 pm			
Department	English (ENGL)		Mary Vanatta (vanattamary):			
Division	Language Arts (1LA)		Approved for			
Units	4		Curriculum			
Hours	4 hours lecture		Coordinator			
Course Title	SURVEY OF LITERATURE OF THE BLAC	CK PANTHER PARTY				
Short Title						
Proposed Transferability	UC/CSU					
Proposed Description and Requisites:	Black Panther Party for Self Defense, which 1966. Literature from the organization's ind statement, biographies, novels, interviews include allegations of criminal violations, C	ception, to present-day, including mission , documentaries, government documents that Constitutional references, and online dialogue. bast and current social concerns such as race ights, as well as film productions, and the				
Proposed Discipline	English					
To which Degree(s)	) or Certificate(s) would this course potentiall English AA and English ADT	y be added?				
Are there any other this course?	r departments that may be impacted from the	e addition of				
	No					
Comments & Other	r Relevant Information for Discussion: N/A					
Reviewer Comments						

# **New Course Proposal**

Date Submitted: 03/30/21 12:00 pm

# Viewing: KINS F049. : MANAGING PHYSICAL STRESS

# Last edit: 04/06/21 12:55 pm

**Course Proposal Form** 

Faculty Author

Changes proposed by: Jeffrey Bissell (10796722)

# Form Jeffrey Bissell Summer 2022

# In Workflow 1. 1PE Curriculum

- Rep
- 2. Curriculum
- Coordinator
- 3. Activation

### Approval Path

1. 03/30/21 1:39 pm
Don Mac Neil
(macneildon):
Approved for 1PE
Curriculum Rep
2.04/06/21 12:57
pm
Mary Vanatta
(vanattamary):
Approved for
Curriculum
Coordinator

Effective Term	Summer 2022			
Subject	Kinesiology (KINS)	Course Number	F049.	
Department	Kinesiology (KINS)			2
Division	Kinesiology and Athletics (1PE)			
Units	3			
Hours	3 hours lecture			
Course Title	MANAGING PHYSICAL STRESS			
Short Title				
Proposed Transferability	UC/CSU			
ProposedManaging Physical Stress is an introduction to physical techniques that effectivelyDescription andrelieve stress related physical problems through the lens of Kinesiology. Students willRequisites:be exposed to information on how lifestyle, environment and society effects stress and the ability to successfully cope with it. Students will develop and implement a personal stress reduction program using physical activities including but not limited to massage, meditation, breathing exercises, mindfulness, aerobic exercises and pain control 				
Proposed Discipline	Kinesiology (KINS)			
To which Degree(s)	or Certificate(s) would this course potentially PHED General Education Degree	v be added?		
Are there any other this course?	departments that may be impacted from the	addition of		
	No			
Comments & Other	Relevant Information for Discussion: N/A			
Reviewer				
Comments				

Key: 8719

Preview Bridge Why Did This Not Sync?

#### New Course Proposal In Workflow Date Submitted: 01/20/21 1:07 pm 1. 1FA Curriculum Viewing: MTEC F057C : MUSIC COMPOSITION FOR FILM & TV Rep 2. Curriculum Last edit: 03/16/21 1:33 pm Coordinator Changes proposed by: Eric Kuehnl (20116797) 3. Activation **Course Proposal Form Approval Path** Eric Kuehnl Faculty Author 1. 03/12/21 4:20 pm Hilary Gomes Effective Term Summer 2022 (gomeshilary): Approved for 1FA Music Technology (MTEC) Subject **Course Number** F057C Curriculum Rep Department Music Technology (MTEC) 2. 03/16/21 1:48 pm Division Fine Arts and Communication (1FA) Mary Vanatta (vanattamary): Units 4 Approved for 3 Hours Lecture, 3 Hours Lab Hours Curriculum Coordinator Course Title MUSIC COMPOSITION FOR FILM & TV Short Title Proposed CSU Only Transferability Proposed Creative and technical aspects of composing music for film and television. Basic Description and overview of modern composition and orchestration techniques for strings, brass, Requisites: woodwinds, and percussion. Technical aspects of scoring using a digital audio workstation, virtual instruments, and MIDI. Generating a notated score for musicians to perform in a recording session. Analysis of historically significant film and television scores. Students will score several visual sequences featuring different types of dramatic content. **Commercial Music** Proposed Discipline To which Degree(s) or Certificate(s) would this course potentially be added? AA Degree in Music Technology Are there any other departments that may be impacted from the addition of this course? No Comments & Other Relevant Information for Discussion: This course will complete the three-course sequence of courses in audio post-production, including the Sound Design for Film & Video (MTEC57A) and Surround Sound Production (MTEC57B) courses . Reviewer

Comments

Key: 8713

#### **New Course Proposal** In Workflow Date Submitted: 02/15/21 9:08 pm 1. 1FA Curriculum Viewing: MTEC F090A : MUSIC TECHNOLOGY ENSEMBLE Rep 2. Curriculum Last edit: 03/22/21 11:11 am Coordinator Changes proposed by: Eric Kuehnl (20116797) 3. Activation **Course Proposal Form Approval Path** Eric Kuehnl Faculty Author 1. 03/12/21 4:31 pm Hilary Gomes Effective Term Summer 2022 (gomeshilary): Approved for 1FA Music Technology (MTEC) Subject **Course Number** F090A Curriculum Rep Department Music Technology (MTEC) 2. 03/22/21 11:12 am Division Fine Arts and Communication (1FA) Mary Vanatta (vanattamary): Units 2 Approved for 1 Hours Lecture, 3 Hours Lab Hours Curriculum Coordinator Course Title MUSIC TECHNOLOGY ENSEMBLE Short Title Proposed CSU Only Transferability Proposed Select group performing varied literature in contemporary styles including pop, rock, Description and hip-hop, metal, and jazz. Designed to develop the performing skills needed by musicians in a studio recording environment. Open by audition to all students. May be Requisites: repeated up to six times. Proposed **Commercial Music** Discipline To which Degree(s) or Certificate(s) would this course potentially be added? AA in Music Technology Are there any other departments that may be impacted from the addition of this course? No Comments & Other Relevant Information for Discussion: Repeatability regulations (2012): https://www.asccc.org/content/repeatability-dealingnew-regulations Most 4-year degrees in Music Tech are part of a general music degree. A common problem we run into with transfer students is that they don't have any ensemble credits. This class will solve that problem by allowing MTEC students who plan to transfer to play in an ensemble for up to 6 quarters. Reviewer Comments

Preview Bridge Why Did This Not Sync?

# **New Course Proposal**

Date Submitted: 04/09/21 12:13 pm

# Viewing: NCBS F448A : JUST-IN-TIME SUPPORT FOR MATH **48A**

### Last edit: 04/14/21 7:54 am

Changes proposed by: Teresa Zwack (10630491)

Course Proposa	l Form	Approval Path
Faculty Author	Teresa Zwack	1. 04/13/21 1:44 pm Zachary Cembellin
Effective Term	Summer 2022	(cembellinzachary) Approved for 1PS
Subject	Non-Credit: Basic Skills (NCBS) Course Number F448A	Curriculum Rep
Department	Mathematics (MATH)	2. 04/14/21 7:56 am Mary Vanatta
Division	Physical Sciences, Mathematics & Engineering (1PS)	(vanattamary): Approved for
Units	0	Curriculum
Hours	2.5 hours lecture	Coordinator
Course Title	JUST-IN-TIME SUPPORT FOR MATH 48A	
Short Title	SUPPORT FOR MATH 48A	
Proposed Transferability	None	
Proposed Description and Requisites:	A just-in-time approach to the core prerequisite skills, competencies, and concepts needed in Precalculus I. Intended for students majoring in science, technology, engineering, and mathematics who are concurrently enrolled in MATH 48A at Foothill College. Topics include: a review of computational skills developed in beginning and intermediate algebra, including factoring, graphing linear equations, solving absolute value equations and inequalities, analyzing functions, including quadratic functions.	
Proposed Discipline	Mathematics	
To which Degree(s	) or Certificate(s) would this course potentially be added? none	
Are there any other this course?	r departments that may be impacted from the addition of	
	No	
Comments & Other	r Relevant Information for Discussion: This class is a noncredit option for students who need to take Math 48A with support. So students will be able to choose Math 248A or this noncredit class depending on their needs and will be taught in the same class and with instructor as their Math 48A class.	
Reviewer		

Comments

### In Workflow

- 1. 1PS Curriculum Rep
- 2. Curriculum
- Coordinator
- 3. Activation

# CCC Notification of Proposed Prerequisites/Co-Requisites

The following courses are currently undergoing review for requisite additions or changes. Please contact the Division Curriculum Rep if you have any questions or comments.

Target Course Number & Title	COR Editor	Requisite Course Number & Title	New/Ongoing
R T 70B: ADVANCED	R. Campbell	Prereq: R T 70A (ADVANCED	New (course
CLINICAL EXPERIENCE:		CLINICAL EXPERIENCE:	reactivation;
INTERVENTIONAL		INTERVENTIONAL	effective 2021-22)
RADIOGRAPHY II		RADIOGRAPHY)	

Division	Course Code	Course Title	Previously Updated
SS	ACTG 1BH	HONORS FINANCIAL ACCOUNTING II	2017 Summer
SS	ACTG 1CH	HONORS MANAGERIAL ACCOUNTING	2017 Summer
SS	ACTG 51A	INTERMEDIATE ACCOUNTING I	2017 Summer
SS	ACTG 51B	INTERMEDIATE ACCOUNTING II	2017 Summer
SS	ACTG 51C	INTERMEDIATE ACCOUNTING III	2017 Summer
SS	ACTG 58	AUDITING	2017 Summer
SS	ACTG 59	FRAUD EXAMINATION	2017 Summer
SS	ACTG 60	ACCOUNTING FOR SMALL BUSINESS	2017 Summer
SS	ACTG 65	PAYROLL & BUSINESS TAX ACCOUNTING	2017 Summer
SS	ACTG 66	COST ACCOUNTING	2017 Summer
SS	ACTG 67	TAX ACCOUNTING	2017 Summer
SS	ACTG 68A	ADVANCED TAX ACCOUNTING I	2017 Summer
SS	ACTG 68B	ADVANCED TAX ACCOUNTING II	2017 Summer
SS	ACTG 75	ACCOUNTING FOR GOVERNMENT & NOT-FOR-PROFIT	2017 Summer
вн	AHS 60A	CARDIOLOGY FOR ALLIED HEALTH	2017 Summer
SR	ALCB 400B	LIP-READING: VOWELS	2017 Summer
SR	ALCB 400D	SPEECHREADING CHALLENGE	2017 Summer
SR	ALCB 406Y	WORLD NEWS DISCUSSION	2017 Summer
SR	ALCB 407Y	SOCIAL CHANGE	2017 Summer
SR	ALCB 408Y	ART APPRECIATION	2017 Summer
SR	ALCB 409Y	MUSIC APPRECIATION	2017 Summer
SR	ALCB 413Y	RELAXATION TECHNIQUES	2017 Summer
SR	ALCB 414Y	STRESS MANAGEMENT	2017 Summer
SR	ALCB 421Y	AROUND THE WORLD IN TRAVEL STUDY	2017 Summer
SR	ALCB 431Y	ANALYSIS OF CURRENT EVENTS	2017 Summer
SR	ALCB 451Y	DRAWING & PAINTING	2017 Summer
SR	ALCB 456Y	CRAFTS	2017 Summer
SR	ALCB 462Y	VERBAL EXPRESSION	2017 Summer
SR	ALCB 463Y	CREATIVE WRITING	2017 Summer
SR	ALCB 465Y	CREATIVE SELF-EXPRESSION	2017 Summer
SR	ALTW 223	INDEPENDENT LIVING SKILLS: FINANCIAL LITERACY	2017 Summer
SR	ALTW 229	HEALTHY RELATIONSHIPS	2017 Summer
SS	ANTH 1	INTRODUCTION TO PHYSICAL ANTHROPOLOGY	2017 Summer
SS	ANTH 2A	CULTURAL ANTHROPOLOGY	2017 Summer
SS	ANTH 2B	PATTERNS OF CULTURE	2017 Summer
SS	ANTH 4	FIRST PEOPLES OF NORTH AMERICA	2017 Summer
SS	ANTH 5	MAGIC, SCIENCE & RELIGION	2017 Summer
SS	ANTH 6	PEOPLES OF AFRICA	2017 Summer
SS	ANTH 12	APPLIED ANTHROPOLOGY	2017 Summer
SS	ANTH 20	NATIVE PEOPLES OF CALIFORNIA	2017 Summer
AP	APAV 50A	CURRENT TOPICS IN VETERINARY TECHNOLOGY I	2018 Spring
AP	APAV 51	INTRODUCTION TO VETERINARY TECHNOLOGY	2018 Spring
AP	APCA 100	CULINARY SAFETY & SANITATION	2018 Spring
AP	APCA 101	BASIC CULINARY THEORY	2018 Spring

Division	Course Code	Course Title	Previously Updated
AP	APCA 102	CULINARY MATH, MEASUREMENTS & CALCULATIONS	2018 Spring
AP	APCA 104	BASIC COOKING TECHNIQUES	2018 Spring
AP	APCA 105	CULINARY MENU DEVELOPMENT	2018 Spring
AP	APCA 106	SUSTAINABILITY IN FOOD SERVICE OPERATIONS	2018 Spring
AP	APPR 183A	BASIC ELECTRICITY FOR SHEET METAL & AIR CONDITIONING SERVICE	2017 Summer
AP	APPR 183B	ADVANCED ELECTRICITY FOR SHEET METAL & AIR CONDITIONING SERVICE	2017 Summer
AP	APPR 184A	AIR CONDITIONING; COMMERCIAL SYSTEMS; HEATING (FOURTH-YEAR SERVICE)	2017 Summer
AP	APPR 184B	COMMERCIAL SYSTEMS; HEAT LOADS; PIPING (FOURTH-YEAR SERVICE)	2017 Summer
AP	APPR 185A	BASIC REFRIGERATION FOR SHEET METAL AIR CONDITIONING SERVICE	2017 Summer
AP	APPR 185B	ADVANCED REFRIGERATION FOR SHEET METAL AIR CONDITIONING SERVICE	2017 Summer
AP	APPR 186A	PROPERTIES OF AIR DISTRIBUTION FOR SHEET METAL AIR CONDITIONING SERVICE	2017 Summer
AP	APPR 186B	REFRIGERATION THEORY FOR SHEET METAL AIR CONDITIONING SERVICE	2017 Summer
AP	APPT 161	SAFETY/OSHA/TOOLS/HERITAGE/SERVICE	2017 Summer
AP	APPT 162	MATHEMATICS/SCIENCE FOR THE PLUMBING TRADE	2017 Summer
AP	APPT 163	CODE/WATER SUPPLY SYSTEMS	2017 Summer
AP	APPT 164	DRAWING I FOR THE PLUMBING TRADE	2017 Summer
AP	APPT 165	DRAWING II FOR THE PLUMBING TRADE	2017 Summer
AP	APPT 166	WELDING/OXY-ACETYLENE TRAINING	2017 Summer
AP	APPT 167	STEAM SYSTEMS/RIGGING/PIPE FITTING & SERVICE	2017 Summer
AP	APPT 168	MEDICAL GAS/HYDRONICS/SIGNAL PERSON	2017 Summer
AP	APPT 169	ADVANCED DRAWING/LAYOUT FOR THE PLUMBING TRADES/UA FOREMAN TRAINING	2017 Summer
AP	APPT 170	CODE II/JUNIOR MECHANICS REVIEW & EXAM	2017 Summer
AP	APPT 171	BASIC REFRIGERATION/HERITAGE/CFC/OSHA 10	2017 Summer
AP	APPT 172	REFRIGERATION SCIENCE	2017 Summer
AP	APPT 173	BASIC ELECTRICITY FOR THE HVAC SERVICE TRADE	2017 Summer
AP	APPT 174	ADVANCED ELECTRICITY/PNEUMATIC DDC INTRODUCTION	2017 Summer
AP	APPT 175	CONTROLS I/ELECTRO PNEUMATICS	2017 Summer
AP	APPT 176	CONTROLS II/ADVANCED PNEUMATICS CALIBRATION/HYDRONICS	2017 Summer
AP	APPT 177	START, TEST & BALANCE I	2017 Summer
AP	APPT 178	START, TEST & BALANCE II/ENERGY AUDITING PRACTICES	2017 Summer
AP	APPT 179	CHILLERS/SPECIAL SYSTEMS/HVACR STAR REVIEW	2017 Summer
AP	APPT 180	HVACR STAR REVIEW & EXIT EXAM	2017 Summer
AP	APRT 106A	SHEET METAL CONTROL SYSTEMS (FIFTH-YEAR SERVICE)	2017 Summer
AP	APRT 106B	ENERGY MANAGEMENT & CUSTOMER SERVICE (FIFTH-YEAR SERVICE)	2017 Summer
AP	APRT 140A	ELECTRICAL BASICS FOR RESIDENTIAL HVAC SERVICE I	2017 Summer
AP	APRT 140A	REFRIGERATION BASICS FOR RESIDENTIAL HVAC SERVICE	2017 Summer
AP	APRT 140B	COMPONENTS OF RESIDENTIAL HVAC SERVICE	2017 Summer
/ \1		TROUBLESHOOTING DIAGNOSIS & REPAIR FOR RESIDENTIAL HVAC SERVICE	2017 Summer

Division	Course Code	Course Title	Previously Updated
AP	APRT 143A	AIR BALANCE TEST EQUIPMENT & INSTRUMENTS (FIRST YEAR)	2017 Summer
AP	APRT 143B	TEMPERATURE MEASUREMENT INSTRUMENTS & DUCT SYSTEMS (FIRST YEAR)	2017 Summer
AP	APRT 149A	ELECTRICAL SYSTEMS OPERATION, CONTROLS & DEVICES (TAB-2)	2017 Summer
AP	APRT 149B	HVAC TESTING & BALANCING PROCEDURES (TAB-2)	2017 Summer
AP	APRT 150A	AIR DISTRIBUTION & MANUFACTURING SYSTEMS (TAB-3)	2017 Summer
AP	APRT 150B	SYSTEMS INSTALLATION & TROUBLESHOOTING (TAB-3)	2017 Summer
AP	APRT 153A	CONTROL SYSTEMS & CUSTOMER SERVICE I (TAB-4)	2017 Summer
AP	APRT 153B	CONTROL SYSTEMS & CUSTOMER SERVICE II (TAB-4)	2017 Summer
AP	APRT 154A	PROJECT MANAGEMENT FOR THE TEST & AIR BALANCE INDUSTRY (TAB-5)	2017 Summer
AP	APRT 154B	HAZARDOUS MATERIAL RECOGNITION FOR THE TEST & AIR BALANCE INDUSTRY (TAB-5)	2017 Summer
AP	APSM 151A	SERVICE INTRODUCTION & SAFETY	2018 Winter
AP	APSM 151B	ESSENTIAL HVAC SERVICE SKILLS	2018 Winter
٩P	APSM 151C	HEAT, MATTER & ENERGY IN HVAC SYSTEMS	2018 Winter
AP	APSM 152A	PIPING, REFRIGERANT EVACUATION & RECOVERY	2018 Winter
AP	APSM 152B	CHARGING REFRIGERANT SYSTEMS	2018 Winter
AP	APSM 152C	INTRODUCTION TO ELECTRICITY	2018 Winter
٩P	APSM 153A	FIELD INSTALLATION FOR THE SERVICE TECHNICIAN	2018 Winter
AP	APSM 153B	ELECTRIC MOTORS & MOTOR CONTROLS IN HVAC SYSTEMS	2018 Winter
AP	APSM 153C	COMPONENTS OF THE REFRIGERANT CYCLE	2018 Winter
AP	APSM 154A	REFRIGERATION IN AIR CONDITIONING	2018 Winter
AP	APSM 154B	GAS & ELECTRIC HEATING	2018 Winter
AP	APSM 154C	HYDRONIC HEATING	2018 Winter
AP	APSM 155A	SHEET METAL FABRICATION	2018 Winter
AP	APSM 155B	AIR DISTRIBUTION & EFFICIENT DUCT DESIGN	2018 Winter
AP	APSM 155C	MAINTAINING EFFICIENT OPERATION OF ELECTRIC COOLING & HEATING EQUIPMENT	2018 Winter
AP	APSM 156A	HEAT PUMP EFFICIENT OPERATION & SERVICE	2018 Winter
AP	APSM 156B	COOLING TOWERS, PUMPS & PIPING	2018 Winter
AP	APSM 156C	CHILLED WATER HVAC SYSTEMS & COMPONENTS	2018 Winter
AP	APSM 157A	PLANS & SPECIFICATIONS FOR THE SERVICE TECHNICIAN	2018 Winter
AP	APSM 157B	HVAC ENERGY CODES & STANDARDS	2018 Winter
AP	APSM 157C	INDOOR AIR QUALITY & ENERGY EFFICIENCY	2018 Winter
AP	APSM 158A	INTRODUCTION TO DIRECT DIGITAL HVAC CONTROLS	2018 Winter
AP	APSM 158B	PNEUMATIC CONTROLS FOR HVAC SYSTEMS	2018 Winter
AP	APSM 158C	INVERTER, VRF & HEAT RECOVERY TECHNOLOGY	2018 Winter
AP	APSM 159A	INTRODUCTION TO TESTING ADJUSTING & BALANCING HVAC SYSTEMS	2018 Winter
AP	APSM 159B	AIRFLOW & PSYCHROMETRICS FOR TAB	2018 Winter
AP	APSM 159C	TESTING ADJUSTING & BALANCING OF HVAC SYSTEMS	2018 Winter
AP	APSM 171A	HVAC TRADE HISTORY & INTRODUCTION TO TESTING, ADJUSTING & BALANCING	2018 Winter
٩P	APSM 171B	BASICS OF AIRFLOW, HEAT ENERGY & HEAT TRANSFER	2018 Winter
AP	APSM 171C	SAFETY TRAINING FOR TAB APPRENTICESHIP	2018 Winter

Division	Course Code	Course Title	Previously Updated
AP	APSM 172A	BASIC HVAC SYSTEMS, PSYCHROMETRICS, AIR PRESSURES & MEASUREMENTS OF AIR	2018 Winter
AP	APSM 172B	PROPORTIONAL BALANCING	2018 Winter
AP	APSM 172C	DUCT LEAKAGE TESTING	2018 Winter
AP	APSM 173A	ELECTRICAL FUNDAMENTALS, ELECTRIC MOTORS & ROTATIONAL MEASUREMENTS	2018 Winter
AP	APSM 173B	TEMPERATURE MEASUREMENTS, DUCT SYSTEMS & BASIC CONTROLS	2018 Winter
AP	APSM 173C	HVAC FANS, FAN LAWS & V-BELT DRIVES	2018 Winter
AP	APSM 174A	HYDRONIC SYSTEMS, PUMPS & HYDRONIC BALANCING	2018 Winter
٩P	APSM 174B	BALANCING DOCUMENTATION, COOLING TOWERS & TAB RELATED SKILLS	2018 Winter
AP	APSM 174C	FIRE LIFE SAFETY LEVEL 1	2018 Winter
٩P	APSM 175A	TABB TECHNICIAN CERTIFICATION	2018 Winter
AP	APSM 175B	DDC CONTROLS & PROGRAMS	2018 Winter
AP	APSM 175C	FIRE LIFE SAFETY LEVEL 2	2018 Winter
AP	APSM 176A	PLANS & SPECIFICATIONS, CODES & STANDARDS	2018 Winter
AP	APSM 176B	BASIC REFRIGERATION & BRAZING/SOLDERING	2018 Winter
AP	APSM 176C	CLEAN ROOMS & HEPA FILTER TESTING	2018 Winter
AP	APSM 177A	TITLE 24 MECHANICAL ACCEPTANCE TESTING	2018 Winter
٩P	APSM 177B	ADVANCED DDC CONTROLS/COMMISSIONING OF HVAC SYSTEMS	2018 Winter
٩P	APSM 177C	ENERGY AUDITING	2018 Winter
٩P	APSM 178A	INDOOR AIR QUALITY	2018 Winter
٩P	APSM 178B	GREEN CONSTRUCTION & LEED CERTIFICATION FOR HVAC	2018 Winter
٩P	APSM 178C	FOREMAN TRAINING/PROJECT MANAGEMENT FOR HVAC	2018 Winter
AP	APSM 179A	BUILDING & CASCADING PRESSURES/AIR CHANGE TESTING	2018 Winter
٩P	APSM 179B	SOUND & VIBRATION IN HVAC SYSTEMS	2018 Winter
٩P	APSM 179C	BIOLOGICAL SAFETY CABINETS/LABORATORY FUME HOODS	2018 Winter
вн	BIOL 54H	HONORS INSTITUTE SEMINAR IN BIOLOGY	2017 Summer
SS	BUSI 11	INTRODUCTION TO INFORMATION SYSTEMS	2017 Summer
SS	BUSI 18	BUSINESS LAW I	2017 Summer
SS	BUSI 19	BUSINESS LAW II	2017 Summer
SS	BUSI 22	PRINCIPLES OF BUSINESS	2017 Summer
SS	BUSI 22H	HONORS PRINCIPLES OF BUSINESS	2017 Summer
SS	BUSI 53	SURVEY OF INTERNATIONAL BUSINESS	2017 Summer
SS	BUSI 60	FUNDAMENTALS OF FINANCE	2017 Summer
SS	BUSI 70	BUSINESS & PROFESSIONAL ETHICS	2017 Summer
SS	BUSI 87	HUMAN RESOURCES MANAGEMENT	2017 Summer
SS	BUSI 90A	PRINCIPLES OF MANAGEMENT	2017 Summer
SS	BUSI 95	ENTREPRENEURSHIP-THE BUSINESS PLAN	2017 Summer
SS	BUSI 96	ENTREPRENEURSHIP-STARTING & MANAGING A SMALL BUSINESS	2017 Summer
ps	CHEM 13BH	HONORS ORGANIC CHEMISTRY LABORATORY	2017 Summer
ps	CHEM 13CH	HONORS ORGANIC CHEMISTRY LABORATORY	2017 Summer
SS	CHLD 53NC	SUPPORTING CHILDREN WITH SPECIAL NEEDS IN CHILDREN'S PROGRAMS	2017 Summer
SS SS	CHLD 53NP	DEVELOPMENT OF CHILDREN WITH SPECIAL NEEDS	2017 Summer
SS SS	CHLD 54A	DEVELOPING A HEALTHY ORGANIZATIONAL CLIMATE IN EDUCATION	2017 Summer

Division	Course Code	Course Title	Previously Updated
SS	CHLD 54B	THE RIGHT FIT: RECRUITING, SELECTING & ORIENTING STAFF	2017 Summer
SS	CHLD 54C	LEADERSHIP IN ACTION: HOW EFFECTIVE DIRECTORS GET THINGS DONE	2017 Summer
SS	CHLD 54D	FROM THE INSIDE OUT: THE POWER OF REFLECTION & SELF-AWARENESS	2017 Summer
SS	CHLD 63N	ARTISTIC & CREATIVE DEVELOPMENT	2017 Summer
SS	CHLD 71	PLANNING CREATIVE ART ACTIVITIES FOR CHILDREN	2017 Summer
SS	CHLD 73	MUSIC & MOVEMENT IN THE EARLY YEARS	2017 Summer
SS	CHLD 74	SCIENCE & NATURE	2017 Summer
SS	CHLD 82	PLANNING CREATIVE DRAMATICS	2017 Summer
SS	CHLD 86A	MENTORING THE EARLY CARE & EDUCATION PROFESSIONAL	2017 Summer
SS	CHLD 88B	POSITIVE BEHAVIOR MANAGEMENT	2017 Summer
SS	CHLD 90B	ADMINISTRATION & SUPERVISION OF CHILDREN'S PROGRAMS PART I	2017 Summer
SS	CHLD 90C	ADMINISTRATION & SUPERVISION OF CHILDREN'S PROGRAMS PART II	2017 Summer
SS	CHLD 91	ADMINISTRATION & SUPERVISION: ADULT SUPERVISION & LEADERSHIP	2017 Summer
CN	CNSL 52	COLLEGE & LIFE MANAGEMENT	2017 Summer
CN	CNSL 86	INTRODUCTION TO LEADERSHIP	2017 Summer
CN	CNSL 87	LEADERSHIP: THEORIES & PRACTICES	2017 Summer
CN	CNSL 88	LEADERSHIP: THEORIES, STYLES & REALITIES	2017 Summer
CN	CNSL 89	ADVANCED LEADERSHIP REALITIES	2017 Summer
CN	CNSL 275	EOPS: THE ROAD TO COLLEGE SUCCESS-MORE THAN JUST BOOKS	2017 Summer
FA	COMM 1B	ARGUMENTATION & PERSUASION	2017 Summer
FA	COMM 4	GROUP DISCUSSION	2017 Summer
FA	COMM 12	INTERCULTURAL COMMUNICATION	2017 Summer
CN	CRLP 71	EXPLORING CAREER FIELDS	2017 Summer
CN	CRLP 73	EFFECTIVE RESUME WRITING	2017 Summer
CN	CRLP 74	SUCCESSFUL INTERVIEWING TECHNIQUES	2017 Summer
LA	CRWR 6	INTRODUCTION TO CREATIVE WRITING	2017 Summer
PS	C S 21A	PYTHON FOR PROGRAMMERS	2017 Summer
PS	C S 26A	RUBY & FUNCTIONAL PROGRAMMING	2017 Summer
PS	C S 71A	DATA ANALYTICS & MANAGEMENT	2017 Summer
KA	DANC 6	BEGINNING COUNTRY-WESTERN LINE DANCING	2017 Summer
BH	D H 200L	INTRODUCTION TO DENTAL HYGIENE	2017 Summer
BH	D H 354	HEALTH CARE MANAGEMENT	2018 Spring
BH	D H 356	EDUCATION THEORY, PRACTICE & ADMINISTRATION	2018 Spring
SS	ECON 54H	HONORS INSTITUTE SEMINAR IN ECONOMICS	2017 Summer
BH	EMS 50	EMERGENCY MEDICAL RESPONSE	2017 Summer
BH	EMS 60A	PARAMEDIC COGNITIVE & AFFECTIVE IA	2017 Summer
BH	EMS 60B	PARAMEDIC COGNITIVE, PSYCHOMOTOR & AFFECTIVE IB	2017 Summer
BH	EMS 61A	PARAMEDIC COGNITIVE & AFFECTIVE IIA	2017 Summer
BH	EMS 61B	PARAMEDIC COGNITIVE, AFFECTIVE & PSYCHOMOTOR IIB	2017 Summer
BH	EMS 62A	PARAMEDIC COGNITIVE & AFFECTIVE IIIA	2017 Summer
BH	EMS 62B	PARAMEDIC COGNITIVE, AFFECTIVE & PSYCHOMOTOR IIIB	2017 Summer
BH	EMS 63A	PARAMEDIC HOSPITAL SPECIALTY ROTATIONS	2017 Summer
BH	EMS 63B	PARAMEDIC HOSPITAL EMERGENCY DEPARTMENT ROTATIONS	2017 Summer
BH	EMS 64A	PARAMEDIC AMBULANCE FIELD INTERNSHIP I	2017 Summer

Division	Course Code	Course Title	Previously Updated
BH	EMS 64B	PARAMEDIC AMBULANCE FIELD INTERNSHIP II	2017 Summer
BH	EMS 120	EMERGENCY MEDICAL SERVICES ACADEMY	2017 Summer
BH	EMS 200	PARAMEDIC ACADEMY	2017 Summer
BH	EMS 203	EMERGENCY MEDICAL TECHNICIAN: BASIC CONTINUING EDUCATION	2017 Summer
BH	EMS 400	EMERGENCY MEDICAL RESPONSE NONCREDIT	2017 Summer
LA	ENGL 5	LGBT LITERATURE	2017 Summer
LA	ENGL 34C	LITERATURE INTO FILM	2017 Summer
LA	ENGL 50C	TECHNICAL WRITING	2017 Summer
LA	ENGL 80	INTRODUCTION TO TRAVEL WRITING	2017 Summer
LA	ENGR 40	INTRODUCTION TO CLEAN ENERGY TECHNOLOGY	2017 Summer
LA	ESLL 226	HIGH-INTERMEDIATE GRAMMAR	2017 Summer
LA	ESLL 227	HIGH-INTERMEDIATE READING SKILLS	2017 Summer
LA	ESLL 235	LISTENING/SPEAKING FOR ACADEMIC PURPOSES	2017 Summer
LA	ESLL 236	ADVANCED GRAMMAR	2017 Summer
LA	ESLL 237	BASIC COMPOSITION SKILLS	2017 Summer
LA	ESLL 248	ADVANCED GRAMMAR REVIEW	2017 Summer
SS	GEOG 2	HUMAN GEOGRAPHY	2017 Summer
SS	GEOG 5	INTRODUCTION TO ECONOMIC GEOGRAPHY	2017 Summer
SS	GEOG 10	WORLD REGIONAL GEOGRAPHY	2017 Summer
FA	GID 1	HISTORY OF GRAPHIC DESIGN	2017 Summer
FA	GID 31	GRAPHIC DESIGN DRAWING	2017 Summer
FA	GID 33	GRAPHIC DESIGN STUDIO I	2017 Summer
FA	GID 34	GRAPHIC DESIGN STUDIO II	2017 Summer
FA	GID 35	GRAPHIC DESIGN STUDIO III	2017 Summer
FA	GID 36	TYPOGRAPHY	2017 Summer
FA	GID 43	ILLUSTRATION & DIGITAL IMAGING	2017 Summer
FA	GID 45	DIGITAL SOUND, VIDEO & ANIMATION	2017 Summer
FA	GID 46	SCREENPRINTING	2017 Summer
FA	GID 47	MOTION GRAPHICS	2017 Summer
FA	GID 53A	BEGINNING T-SHIRT DESIGN & GARMENT PRINTING	2017 Summer
FA	GID 53B	INTERMEDIATE T-SHIRT DESIGN & GARMENT PRINTING	2017 Summer
FA	GID 53C	ADVANCED T-SHIRT DESIGN & GARMENT PRINTING	2017 Summer
FA	GID 56	WEBSITE DESIGN	2017 Summer
FA	GID 57	WEBSITE DESIGN & DEVELOPMENT II	2017 Summer
FA	GID 58	WEB DESIGN & DEVELOPMENT III	2017 Summer
FA	GID 60	CAREERS IN THE VISUAL ARTS	2017 Summer
FA	GID 71	STORYBOARDING	2017 Summer
FA	GID 77	ADVANCED WEBSITE DESIGN & DEVELOPMENT	2017 Summer
FA	GID 78	RAPID WEBSITE DEVELOPMENT	2017 Summer
SS	GLST 1	INTRODUCTION TO GLOBAL STUDIES	2017 Summer
SS	GLST 2	GLOBAL ISSUES	2017 Summer
SS	HIST 4A	HISTORY OF WESTERN CIVILIZATION TO 800 CE	2017 Summer
SS	HIST 4B	HISTORY OF WESTERN CIVILIZATION: 700-1800	2017 Summer
SS	HIST 4C	HISTORY OF WESTERN CIVILIZATION 1789-PRESENT	2017 Summer

	Course Code	Course Title	Previously Updated
SS	HIST 4CH	HONORS HISTORY OF WESTERN CIVILIZATION 1789-PRESENT	2017 Summer
SS	HIST 18	INTRODUCTION TO MIDDLE EASTERN CIVILIZATION	2017 Summer
SS	HIST 19	HISTORY OF ASIA: CHINA/JAPAN	2017 Summer
SS	HIST 20	HISTORY OF RUSSIA & THE SOVIET UNION	2017 Summer
SS	HIST 54H	HONORS INSTITUTE SEMINAR IN HISTORY	2017 Summer
BH	HORT 10	ENVIRONMENTAL HORTICULTURE & THE URBAN LANDSCAPE	2017 Summer
BH	HORT 23	PLANT MATERIALS: CALIFORNIA NATIVE PLANTS	2017 Summer
BH	HORT 24	PLANT MATERIALS: GROUND COVERS & VINES	2017 Summer
BH	HORT 25	PLANT MATERIALS: BAMBOOS & PALMS	2017 Summer
BH	HORT 26	PLANT MATERIALS: PERENNIALS & ANNUALS	2017 Summer
BH	HORT 31	HORTICULTURAL PRACTICES: PLANT PROPAGATION	2017 Summer
BH	HORT 40	LANDSCAPE DESIGN: GRAPHIC COMMUNICATION	2017 Summer
вн	HORT 52E	HORTICULTURAL PRACTICES: GREENHOUSE & NURSERY MANAGEMENT	2017 Summer
вн	HORT 52G	HORTICULTURAL PRACTICES: TURFGRASS MANAGEMENT	2017 Summer
BH	HORT 54D	LANDSCAPE CONSTRUCTION: APPLIED PRACTICES	2017 Summer
вн	HORT 55A	GREEN INDUSTRY MANAGEMENT: BUSINESS PRACTICES	2017 Summer
BH	HORT 60B	LANDSCAPE DESIGN: THEORY	2017 Summer
BH	HORT 60C	LANDSCAPE DESIGN: IRRIGATION	2017 Summer
BH	HORT 60D	LANDSCAPE DESIGN: PLANTING	2017 Summer
BH	HORT 60F	LANDSCAPE DESIGN: PROCESS	2017 Summer
BH	HORT 60G	LANDSCAPE DESIGN: INTERMEDIATE COMPUTER APPLICATIONS	2017 Summer
BH	HORT 90D	HERBS: IDENTIFICATION, USE & FOLKLORE	2017 Summer
BH	HORT 90E	HORTICULTURAL & LANDSCAPE PHOTOGRAPHY	2017 Summer
BH	HORT 90F	LANDSCAPE DESIGN: BASIC PRINCIPLES	2017 Summer
BH	HORT 90M	PLANT NUTRITION & FERTILIZATION	2017 Summer
BH	HORT 90Y	CACTI & SUCCULENTS	2017 Summer
BH	HORT 90Z	ORNAMENTAL GRASSES	2017 Summer
BH	HORT 91C	CONSTRUCTION COST ESTIMATING	2017 Summer
SS	HUMN 3	WORLD MYTHS IN LITERATURE ARTS & FILM	2017 Summer
SS	HUMN 3H	HONORS WORLD MYTHS IN LITERATURE ARTS & FILM	2017 Summer
SS	HUMN 9	ONCE UPON A TIME? THE IMMORTAL LURE OF FAIRY TALES	2017 Summer
LA	JAPN 1	ELEMENTARY JAPANESE I	2017 Summer
LA	JAPN 2	ELEMENTARY JAPANESE II	2017 Summer
LA	JAPN 3	ELEMENTARY JAPANESE III	2017 Summer
КА	KINS 8A	THEORY & CONCEPTS OF EXERCISE PHYSIOLOGY I	2017 Summer
КА	KINS 10	WOMEN IN SPORTS	2017 Summer
КА	KINS 54	INTRODUCTION TO SPORTS MANAGEMENT	2017 Summer
SS	LINC 50	TECHNOLOGY IN THE K-12 CLASSROOM I	2017 Summer
SS	LINC 50A	TECHNOLOGY IN THE K-12 CLASSROOM II	2017 Summer
SS	LINC 50B	TECHNOLOGY IN THE K-12 CLASSROOM III	2017 Summer
SS	LINC 50F	INTEGRATING TECHNOLOGY INTO A STANDARDS-BASED CURRICULUM I	2017 Summer
SS	LINC 53	INTEGRATING TECHNOLOGY INTO MATHEMATICS	2017 Summer
SS	LINC 53B	INTEGRATING TECHNOLOGY INTO MATHEMATICS GRADES 6-8	2017 Summer
SS	LINC 57	DESIGNING LEARNER-CENTERED INSTRUCTION	2017 Summer

Division	Course Code	Course Title	Previously Updated
SS	LINC 58	GLOBAL PROJECT-BASED LEARNING	2017 Summer
SS	LINC 58A	E-PORTFOLIOS	2017 Summer
SS	LINC 64	SLIDE PRESENTATION DESIGN	2017 Summer
SS	LINC 66	INTRODUCTION TO THE INTERNET	2017 Summer
SS	LINC 66C	SEARCHING & RESEARCHING THE INTERNET	2017 Summer
SS	LINC 70B	WEB PAGE DESIGN II	2017 Summer
SS	LINC 72B	ADOBE INDESIGN OVERVIEW	2017 Summer
SS	LINC 73	ADOBE PHOTOSHOP OVERVIEW	2017 Summer
SS	LINC 73H	ADOBE ILLUSTRATOR OVERVIEW	2017 Summer
SS	LINC 73I	ADOBE ILLUSTRATOR I	2017 Summer
SS	LINC 79	MULTIMEDIA PROJECT PRODUCTION	2017 Summer
SS	LINC 80	MULTIMEDIA OVERVIEW	2017 Summer
SS	LINC 80A	MULTIMEDIA IN THE CLASSROOM I	2017 Summer
SS	LINC 80B	MULTIMEDIA IN THE CLASSROOM II	2017 Summer
SS	LINC 81	USING DIGITAL IMAGES	2017 Summer
SS	LINC 81A	USING DIGITAL IMAGES I	2017 Summer
SS	LINC 83F	INTRODUCTION TO DIGITAL VIDEO EDITING	2017 Summer
SS	LINC 86A	VIDEO PODCASTING I	2017 Summer
SS	LINC 90C	ONLINE COLLABORATION TOOLS	2017 Summer
SS	LINC 96B	HANDHELD DIGITAL MEDIA DEVICES I	2017 Summer
SS	LINC 98	TEACHING & LEARNING IN THE DIGITAL AGE	2017 Summer
SS	LINC 98A	TEACHING & LEARNING IN THE DIGITAL AGE I	2017 Summer
SS	LINC 98B	TEACHING & LEARNING IN THE DIGITAL AGE II	2017 Summer
PS	MATH 2B	LINEAR ALGEBRA	2017 Summer
PS	MATH 44	MATH FOR THE LIBERAL ARTS	2017 Summer
PS	MATH 67	ENHANCED MATHEMATICS LEARNING WITH MATHEMATICA	2017 Summer
FA	MDIA 13	VIDEO GAMES & POPULAR CULTURE Note: cross-listed w/ MUS 11F—please also submit the same updates to MUS 11F (even though it's not on the list)	2017 Summer
FA	MTEC 62C	COMPOSING & PRODUCING ELECTRONIC MUSIC III	2017 Summer
FA	MTEC 70G	PRO TOOLS 310P-AVID CERTIFICATION	2017 Summer
FA	MTEC 82B	MARKETING YOUR MUSIC	2017 Summer
FA	MUS 1	INTRODUCTION TO MUSIC	2017 Summer
FA	MUS 3A	THEORY & MUSICIANSHIP I	2017 Summer
FA	MUS 3B	THEORY & MUSICIANSHIP II	2017 Summer
FA	MUS 3C	THEORY & MUSICIANSHIP III	2017 Summer
FA	MUS 3D	THEORY & MUSICIANSHIP IV	2017 Summer
FA	MUS 7D	CONTEMPORARY MUSICAL STYLES: THE BEATLES IN THE CULTURE OF POPULAR MUSIC	2017 Summer
FA	MUS 11A	JAZZ & SWING	2017 Summer
FA	MUS 47A	INTRODUCTION TO MUSICAL THEATRE PRODUCTION Note: cross-listed w/ THTR 47A (also on the list)—please submit the same updates to both CORs	2017 Summer

Division	Course Code	Course Title	Previously Updated
FA	MUS 47B	INTERMEDIATE MUSIC THEATRE PRODUCTION WORKSHOP	2017 Summer
		Note: cross-listed w/ THTR 47B (also on the list)—please submit the same	
		updates to both CORs	
FA	MUS 47C	ADVANCED MUSIC THEATRE PRODUCTION WORKSHOP	2017 Summer
		Note: cross-listed w/ THTR 47C (also on the list)—please submit the same	
		updates to both CORs	
FA	MUS 47D	ADVANCED MUSIC THEATRE PRODUCTION WORKSHOP II	2017 Summer
		Note: cross-listed w/ THTR 47D (also on the list)—please submit the same	
		updates to both CORs	
LA	NCCS 406	SUPERVISED TUTORING	2017 Summer
LA	NCEL 470	LOW TO INTERMEDIATE VOCATIONAL ESL FOR FOOD WORKERS	2017 Summer
LA	NCEL 471	INTERMEDIATE TO ADVANCED ESL FOR FOOD WORKERS	2017 Summer
LA	NCLA 406A	SUPPLEMENTAL INSTRUCTION ENGLISH: ESSAY- & PARAGRAPH-LEVEL REVISION	2017 Summer
LA	NCLA 406B	SUPPLEMENTAL INSTRUCTION ENGLISH: SENTENCE-LEVEL EDITING & PROOFREADING IN CONTEXT	2017 Summer
SR	NCP 400A	STRONG START FOR CHILDREN I: BIRTH-8 YEARS	2017 Summer
SR	NCP 400B	STRONG START FOR CHILDREN II: NAVIGATING MIDDLE SCHOOL	2017 Summer
SR	NCP 400C	STRONG START FOR CHILDREN III: PATHWAYS TO COLLEGE	2017 Summer
SR	NCP 401A	NURTURING HEALTHY CHOICES I: EARLY YEARS	2017 Summer
SR	NCP 401B	NURTURING HEALTHY CHOICES II: ADOLESCENT YEARS	2017 Summer
SR	NCP 402A	THE IMPORTANCE OF FAMILY IN THE LIVES OF CHILDREN I: EARLY YEARS	2017 Summer
SR	NCP 402B	THE IMPORTANCE OF FAMILY IN THE LIVES OF CHILDREN II: ADOLESCENT YEARS	2017 Summer
SR	NCP 403	BUILDING BRIDGES, OPENING DOORS, RAISING EMOTIONALLY HEALTHY CHILDREN	2017 Summer
BH	NCSV 400	GERIATRIC HOME AIDE BASICS	2017 Summer
BH	NCSV 401	GERIATRIC HOME AIDE-NUTRITION	2017 Summer
KA	PHED 15A	BEGINNING PICKLEBALL	2017 Summer
KA	PHED 15B	INTERMEDIATE PICKLEBALL	2017 Summer
KA	PHED 15C	ADVANCED PICKLEBALL	2017 Summer
КА	PHED 22B	PILATES & YOGA	2017 Summer
SS	PHIL 1	CRITICAL THINKING & WRITING	2017 Summer
SS	PHIL 2	INTRODUCTION TO SOCIAL & POLITICAL PHILOSOPHY	2017 Summer
SS	PHIL 7	INTRODUCTION TO SYMBOLIC LOGIC	2017 Summer
SS	PHIL 8	ETHICS	2017 Summer
SS	PHIL 11	INTRODUCTION TO THE PHILOSOPHY OF ART & AESTHETICS	2017 Summer
SS	PHIL 12	PHILOSOPHY OF SCIENCE	2017 Summer
SS	PHIL 20A	HISTORY OF WESTERN PHILOSOPHY FROM SOCRATES THROUGH ST. THOMAS	2017 Summer
SS	PHIL 20B	HISTORY OF WESTERN PHILOSOPHY FROM THE RENAISSANCE THROUGH KANT	2017 Summer
SS	PHIL 24	COMPARATIVE WORLD RELIGIONS: EAST	2017 Summer
SS	PHIL 25	COMPARATIVE WORLD RELIGIONS: WEST	2017 Summer

Division	Course Code	Course Title	Previously Updated
PS	PHYS 2AM	GENERAL PHYSICS: CALCULUS SUPPLEMENT	2017 Summer
PS	PHYS 2BM	GENERAL PHYSICS: CALCULUS SUPPLEMENT	2017 Summer
PS	PHYS 2CM	GENERAL PHYSICS: CALCULUS SUPPLEMENT	2017 Summer
SS	PSYC 1H	HONORS GENERAL PSYCHOLOGY	2017 Summer
SS	PSYC 14	CHILD & ADOLESCENT DEVELOPMENT	2017 Summer
SS	PSYC 21	PSYCHOLOGY OF WOMEN: SEX & GENDER DIFFERENCES	2017 Summer
		Note: cross-listed w/ WMN 21 (also on the list)—please submit the same	
		updates to both CORs	
SS	PSYC 22	PSYCHOLOGY OF PREJUDICE & DISCRIMINATION	2017 Summer
SS	PSYC 30	SOCIAL PSYCHOLOGY	2017 Summer
		Note: cross-listed w/ SOC 30 (also on the list)—please submit the same	
		updates to both CORs	
SS	PSYC 33	INTRODUCTION TO PERSONALITY PSYCHOLOGY	2017 Summer
SS	PSYC 49	HUMAN SEXUALITY	2017 Summer
SS	PSYC 54H	HONORS INSTITUTE SEMINAR IN PSYCHOLOGY	2017 Summer
BH	RSPT 50A	RESPIRATORY THERAPY PROCEDURES	2016 Summer
BH	RSPT 51A	INTRODUCTION TO RESPIRATORY ANATOMY & PHYSIOLOGY	2017 Summer
BH	RSPT 52	APPLIED SCIENCE FOR RESPIRATORY THERAPY	2017 Summer
BH	RSPT 53B	ADVANCED RESPIRATORY THERAPY PHARMACOLOGY	2017 Summer
BH	RSPT 60C	PULMONARY DIAGNOSTICS	2017 Summer
BH	RSPT 61B	NEONATAL RESPIRATORY CARE	2016 Summer
BH	RSPT 61C	HOME & REHABILITATIVE RESPIRATORY CARE	2017 Summer
BH	RSPT 61D	PEDIATRIC RESPIRATORY CARE	2016 Summer
BH	RSPT 63A	ADVANCED PATHOPHYSIOLOGY & PATIENT MANAGEMENT	2016 Summer
BH	RSPT 65	COMPUTER PATIENT SIMULATIONS	2016 Summer
BH	R T 55A	PRINCIPLES OF RADIOLOGIC TECHNOLOGY I	2017 Summer
BH	R T 55B	PRINCIPLES OF RADIOLOGIC TECHNOLOGY II	2017 Summer
BH	R T 55C	PRINCIPLES OF RADIOLOGIC TECHNOLOGY III	2017 Summer
BH	R T 64	FLUOROSCOPY	2017 Summer
SS	SOC 1	INTRODUCTION TO SOCIOLOGY	2017 Summer
SS	SOC 8	POPULAR CULTURE	2017 Summer
SS	SOC 11	INTRODUCTION TO SOCIAL WELFARE	2017 Summer
SS	SOC 15	LAW & SOCIETY	2017 Summer
SS	SOC 19	ALCOHOL & DRUG ABUSE	2017 Summer
SS	SOC 20	MAJOR SOCIAL PROBLEMS	2017 Summer
SS	SOC 23	RACE & ETHNIC RELATIONS	2017 Summer
SS	SOC 28	SOCIOLOGY OF GENDER	2017 Summer
SS	SOC 30	SOCIAL PSYCHOLOGY	2017 Summer
		Note: cross-listed w/ PSYC 30 (also on the list)—please submit the same	
		updates to both CORs	
SS	SOC 40	ASPECTS OF MARRIAGE & FAMILY	2017 Summer
SS	SOC 54H	HONORS INSTITUTE SEMINAR IN SOCIOLOGY	2017 Summer
SS	SOSC 20	CROSS-CULTURAL PERSPECTIVES FOR A MULTICULTURAL SOCIETY	2017 Summer
SS	SOSC 79	INTRODUCTION TO COMMUNITY/CIVIC ENGAGEMENT	2017 Summer

Division	Course Code	Course Title	Previously Updated
LA	SPAN 1	ELEMENTARY SPANISH I	2017 Summer
LA	SPAN 2	ELEMENTARY SPANISH II	2017 Summer
LA	SPAN 3	ELEMENTARY SPANISH III	2017 Summer
LA	SPAN 4	INTERMEDIATE SPANISH I	2017 Summer
LA	SPAN 5	INTERMEDIATE SPANISH II	2017 Summer
LA	SPAN 6	INTERMEDIATE SPANISH III	2017 Summer
LA	SPAN 25A	ADVANCED COMPOSITION & READING I	2017 Summer
LA	SPAN 25B	ADVANCED COMPOSITION & READING II	2017 Summer
FA	THTR 8	MULTICULTURAL THEATRE ARTS IN MODERN AMERICA	2017 Summer
FA	THTR 26	INTRODUCTION TO FASHION HISTORY & COSTUME DESIGN	2017 Summer
FA	THTR 47A	INTRODUCTION TO MUSICAL THEATRE PRODUCTION	2017 Summer
		Note: cross-listed w/ MUS 47A (also on the list)—please submit the same	
		updates to both CORs	
FA	THTR 47B	INTERMEDIATE MUSIC THEATRE PRODUCTION WORKSHOP	2017 Summer
		Note: cross-listed w/ MUS 47B (also on the list)—please submit the same	
		updates to both CORs	
FA	THTR 47C	ADVANCED MUSIC THEATRE PRODUCTION WORKSHOP	2017 Summer
		Note: cross-listed w/ MUS 47C (also on the list)—please submit the same	
		updates to both CORs	
FA	THTR 47D	ADVANCED MUSIC THEATRE PRODUCTION WORKSHOP II	2017 Summer
		Note: cross-listed w/ MUS 47D (also on the list)—please submit the same	
		updates to both CORs	
SS	WMN 5	INTRODUCTION TO WOMEN'S STUDIES	2017 Summer
SS	WMN 21	PSYCHOLOGY OF WOMEN: SEX & GENDER DIFFERENCES	2017 Summer
		Note: cross-listed w/ PSYC 21 (also on the list)—please submit the same	
		updates to both CORs	

# FOOTHILL COLLEGE GENERAL EDUCATION & GRADUATION REQUIREMENTS

The Foothill College general education (GE) pattern is designed to ensure that the student meets the four institutional/general education student learning outcomes:

- 1. **Communication:** Demonstrate analytical reading and writing skills, including evaluation, synthesis and research; deliver focused and coherent presentations; and demonstrate active, discerning listening and speaking skills in lectures and discussions.
- 2. **Computation:** Demonstrate complex problem-solving skills, technology skills, computer proficiency and decision analysis through synthesis and evaluation; apply mathematical concepts and reasoning; and analyze and use numerical data.
- Creative, Critical & Analytical Thinking: Demonstrate judgment, decision-making skills and intellectual curiosity; demonstrate problem-solving skills through analysis, synthesis and evaluation; develop creativity and aesthetic awareness; conduct research methodology; and identify and respond to a variety of learning styles and strategies.
- 4. Community/Global Consciousness & Responsibility: Demonstrate social perceptiveness, including citizenship, community service, cultural awareness, empathy, ethics, interpersonal skills, personal integrity, respect, self-esteem and sensitivity; and exhibit interest in and pursuit of lifelong learning.

Completion of the Foothill College general education pattern requires that students successfully earn a minimum of 30 units from the courses listed below, with at least one course in humanities, English, natural sciences (with laboratory), social and behavioral sciences, communication and analytical thinking, United States cultures and communities, and two courses in lifelong learning from two different academic departments. Courses may only be used in one area.

Code I. Humanities	Title	Units
ART 1	INTRODUCTION TO ART	4.5
ART 2A	HISTORY OF ART: HISTORY OF WESTERN ART FROM PREHISTORY THROUGH EARLY CHRISTIANITY	4.5
or ART 2AH	HONORS HISTORY OF ART: HISTORY OF WESTEF ART FROM PREHISTORY THROUGH EARLY CHRISTIANITY	RN
ART 2B	HISTORY OF WESTERN ART FROM THE MIDDLE AGES TO THE RENAISSANCE	4.5
or ART 2BH	HONORS HISTORY OF WESTERN ART FROM THE MIDDLE AGES TO THE RENAISSANCE	
ART 2C	HISTORY OF WESTERN ART FROM THE BAROQU TO CONTEMPORARY	E 4.5
ART 2E	A HISTORY OF WOMEN IN ART	4.5
ART 2F	INTRODUCTION TO ASIAN ART	4.5
ART 2J	AMERICAN ART	4.5
ART 4A	FUNDAMENTALS IN DRAWING	4
ART 4G	MURAL MAKING: COMMUNITY ART PROJECT	4

ART 5A	2-D FOUNDATIONS	4
ART 5B	3-D FOUNDATIONS	4
ART 20B	COLOR II	4
ART 45B	BEGINNING CERAMICS POTTER'S WHEEL	4
BUSI 70	BUSINESS & PROFESSIONAL ETHICS	4
CRWR 6	INTRODUCTION TO CREATIVE WRITING	5
CRWR 25A	POETRY IN COMMUNITY	5
CRWR 39A	INTRODUCTION TO SHORT FICTION WRITING	5
CRWR 41A	POETRY WRITING	5
DANC 10	TOPICS IN DANCE HISTORY	5
ENGL 5	LGBT LITERATURE	4
ENGL 7	NATIVE AMERICAN LITERATURE	4
ENGL 12	AFRICAN AMERICAN LITERATURE	4
ENGL 14	TRAVELING THE WORLD THROUGH CONTEMPORARY LITERATURE	4
ENGL 16	INTRODUCTION TO LITERATURE	4
ENGL 17	INTRODUCTION TO SHAKESPEARE	4
ENGL 22	WOMEN WRITERS	4
ENGL 24	UNMASKING COMICS: THE DAWN OF THE GRAPHIC NOVEL	4
ENGL 27G	DETECTIVE & MYSTERY FICTION	4
ENGL 31	LATINO/A LITERATURE	4
ENGL 34C	LITERATURE INTO FILM	4
ENGL 37	SCIENCE FICTION LITERATURE: REIMAGINEERING REALITY	4
ENGL 38	LITERATURE OF PROTEST	4
ENGL 40	ASIAN AMERICAN LITERATURE	4
ENGL 41	LITERATURE OF MULTICULTURAL AMERICA	4
ENGL 43A	SURVEY OF BRITISH LITERATURE I: BEOWULF TO THE LATE 18TH CENTURY	5
or ENGL 43AH	HONORS SURVEY OF BRITISH LITERATURE I: BEOWULF TO THE LATE 18TH CENTURY	
ENGL 43B	SURVEY OF BRITISH LITERATURE II: THE ROMANTIC PERIOD TO THE PRESENT	5
or ENGL 43BH	HONORS SURVEY OF BRITISH LITERATURE II: THE ROMANTIC PERIOD TO THE PRESENT	
ENGL 45A	SURVEY OF AMERICAN LITERATURE I: BEGINNINGS TO 1865	5
or ENGL 45AH	HONORS SURVEY OF AMERICAN LITERATURE I: BEGINNINGS TO 1865	
ENGL 45B	SURVEY OF AMERICAN LITERATURE II: 1865 TO THE PRESENT	5
or ENGL 45BH	HONORS SURVEY OF AMERICAN LITERATURE II: 18 TO THE PRESENT	65
ENGL 47A	WORLD LITERATURE I	5
or ENGL 47AH	HONORS WORLD LITERATURE I	
ENGL 47B	WORLD LITERATURE II	5
or ENGL 47BH	HONORS WORLD LITERATURE II	
ENGL 49	CALIFORNIA LITERATURE: GOLDEN STATE CULTURES, GEOGRAPHIES & HISTORIES	4
GID 1	HISTORY OF GRAPHIC DESIGN	4
HUMN 1	CULTURES, CIVILIZATIONS & IDEAS: THE ANCIENT WORLD	4

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or HUMN 1H	HONORS CULTURES, CIVILIZATIONS & IDEAS: THE ANCIENT WORLD	
HUMN 2	CULTURES, CIVILIZATIONS & IDEAS: OF EMPIRES & CONFLICT	4
HUMN 3	WORLD MYTHS IN LITERATURE ARTS & FILM	4
or HUMN 3H	HONORS WORLD MYTHS IN LITERATURE ARTS & FILM	
HUMN 4	TRAUMA & THE ARTS	4
or HUMN 4H	HONORS TRAUMA & THE ARTS	
HUMN 5	CULTURES, CIVILIZATIONS & IDEAS: THE MODERN WORLD	4
or HUMN 5H	HONORS CULTURES, CIVILIZATIONS & IDEAS: THE MODERN WORLD	
HUMN 6	THE SHOCK OF THE NEW: FROM THE MODERN TO THE CONTEMPORARY	4
HUMN 7	GLOBAL RELIGIONS: CONTEMPORARY PRACTICES & PERSPECTIVES	4
or HUMN 7H	HONORS GLOBAL RELIGIONS: CONTEMPORARY PRACTICES & PERSPECTIVES	
HUMN 8	EX MACHINA: THE PARADOX OF BEING HUMAN IN THE DIGITAL AGE	4
HUMN 9	ONCE UPON A TIME? THE IMMORTAL LURE OF FAIRY TALES	4
JAPN 14A	ADVANCED CONVERSATION I	4
JAPN 14B	ADVANCED CONVERSATION II	4
KINS 5	SPORTS & CINEMA	4
MDIA 1	INTRODUCTION TO FILM STUDIES	4
or MDIA 1H	HONORS INTRODUCTION TO FILM STUDIES	
MDIA 2A	HISTORY OF FILM 1895-1945	4
MDIA 2B	HISTORY OF FILM 1945-CURRENT	4
MDIA 2C	CURRENT TRENDS IN FILM, TV & THE INTERNET	4
MDIA 4	EXPERIMENTAL FILM & VIDEO	4
MDIA 7	DOCUMENTARY FILM	4
MDIA 11	INTRODUCTION TO POPULAR CULTURE	4
or MDIA 11H	HONORS INTRODUCTION TO POPULAR CULTURE	
MDIA 13	VIDEO GAMES & POPULAR CULTURE	4
MUS 1	INTRODUCTION TO MUSIC	4
MUS 2A	GREAT COMPOSERS & MUSIC MASTERPIECES OF WESTERN CIVILIZATION	5
or MUS 2AH	HONORS GREAT COMPOSERS & MUSIC MASTERPIECES OF WESTERN CIVILIZATION	
MUS 2B	GREAT COMPOSERS & MUSIC MASTERPIECES OF WESTERN CIVILIZATION	5
or MUS 2BH	HONORS GREAT COMPOSERS & MUSIC MASTERPIECES OF WESTERN CIVILIZATION	
MUS 2C	GREAT COMPOSERS & MUSIC MASTERPIECES OF WESTERN CIVILIZATION	5
or MUS 2CH	HONORS GREAT COMPOSERS & MUSIC MASTERPIECES OF WESTERN CIVILIZATION	
MUS 2D	WORLD MUSIC: ROOTS TO CONTEMPORARY GLOBAL FUSION	5
MUS 2F	HISTORY OF AMERICAN MUSICAL THEATRE	4
MUS 7	CONTEMPORARY MUSICAL STYLES: ROCK, POP & JAZZ	4

MUS 7D	CONTEMPORARY MUSICAL STYLES: THE BEATLES IN THE CULTURE OF POPULAR MUSIC	4
MUS 7F	MUSIC IN FILM	4
MUS 8	MUSIC OF AMERICAN CULTURES	5
or MUS 8H	HONORS MUSIC OF AMERICAN CULTURES	
MUS 11D	HISTORY OF ELECTRONIC MUSIC: ORIGINS-1970	4
MUS 11E	HISTORY OF ELECTRONIC MUSIC: 1970-PRESENT	4
MUS 11F	VIDEO GAMES & POPULAR CULTURE	4
PHIL 2	INTRODUCTION TO SOCIAL & POLITICAL PHILOSOPHY	4
PHIL 4	INTRODUCTION TO PHILOSOPHY	4
PHIL 11	INTRODUCTION TO THE PHILOSOPHY OF ART & AESTHETICS	4
PHIL 12	PHILOSOPHY OF SCIENCE	4
PHIL 20A	HISTORY OF WESTERN PHILOSOPHY FROM SOCRATES THROUGH ST. THOMAS	4
PHIL 20B	HISTORY OF WESTERN PHILOSOPHY FROM THE RENAISSANCE THROUGH KANT	4
PHIL 24	COMPARATIVE WORLD RELIGIONS: EAST	4
PHIL 25	COMPARATIVE WORLD RELIGIONS: WEST	4
PHOT 5	INTRODUCTION TO PHOTOGRAPHY	4
PHOT 8	PHOTOGRAPHY OF MULTICULTURAL AMERICA	4
or PHOT 8H	HONORS PHOTOGRAPHY OF MULTICULTURAL AMERICA	
PHOT 10	HISTORY OF PHOTOGRAPHY	4
or PHOT 10H	HONORS HISTORY OF PHOTOGRAPHY	
PHOT 11	CONTEMPORARY ISSUES IN PHOTOGRAPHY	4
or PHOT 11H	HONORS CONTEMPORARY ISSUES IN PHOTOGRAPHY	
SPAN 4	INTERMEDIATE SPANISH I	5
SPAN 5	INTERMEDIATE SPANISH II	5
SPAN 6	INTERMEDIATE SPANISH III	5
SPAN 13A	INTERMEDIATE CONVERSATION I	4
SPAN 13B	INTERMEDIATE CONVERSATION II	4
SPAN 14A	ADVANCED CONVERSATION I	4
SPAN 14B	ADVANCED CONVERSATION II	4
THTR 1	INTRODUCTION TO THEATRE	4
THTR 2A	HISTORY OF DRAMATIC LITERATURE: CLASSICAL TO MOLIERE	4
THTR 2B	HISTORY OF DRAMATIC LITERATURE: MOLIERE TO MODERN	4
THTR 2F	HISTORY OF AMERICAN MUSICAL THEATRE	4
THTR 8	MULTICULTURAL THEATRE ARTS IN MODERN AMERICA	4
THTR 12A	STAGE & SCREEN	4
THTR 26	INTRODUCTION TO FASHION HISTORY & COSTUME DESIGN	4
II. English		
ENGL 1A or ENGL 1AH	COMPOSITION & READING HONORS COMPOSITION & READING	5
ENGL 1S & ENGL 1T	INTEGRATED COMPOSITION & READING and INTEGRATED COMPOSITION & READING	8
	lents who complete the major requirements for the Plumbing Technology program will satisfy Area II.	

III. Natural Science	ces (with Laboratory)	
ANTH 1 & 1L	INTRODUCTION TO PHYSICAL ANTHROPOLOGY and PHYSICAL ANTHROPOLOGY LABORATORY	5
or ANTH 1H & 1HL	HONORS INTRODUCTION TO PHYSICAL ANTHROPOLOGY	
	and HONORS PHYSICAL ANTHROPOLOGY LABORATORY	
ANTH 13 & 13L	INTRODUCTION TO FORENSIC ANTHROPOLOGY and FORENSIC ANTHROPOLOGY LABORATORY	5
ASTR 10A & ASTR 10L	GENERAL ASTRONOMY: SOLAR SYSTEM and ASTRONOMY LABORATORY	6
ASTR 10B & ASTR 10L	GENERAL ASTRONOMY: STARS, GALAXIES, COSMOLOGY and ASTRONOMY LABORATORY	6
or ASTR 10BH & ASTR 10L	HONORS GENERAL ASTRONOMY: STARS, GALAXIE COSMOLOGY and ASTRONOMY LABORATORY	S,
BIOL 9 & 9L	ENVIRONMENTAL BIOLOGY and ENVIRONMENTAL BIOLOGY LABORATORY	5
BIOL 10	GENERAL BIOLOGY: BASIC PRINCIPLES	5
BIOL 13	MARINE BIOLOGY	5
BIOL 14	HUMAN BIOLOGY	5
BIOL 15	CALIFORNIA ECOLOGY/NATURAL HISTORY	5
BIOL 41	MICROBIOLOGY	6
CHEM 1A	GENERAL CHEMISTRY	5
	HONORS GENERAL CHEMISTRY	Ū
CHEM 9	CHEMISTRY OF COOKING	5
CHEM 25	FUNDAMENTALS OF CHEMISTRY	5
CHEM 30A	SURVEY OF INORGANIC & ORGANIC CHEMISTRY	5
GEOG 1	PHYSICAL GEOGRAPHY	5
PHYS 2A	GENERAL PHYSICS	5
PHYS 4A	GENERAL PHYSICS GENERAL PHYSICS (CALCULUS)	6
PSE 20	INTRODUCTION TO PHYSICAL SCIENCE	5
		Э
Apprenticeship - I	ents who complete the major requirements for the Plumbing Technology program will satisfy Area III.	
IV. Social and Bel		
ANTH 2A	CULTURAL ANTHROPOLOGY	4
ANTH 2B ANTH 3	PATTERNS OF CULTURE WORLD PREHISTORY: THE RISE & FALL OF EARLY CIVILIZATIONS	4 4
ANTH 5	MAGIC, SCIENCE & RELIGION	4
ANTH 8	INTRODUCTION TO ARCHAEOLOGY	4
ANTH 12	APPLIED ANTHROPOLOGY	4
ANTH 14	LINGUISTIC ANTHROPOLOGY	4
ANTH 15	MEDICAL ANTHROPOLOGY: METHODS & PRACTICE	4
ANTH 20	NATIVE PEOPLES OF CALIFORNIA	4
ANTH 22	THE AZTEC, MAYA, INCA & THEIR PREDECESSORS: CIVILIZATIONS OF THE AMERICAS	4
BUSI 22	PRINCIPLES OF BUSINESS	5
or BUSI 22H	HONORS PRINCIPLES OF BUSINESS	
BUSI 53	SURVEY OF INTERNATIONAL BUSINESS	4

CHLD 1	CHILD GROWTH & DEVELOPMENT: PRENATAL THROUGH EARLY CHILDHOOD	4
CHLD 2	CHILD GROWTH & DEVELOPMENT II: MIDDLE CHILDHOOD THROUGH ADOLESCENCE	4
CNSL 3	IDENTITY, CULTURE & EDUCATION	4.5
or CNSL 3H	HONORS IDENTITY, CULTURE & EDUCATION	
ECON 1A	PRINCIPLES OF MACROECONOMICS	5
ECON 1B	PRINCIPLES OF MICROECONOMICS	5
ECON 9	POLITICAL ECONOMY	4
or ECON 9H	HONORS POLITICAL ECONOMY	
ECON 25	THE GLOBAL ECONOMY	4
GEOG 2	HUMAN GEOGRAPHY	4
GEOG 5	INTRODUCTION TO ECONOMIC GEOGRAPHY	4
GEOG 10	WORLD REGIONAL GEOGRAPHY	4
HIST 3A	WORLD HISTORY FROM PREHISTORY TO 750 CE	4
HIST 3B	WORLD HISTORY FROM 750 CE TO 1750 CE	4
HIST 3C	WORLD HISTORY FROM 1750 CE TO THE PRESENT	4
HIST 4A	HISTORY OF WESTERN CIVILIZATION TO 800 CE	4
HIST 4B	HISTORY OF WESTERN CIVILIZATION: 700-1800	4
HIST 4C	HISTORY OF WESTERN CIVILIZATION 1789- PRESENT	4
or HIST 4CH	HONORS HISTORY OF WESTERN CIVILIZATION 178 PRESENT	39-
HIST 8	HISTORY OF LATIN AMERICA	4
HIST 10	HISTORY OF CALIFORNIA: THE MULTICULTURAL STATE	4
HIST 17A	HISTORY OF THE UNITED STATES TO 1815	4
HIST 17B	HISTORY OF THE UNITED STATES FROM 1812 TO 1914	4
HIST 17C	HISTORY OF THE UNITED STATES FROM 1914 TO THE PRESENT	4
or HIST 17CH	HONORS HISTORY OF THE UNITED STATES FROM 1914 TO THE PRESENT	
HIST 18	INTRODUCTION TO MIDDLE EASTERN CIVILIZATION	4
HIST 20	HISTORY OF RUSSIA & THE SOVIET UNION	4
KINS 2	SPORT IN SOCIETY	5
KINS 10	WOMEN IN SPORTS	5
KINS 51	PERFORMANCE ENHANCING SUBSTANCES IN SPORT & EXERCISE	4
POLI 1	POLITICAL SCIENCE: INTRODUCTION TO AMERICAN GOVERNMENT & POLITICS	5
POLI 3	INTRODUCTION TO POLITICAL PHILOSOPHY/ POLITICAL THEORY	5
or POLI 3H	HONORS INTRODUCTION TO POLITICAL PHILOSOPHY/POLITICAL THEORY	
POLI 4	CALIFORNIA POLITICS & GOVERNMENT	5
POLI 9	POLITICAL ECONOMY	4
or POLI 9H	HONORS POLITICAL ECONOMY	
POLI 15	INTERNATIONAL RELATIONS/WORLD POLITICS	4
or POLI 15H	HONORS INTERNATIONAL RELATIONS/WORLD POLITICS	
PSYC 1	GENERAL PSYCHOLOGY	5

or PSYC 1H	HONORS GENERAL PSYCHOLOGY	_
PSYC 4	INTRODUCTION TO BIOPSYCHOLOGY	5
PSYC 9	POSITIVE PSYCHOLOGY	4
PSYC 10	RESEARCH METHODS & DESIGNS	5
PSYC 14	CHILD & ADOLESCENT DEVELOPMENT	4
PSYC 21	PSYCHOLOGY OF WOMEN: SEX & GENDER DIFFERENCES	4
PSYC 22	PSYCHOLOGY OF PREJUDICE & DISCRIMINATION	4
PSYC 25	INTRODUCTION TO ABNORMAL PSYCHOLOGY	4
PSYC 30	SOCIAL PSYCHOLOGY	4
PSYC 33	INTRODUCTION TO PERSONALITY PSYCHOLOGY	4
PSYC 40	HUMAN DEVELOPMENT	5
PSYC 49	HUMAN SEXUALITY	4
SOC 1	INTRODUCTION TO SOCIOLOGY	5
or SOC 1H	HONORS INTRODUCTION TO SOCIOLOGY	
SOC 10	RESEARCH METHODS & DESIGNS	5
SOC 11	INTRODUCTION TO SOCIAL WELFARE	5
SOC 15	LAW & SOCIETY	4
SOC 19	ALCOHOL & DRUG ABUSE	4
SOC 20	MAJOR SOCIAL PROBLEMS	4
SOC 23	RACE & ETHNIC RELATIONS	4
SOC 28	SOCIOLOGY OF GENDER	4
SOC 30	SOCIAL PSYCHOLOGY	4
SOC 40	ASPECTS OF MARRIAGE & FAMILY	4
SOC 45	SOCIOLOGY OF SEXUALITY	4
WMN 5	INTRODUCTION TO WOMEN'S STUDIES	4
WMN 21	PSYCHOLOGY OF WOMEN: SEX & GENDER DIFFERENCES	4
Additionally, stude	ents who complete the major requirements for the	
Apprenticeship - F	Plumbing Technology program will satisfy Area IV.	
V. Communication	n and Analytical Thinking	
COMM 1A	PUBLIC SPEAKING	5
or COMM 1AH	HONORS PUBLIC SPEAKING	
COMM 1B	ARGUMENTATION & PERSUASION	5
or COMM 1BH	HONORS ARGUMENTATION & PERSUASION	
COMM 2	INTERPERSONAL COMMUNICATION	5
COMM 3	INTRODUCTION TO COMMUNICATION STUDIES	5
COMM 4	GROUP DISCUSSION	5
COMM 55	CAREER & LEADERSHIP COMMUNICATION IN THE GLOBAL WORKPLACE	5
C S 1A	OBJECT-ORIENTED PROGRAMMING METHODOLOGIES IN JAVA	4.5
CS1B	INTERMEDIATE SOFTWARE DESIGN IN JAVA	4.5
C S 1C	ADVANCED DATA STRUCTURES & ALGORITHMS IN JAVA	4.5
C S 2A	OBJECT-ORIENTED PROGRAMMING METHODOLOGIES IN C++	4.5
C S 2B	INTERMEDIATE SOFTWARE DESIGN IN C++	4.5
C S 2C	ADVANCED DATA STRUCTURES & ALGORITHMS IN C++	4.5
C S 3A	OBJECT-ORIENTED PROGRAMMING METHODOLOGIES IN PYTHON	4.5
C S 18	DISCRETE MATHEMATICS	5

ENGL 1B	COMPOSITION, CRITICAL READING & THINKING THROUGH LITERATURE HONORS COMPOSITION, CRITICAL READING &	5
OF ENGLIPHI	THINKING THROUGH LITERATURE	
ENGL 50C	TECHNICAL WRITING	5
GEOG 11	INTRODUCTION TO MAPPING & SPATIAL REASONING	4
GIST 11	INTRODUCTION TO MAPPING & SPATIAL REASONING	4
MATH 1A	CALCULUS HONORS CALCULUS I	5
MATH 1B	CALCULUS	5
	HONORS CALCULUS II	0
MATH 1C	CALCULUS	5
MATH 10	ELEMENTARY STATISTICS	5
MATH 12	CALCULUS FOR BUSINESS & ECONOMICS	5
MATH 17	INTEGRATED STATISTICS II	5
MATH 22	DISCRETE MATHEMATICS	5
MATH 44	MATH FOR THE LIBERAL ARTS	5
MATH 48A	PRECALCULUS I	5
MATH 48B	PRECALCULUS II	5
MATH 48C	PRECALCULUS III	5
MDIA 3	INTRODUCTION TO FILM & MEDIA CRITICISM	4
PHIL 1	CRITICAL THINKING & WRITING	5
PHIL 7	INTRODUCTION TO SYMBOLIC LOGIC	5
PSYC 7	STATISTICS FOR THE BEHAVIORAL SCIENCES	5
SOC 7	STATISTICS FOR THE BEHAVIORAL SCIENCES	5
	ents who complete the major requirements for the Plumbing Technology program will satisfy Area V.	
VI. United States	Cultures and Communities	
CHLD 51A	AFFIRMING DIVERSITY IN EDUCATION	4
CNSL 3	IDENTITY, CULTURE & EDUCATION	4.5
or CNSL 3H	HONORS IDENTITY, CULTURE & EDUCATION	
COMM 10	GENDER, COMMUNICATION & CULTURE	5
COMM 12	INTERCULTURAL COMMUNICATION	5
ENGL 7	NATIVE AMERICAN LITERATURE	4
ENGL 12	AFRICAN AMERICAN LITERATURE	4
ENGL 40	ASIAN AMERICAN LITERATURE	4
ENGL 45A	SURVEY OF AMERICAN LITERATURE I: BEGINNINGS TO 1865	5
or ENGL 45AH	HONORS SURVEY OF AMERICAN LITERATURE I: BEGINNINGS TO 1865	
ENGL 45B	SURVEY OF AMERICAN LITERATURE II: 1865 TO THE PRESENT	5
or ENGL 45BH	HONORS SURVEY OF AMERICAN LITERATURE II: TO THE PRESENT	1865
HIST 10	HISTORY OF CALIFORNIA: THE MULTICULTURAL STATE	4
MDIA 8A	RACE & GENDER IN AMERICAN MEDIA	4
MDIA 12	POPULAR CULTURE & UNITED STATES HISTORY	4
MUS 8	MUSIC OF AMERICAN CULTURES	5
or MUS 8H	HONORS MUSIC OF AMERICAN CULTURES	
PHOT 8	PHOTOGRAPHY OF MULTICULTURAL AMERICA	4

or PHOT 8H	HONORS PHOTOGRAPHY OF MULTICULTURAL AMERICA	
PSYC 22	PSYCHOLOGY OF PREJUDICE & DISCRIMINATION	4
SOC 8	POPULAR CULTURE	4
SOC 23	RACE & ETHNIC RELATIONS	4
THTR 8	MULTICULTURAL THEATRE ARTS IN MODERN AMERICA	4
WMN 5	INTRODUCTION TO WOMEN'S STUDIES	4
	dents who complete the major requirements for the Plumbing Technology program will satisfy Area VI.	
VII. Lifelong Lea	rning	
in lifelong learnir	st successfully complete a total of four units or more ng from two different academic departments. For the area, ATHL, DANC, PHDA and PHED will be considered epartment.	
ATHL 4	INTERCOLLEGIATE FOOTBALL I (MEN)	2
ATHL 4A	PRESEASON CONDITIONING FOR FOOTBALL	2
ATHL 4B	SPORT TECHNIQUES & CONDITIONING FOR FOOTBALL	2
ATHL 4C	FUNCTIONAL FITNESS FOR FOOTBALL	1
ATHL 4E	INTERCOLLEGIATE FOOTBALL (MEN)	1
ATHL 4F	INTERCOLLEGIATE FOOTBALL II (MEN)	3
ATHL 11	INTERCOLLEGIATE BASKETBALL I (MEN)	3
ATHL 11A	PRESEASON CONDITIONING FOR MEN'S BASKETBALL	2
ATHL 11B	SPORT TECHNIQUES & CONDITIONING FOR MEN'S BASKETBALL	2
ATHL 12	INTERCOLLEGIATE BASKETBALL I (WOMEN)	3
ATHL 12A	PRESEASON CONDITIONING FOR WOMEN'S BASKETBALL	2
ATHL 12B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S BASKETBALL	2
ATHL 12E	INTERCOLLEGIATE BASKETBALL (WOMEN)	1
ATHL 21	INTERCOLLEGIATE SOCCER I (MEN)	2
ATHL 21A	PRESEASON CONDITIONING FOR MEN'S SOCCER	2
ATHL 21B	SPORT TECHNIQUES & CONDITIONING FOR MEN'S SOCCER	2
ATHL 21C	FUNCTIONAL FITNESS FOR MEN'S SOCCER	1
ATHL 21F	INTERCOLLEGIATE SOCCER II (MEN)	3
ATHL 22	INTERCOLLEGIATE SOCCER I (WOMEN)	2
ATHL 22A	PRESEASON CONDITIONING FOR WOMEN'S SOCCER	2
ATHL 22B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S SOCCER	2
ATHL 22C	FUNCTIONAL FITNESS FOR WOMEN'S SOCCER	1
ATHL 22F	INTERCOLLEGIATE SOCCER II (WOMEN)	3
ATHL 31	INTERCOLLEGIATE SOFTBALL I (WOMEN)	3
ATHL 31A	PRESEASON CONDITIONING FOR SOFTBALL	2
ATHL 31B	SPORT TECHNIQUES & CONDITIONING FOR SOFTBALL	2
ATHL 31C	FUNCTIONAL FITNESS FOR SOFTBALL	1
ATHL 31E	INTERCOLLEGIATE SOFTBALL (WOMEN)	1
ATHL 31F	INTERCOLLEGIATE SOFTBALL II (WOMEN)	2
ATHL 32	INTERCOLLEGIATE SWIMMING I (MEN & WOMEN)	3

ATHL 32A	PRESEASON CONDITIONING FOR SWIMMING	2
ATHL 32C	FUNCTIONAL FITNESS FOR SWIMMING	1
ATHL 32F	INTERCOLLEGIATE SWIMMING II (MEN & WOMEN)	2
ATHL 33	INTERCOLLEGIATE WATER POLO I (WOMEN)	2
ATHL 33A	PRESEASON CONDITIONING FOR WOMEN'S WATER POLO	2
ATHL 33B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S WATER POLO	2
ATHL 33C	FUNCTIONAL FITNESS FOR WOMEN'S WATER POLO	1
ATHL 33F	INTERCOLLEGIATE WATER POLO II (WOMEN)	3
ATHL 41A	INTERCOLLEGIATE SAND VOLLEYBALL I (WOMEN)	2
ATHL 41B	INTERCOLLEGIATE SAND VOLLEYBALL II (WOMEN)	3
ATHL 42	INTERCOLLEGIATE VOLLEYBALL I (WOMEN)	2
ATHL 42B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S VOLLEYBALL	2
ATHL 42C	FUNCTIONAL FITNESS FOR WOMEN'S VOLLEYBALL	1
ATHL 42F	INTERCOLLEGIATE VOLLEYBALL II (WOMEN)	3
ATHL 44	INTERCOLLEGIATE TENNIS I (MEN)	3
ATHL 44A	PRESEASON CONDITIONING FOR MEN'S TENNIS	2
ATHL 44B	SPORT TECHNIQUES & CONDITIONING FOR MEN'S TENNIS	2
ATHL 44C	FUNCTIONAL FITNESS FOR MEN'S TENNIS	1
ATHL 44F	INTERCOLLEGIATE TENNIS II (MEN)	2
ATHL 45	INTERCOLLEGIATE TENNIS I (WOMEN)	3
ATHL 45A	PRESEASON CONDITIONING FOR WOMEN'S TENNIS	2
ATHL 45B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S TENNIS	2
ATHL 45C	FUNCTIONAL FITNESS FOR WOMEN'S TENNIS	1
ATHL 45F	INTERCOLLEGIATE TENNIS II (WOMEN)	2
BIOL 8	BASIC NUTRITION	5
BIOL 9	ENVIRONMENTAL BIOLOGY	4
BIOL 12	HUMAN GENETICS	4
BIOL 81	LEARNERS ENGAGED IN ADVOCATING FOR DIVERSITY IN SCIENCE	4
CNSL 1	COLLEGE SUCCESS	3
CNSL 52	COLLEGE & LIFE MANAGEMENT	4
CNSL 56	LIFELONG LEARNING STRATEGIES	3
CNSL 72	STRESS, WELLNESS & COPING	3
CNSL 90	INTRODUCTION TO ONLINE LEARNING	1.5
COMM 2	INTERPERSONAL COMMUNICATION	5
COMM 10	GENDER, COMMUNICATION & CULTURE	5
COMM 12	INTERCULTURAL COMMUNICATION	5
COMM 55	CAREER & LEADERSHIP COMMUNICATION IN THE GLOBAL WORKPLACE	5
CRLP 7	SELF-ASSESSMENT	4
CRLP 73	EFFECTIVE RESUME WRITING	1
CRLP 74	SUCCESSFUL INTERVIEWING TECHNIQUES	1
DANC 1A	BEGINNING BALLET	1
DANC 1B	INTERMEDIATE BALLET	1
DANC 1C	ADVANCED BALLET	1

DANC 2A	BEGINNING MODERN DANCE	1	PHED 17B	INTERMEDIATE KARATE	1
DANC 2B	INTERMEDIATE MODERN DANCE	1	PHED 18	BEGINNING TAI CHI (TAIJI)	1
DANC 3A	BEGINNING JAZZ DANCE	1	PHED 18B	INTERMEDIATE TAI CHI (TAIJI)	1
DANC 3B	INTERMEDIATE JAZZ DANCE	1	PHED 18C	ADVANCED TAI CHI (TAIJI)	1
DANC 4A	<b>BEGINNING BALLROOM &amp; SOCIAL DANCE</b>	1	PHED 19B	KICKBOXING FOR FITNESS	1
DANC 4B	INTERMEDIATE BALLROOM & SOCIAL DANCE	1	PHED 19C	INTERMEDIATE KICKBOXING FOR FITNESS	1
DANC 4C	ADVANCED BALLROOM & SOCIAL DANCE	1	PHED 19D	ADVANCED KICKBOXING FOR FITNESS	1
DANC 6	BEGINNING COUNTRY-WESTERN LINE DANCING	1	PHED 20A	BEGINNING MAT PILATES	1
DANC 7	CHOREOGRAPHY	1	PHED 20B	INTERMEDIATE MAT PILATES	1
DANC 13A	INTRODUCTION TO CONTEMPORARY DANCE	1	PHED 21	FOUNDATIONS OF YOGA	1
DANC 13B	INTERMEDIATE CONTEMPORARY DANCE	1	PHED 21A	BEGINNING HATHA YOGA	1
DANC 14	DANCE CONDITIONING	1	PHED 21B	INTERMEDIATE HATHA YOGA	1
DANC 18A	INTRODUCTION TO HIP-HOP DANCE	1	PHED 21C	ADVANCED HATHA YOGA	1
DANC 18B	INTERMEDIATE HIP-HOP DANCE	1	PHED 21D	VINYASA FLOW YOGA	1
HLTH 20	INTRODUCTION TO PUBLIC HEALTH	5	PHED 21E	RESTORATIVE YOGA	1
HLTH 21	CONTEMPORARY HEALTH CONCERNS	4	PHED 22	<b>BEGINNING FLEXIBILITY &amp; MOBILITY</b>	1
HLTH 22	HEALTH & SOCIAL JUSTICE	4	PHED 22A	INTERMEDIATE FLEXIBILITY & MOBILITY	1
HLTH 23	DRUGS, HEALTH & SOCIETY	4	PHED 22B	PILATES & YOGA	1
KINS 4	CONCEPTS OF PHYSICAL FITNESS & WELLNESS	4	PHED 22C	CORE CONDITIONING	1
KINS 16A	PREVENTION OF ATHLETIC INJURIES	3	PHED 22E	CROSS TRAINING FOR ENDURANCE	1
KINS 16B	EMERGENCY ATHLETIC INJURY CARE	3	PHED 23A	TRAIL HIKING	1
KINS 16C	TREATMENT & REHABILITATION OF ATHLETIC	3	PHED 23B	DAY HIKING	1
	INJURIES		PHED 24	INTRODUCTION TO GOLF	1
LIBR 10	INTRODUCTION TO COLLEGE RESEARCH	1	PHED 24A	SWING DEVELOPMENT FOR THE EXPERIENCED	1
or LIBR 10H	HONORS INTRODUCTION TO COLLEGE RESEARCH			GOLFER	
PHDA 15A	MODIFIED TOTAL FITNESS	1	PHED 24C	INTERMEDIATE GOLF COURSE PLAY	2
PHDA 15B	INTERMEDIATE MODIFIED TOTAL FITNESS	1	PHED 24D	ADVANCED GOLF COURSE PLAY	2
PHDA 15C	PROGRESSIVE MODIFIED TOTAL FITNESS	1	PHED 25A	SWING ANALYSIS	1
PHDA 16	MODIFIED GENERAL CONDITIONING	1	PHED 25B	BEGINNING GOLF COURSE PLAY	2
PHDA 17	MODIFIED RESISTIVE EXERCISE	1	PHED 26	BEGINNING TENNIS SKILLS	1
PHDA 18	INDIVIDUALIZED EXERCISE FOR SPECIAL	1	PHED 26A	INTERMEDIATE TENNIS	1
	POPULATIONS	-	PHED 26C	BEGINNING DOUBLES TENNIS	1
PHDA 20	MODIFIED FUNCTIONAL FITNESS	1	PHED 27	WALK FOR HEALTH	1
PHDA 21A	MODIFIED AQUATICS	1	PHED 27A	RUN FOR FITNESS	1
PHDA 21B	MODIFIED WATER EXERCISE	1	PHED 27B	INTERMEDIATE RUN FOR FITNESS	1
PHDA 23	MODIFIED AEROBIC EXERCISE	1	PHED 27C	INTERMEDIATE WALK FOR HEALTH	1
PHDA 24	MODIFIED STRETCHING & FLEXIBILITY	1	PHED 31A	FUTSAL: INDOOR SOCCER BEGINNING	1
PHDA 25	BALANCE & FUNCTIONAL MOVEMENT	1	PHED 31B	FUTSAL: INDOOR SOCCER INTERMEDIATE	1
PHED 10A	AQUATICS: LEVEL I, BEGINNING SWIMMING	1	PHED 31C	FUTSAL: INDOOR SOCCER ADVANCED	1
PHED 10B	AQUATICS: LEVEL II, INTERMEDIATE SWIMMING	1	PHED 33	BEGINNING TABLE TENNIS	1
PHED 10C	AQUATICS LEVEL III, MASTERS SWIMMING/ ADVANCED SWIM TRAINING	1	PHED 33A	INTERMEDIATE TABLE TENNIS	1
PHED 11A	WATER EXERCISE	1	PHED 33B	ADVANCED TABLE TENNIS	1
PHED 11B	AQUATIC FITNESS	1	PHED 36A	BEGINNING ARCHERY	1
PHED 11C	WATER AWARENESS	1	PHED 36B	INTERMEDIATE ARCHERY	1
			PHED 36C	ADVANCED ARCHERY	1
PHED 13 PHED 13A	BEGINNING WATER POLO INTERMEDIATE WATER POLO	1	PHED 37	BEGINNING BADMINTON: SINGLES & DOUBLES	1
		1	PHED 37A	INTERMEDIATE BADMINTON: SINGLES &	1
PHED 13C PHED 14	WATER POLO: GAME SKILLS NUTRITIONAL ASSESSMENT & FITNESS			DOUBLES	-
		1	PHED 37B	ADVANCED BADMINTON: SINGLES & DOUBLES	1
PHED 15A		1	PHED 38A	BASKETBALL FUNDAMENTALS	1
PHED 15B	INTERMEDIATE PICKLEBALL ADVANCED PICKLEBALL	1	PHED 38B	BASKETBALL GAME SKILLS	1
PHED 15C PHED 17A	ADVANCED PICKLEBALL BEGINNING KARATE	1	PHED 38C	BEGINNING BASKETBALL	1
		I			

PHED 40	BEGINNING VOLLEYBALL	1
PHED 40A	INTERMEDIATE VOLLEYBALL	1
PHED 40C	VOLLEYBALL: GAME SKILLS	1
PHED 41	INDOOR CYCLING: SPIN	1
PHED 41A	INDOOR CYCLING: HILLS & SPRINTS	1
PHED 41B	INTERMEDIATE INDOOR CYCLING	1
PHED 42	BOWLING FOR FITNESS	1
PHED 43A	ULTIMATE I	1
PHED 45	FITNESS FOR LIFE	1
PHED 45A	FOUNDATIONS OF STRENGTH & CONDITIONING	1
PHED 45C	CIRCUIT TRAINING	1
PHED 46	WEIGHT LIFTING FOR HEALTH & FITNESS	1
PHED 46A	INTERMEDIATE WEIGHT TRAINING FOR HEALTH & FITNESS	1
PHED 46B	ADVANCED WEIGHT LIFTING FOR HEALTH & FITNESS	1
PHED 47B	THIGHS, ABS & GLUTEUS (TAG)	1
PHED 47C	HIGH-INTENSITY INTERVAL TRAINING (HIIT)	1
PHED 49A	SURVIVOR TRAINING	1
PHED 49B	BOOT CAMP TRAINING	1
PSYC 49	HUMAN SEXUALITY	4
SOC 19	ALCOHOL & DRUG ABUSE	4
SOC 40	ASPECTS OF MARRIAGE & FAMILY	4
A 1 1949		

Additionally, students who complete the major requirements for the Apprenticeship - Plumbing Technology program will satisfy Area VII.

Minimum proficiency: ENGL 1A or ENGL 1AH or ENGL 1S and ENGL 1T; MATH 105<sup>1</sup> or MATH 180 or any MATH course approved for Foothill GE Area V, Communication and Analytical Thinking.

<sup>1</sup> Intermediate Algebra or equivalent means MATH 105 or completion of a higher-level course with a grade of "C" or better.

It is imperative to note that the Foothill College general education pattern is only appropriate for students pursuing the Foothill College associate in arts or associate in science degree. However, it is not appropriate for students pursuing an A.A.-T or A.S.-T degree. Students planning to earn an A.A.-T or A.S.-T must complete either the IGETC or CSU GE Breadth general education pattern. Note that completion of the IGETC or CSU GE Breadth pattern may also be used to satisfy the general education requirements for the Foothill A.A./A.S. degree. **Because there are significant differences between the three patterns, the student is strongly advised to meet with a counselor to determine which pattern will best meet the student's goals.** 

Effective Summer Session 2021

# FOOTHILL COLLEGE

# **CHANGES TO GENERAL EDUCATION & GRADUATION REQUIREMENTS 2021-22**

# Area I - Humanities

- Added: BUSI 70\*, ENGL 27G, ETHN 51+, ETHN 52+, ETHN 53+, ETHN 55+, KINS 5
- Removed (deactivated): ENGL 18A

# Area II - English

No changes

# Area III - Natural Sciences (with laboratory)

No changes

# Area IV - Social & Behavioral Sciences

- Added: CNSL 3, CNSL 3H, POLI 4
- Removed (deactivated): SPED 2

# Area V - Communication & Analytical Thinking

• Removed (deactivated): C S 1AH

# Area VI - United States Cultures & Communities

- Added: CNSL 3, CNSL 3H, ETHN 51<sup>+</sup>, ETHN 52<sup>+</sup>, ETHN 52<sup>+</sup>, ETHN 55<sup>+</sup>
- Removed (deactivated): SPED 1

# Area VII - Lifelong Learning

- Added: Apprenticeship Plumbing Technology program\*
- Removed (deactivated): SPED 1

\*Note that the GE applications for BUSI 70 and the Apprenticeship - Plumbing Technology program are included on the 4/20/21 CCC agenda for approval. If either is not approved, it will not be included on the 2021-22 GE list

*†Effective fall 2021 quarter (will be added when the fall catalog addendum is published)* 

# General Education Review Request AREA I - HUMANITIES

### Course Number & Title: BUSI 70 Business & Professional Ethics

### Breadth Criteria:

At Foothill College, the primary objective of the general education requirements is to provide students with the depth and breadth of knowledge and understanding required to be independent, thinking persons who are able to interact successfully with others as educated and productive members of our diverse society. Design and implementation of the general education curriculum ensures that students have exposure to all major disciplines, understand relationships among the various disciplines, and appreciate and evaluate the collective knowledge and experiences that form our cultural and physical heritage. General education courses provide content that is broad in scope and at an introductory depth, and all require critical thinking.

A general education enables students to clarify and present their personal views as well as respect, evaluate, and be informed by the views of others. This academic program is designed to facilitate a process that enables students to reach their fullest potential as individuals, national and global citizens, and lifelong learners for the 21st century.

In order to be successful, students are expected to have achieved minimum proficiency in math (MATH 105) and English (ENGL 1A, 1AH or ESL 26) before enrolling in a GE course.

A completed pattern of general education courses provides students with opportunities to acquire, practice, apply, and become proficient in each of the core competencies listed below.

- B1. Communication (analytical reading, writing, speaking, and listening skills including evaluation, synthesis, and research).
- B2. Computation (application of mathematical concepts, and/or using principles of data collection and analysis to solve problems).
- B3. Creative, critical, and analytical thinking (reasoning, questioning, problem solving, and consideration of consequence).
- B4. Community and global consciousness and responsibility (consideration of one's role in society at the local, regional, national, and global level in the context of cultural constructs and historical and contemporary events and issues).
- B5. Information competency (ability to identify an information need, to find, evaluate and use information to meet that need in a legal and ethical way) and digital literacy (to teach and assess basic computer concepts and skills so that people can use computer technology in everyday life to develop new social and economic opportunities for themselves, their families, and their communities).

### Depth Criteria for Area I - Humanities:

The humanities include courses in Arts and Letters that give students knowledge and understanding of significant works of the human intellect and imagination. These works cover all the varieties of human expression through time. Knowledge of the significance of the historical and cultural context in which the works are created and interpreted expands the students' awareness of the human condition, cultivating an appreciation of human values and achievements. Humanities courses should enable students to participate in social and cultural communities associated with artistic and literary endeavors, enriching their personal and professional lives.

A course meeting the Humanities requirement incorporates a multidisciplinary approach (drawing from *two or more* of the following - history, literature, philosophy, religion, language, and the arts) as it addresses and explores central questions about the meaning and experience of human life.

A course meeting the Humanities General Education Requirement *must* help students:

- H1. Acquire knowledge and understanding of significant artistic, literary, or philosophical works and the historical and cultural context in which the works were created and interpreted;
- H2. Deepen their knowledge of the human condition through systematic inquiry into consciousness, values, ideas, and ideals;
- H3. Develop appreciation for what is significant about human life and its creations;
- H4. Make reasoned judgments that reflect ethical and aesthetic human values;
- H5. Develop the ability to respond to artistic and literary works both analytically and affectively through writing as well as through other forms of artistic expression.

In addition, courses *must* identify how they will help students achieve *at least two* of the following learning outcomes:

- H6. Understanding of the ambiguities, vagaries, and value inherent in human language;
- H7. Appreciation of nonverbal communication to be found in the visual and performing arts;
- H8. Recognition of the variety of valid interpretations of artistic expression;
- H9. Appreciation of our common humanity within the context of diverse cultures;
- H10. Thinking critically, including the ability to find, recognize, analyze, evaluate, and communicate ideas, information, and opinions as they relate to the products of human intellect and imagination.

# General Education Review Request AREA I - HUMANITIES

### Course Number & Title: BUSI 70 Business & Professional Ethics

Please map each appropriate component from the **Course Outline of Record** to the appropriate depth and breadth criteria. You can use any part of your COR including course outcomes, expanded content, methods of instruction/evaluation, and/or lab content.

## Depth Map: Must include the following:

Course incorporates a multidisciplinary approach (drawing from two or more of the following: history, literature, philosophy, religion, language and the arts) as it addresses and explores central questions about the meaning and experience of human life;

## Matching course component(s):

**H1.** Acquire knowledge and understanding of significant artistic, literary, or philosophical works and the historical and cultural context in which the works were created and interpreted;

#### Matching course component(s)

BUSI 70 provides a foundational exploration of philosophical schools/theories of Classic moral philosophy and normative theories of ethics, such as:

- 1. The nature of ethics and morality
- 2. Normative theories of ethics
- 3. Business ethics and professional ethics
- 4. Threats to ethics: Conventionalism, relativism

**H2.** Deepen their knowledge of the human condition through systematic inquiry into consciousness, values, ideas, and ideals;

Matching course component(s):

BUSI 70 addresses topics of human consciousness, values, ideas and ideals as they apply in the business context of human agency, touching a variety of topics, including:

- 1. Corporate moral agency
- 2. Corporate responsibility the social debate
- 3. Individual obligations to self, team, organization, and society
- 4. Business compliance vs business ethics
- 5. Business and environmental ethics
- 6. Technology and ethics

**H3.** Develop appreciation for what is significant about human life and its creations;

#### Matching course component(s):

BUSI 70 helps students to develop an appreciation for and understanding of ethics in a global context, focusing on topics such as:

- 1. Ethical principles and global business
- 2. Ethics viewed from a multicultural perspective
- 3. First world vs. Third world values in conflict
- 4. Globalization: Economic and ethical challenges

## H4. Make reasoned judgments that reflect ethical and aesthetic human values;

## Matching course component(s):

- 1. The nature of justice
- 2. The Utilitarian perspective of justice
- 3. Deontological approach
- 4. The Libertarian approach
- 5. John Rawls, "A Theory of Justice"

#### 6. Distributive justice

**H5.** Develop the ability to respond to artistic and literary works both analytically and affectively through writing as well as through other forms of artistic expression.

Matching course component(s):

Students will be exposed to a variety of literary works in philosophy and ethics, and be guided through critical analyses of these works as they apply to the business aspect of the human condition

## Depth Map: Additionally, must include at least two of the following:

**H6.** Understanding of the ambiguities, vagaries, and value inherent in human language;

Matching course component(s): N/A

**H7.** Appreciation of nonverbal communication to be found in the visual and performing arts;

Matching course component(s):

N/A

**H8.** Recognition of the variety of valid interpretations of artistic expression;

- Matching course component(s):
- N/A

H9. Appreciation of our common humanity within the context of diverse cultures;

#### Matching course component(s):

Students will gain an appreciation of common humanity within the context of diverse cultures in BUSI 70 through the exploration of ethics as it relates to global business viewed from a multicultural perspective

**H10.** Thinking critically, including the ability to find, recognize, analyze, evaluate, and communicate ideas, information, and opinions as they relate to the products of human intellect and imagination.

Matching course component(s):

In BUSI 70, students will develop their ability to think critically, focusing on issues of ethics in the context of business in order to understand, evaluate, and develop informed opinions on moral issues and dilemmas facing today's workforce.

## Breadth Mapping: please indicate all that apply (if applicable)

**B1.** Communication (analytical reading, writing, speaking, and listening skills including evaluation, synthesis, and research).

Matching course component(s):

BUSI 70 will place significant emphasis on various forms of communication including analytical reading and writing (focusing on evaluation, synthesis and research)

**B2.** Computation (application of mathematical concepts, and/or using principles of data collection and analysis to solve problems).

Matching course component(s):

BUSI 70 students will utilize utilitarianism to calculate hedons/utility to inform right actions

**B3.** Clearly and precisely express their ideas in a logical and organized manner using the disciplineappropriate language.

Matching course component(s):

Students in BUSI 70 will be required to demonstrate their ability to express ideas in a cogent, logical and organized manner when presenting arguments regarding ethical issues in the workplace.

# **General Education Review Request AREA I - HUMANITIES**

**B4.** Community and global consciousness and responsibility (consideration of one's role in society at the local, regional, national, and global level in the context of cultural constructs and historical and contemporary events and issues).

#### Matching course component(s):

Students in BUSI 70 are compelled to apply ethical approaches to explore and investigate a variety of case studies and situations illustrating how conflicts arise from various ethical schools of thought. Additionally, this approach compels students to appreciate the complexity of ethics and the ambiguities that can arise.

**B5.** Information competency (ability to identify an information need, to find, evaluate and use information to meet that need in a legal and ethical way) and digital literacy (to teach and assess basic computer concepts and skills so that people can use computer technology in everyday life to develop new social and economic opportunities for themselves, their families, and their communities).

#### Matching course component(s):

BUSI 70 compels student to expand their scope of consideration to include a broader set of stakeholders and their interests. As a result, students should seek out more information and perspectives to develop more complex decisions that account for the interests of others, including stakeholders that are unable to express their interests (indirect and non-human stakeholders). This component compels students to consider legal dimensions, but also the ethical justification to conclude that some laws may be unethical and unjust.

Requesting Faculty: Laurence Lew

Division Curriculum Rep: Kas Pereira & Laurence Lew Date: 2/8/21

## FOR USE BY GE SUBCOMMITTEE:

Review Committee Members: Hilary Gomes and Kella Svetich

Recommended for Approval: X	Not Recommended for Approval:	Date: 3/26/21
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In the box below, please provide rationale regarding the subcommittee's recommendation:

## FOR USE BY CURRICULUM OFFICE:

Approved: \_\_\_\_\_ Denied: \_\_\_\_\_ CCC Co-Chair Signature: \_\_\_\_\_\_Date: \_\_\_\_\_

Date: February 1, 2021

# General Education Review Request AREA VII - LIFELONG LEARNING

#### Course Number & Title: Plumbing Technology Apprenticeship Program

#### Breadth Criteria:

At Foothill College, the primary objective of the general education requirements is to provide students with the depth and breadth of knowledge and understanding required to be independent, thinking persons who are able to interact successfully with others as educated and productive members of our diverse society. Design and implementation of the general education curriculum ensures that students have exposure to all major disciplines, understand relationships among the various disciplines, and appreciate and evaluate the collective knowledge and experiences that form our cultural and physical heritage. General education courses provide content that is broad in scope and at an introductory depth, and all require critical thinking.

A general education enables students to clarify and present their personal views as well as respect, evaluate, and be informed by the views of others. This academic program is designed to facilitate a process that enables students to reach their fullest potential as individuals, national and global citizens, and lifelong learners for the 21st century.

In order to be successful, students are expected to have achieved minimum proficiency in math (MATH 105) and English (ENGL 1A, 1AH or ESL 26) before enrolling in a GE course.

A completed pattern of general education courses provides students with opportunities to acquire, practice, apply, and become proficient in each of the core competencies listed below.

- B1. Communication (analytical reading, writing, speaking, and listening skills including evaluation, synthesis, and research).
- B2. Computation (application of mathematical concepts, and/or using principles of data collection and analysis to solve problems).
- B3. Creative, critical, and analytical thinking (reasoning, questioning, problem solving, and consideration of consequence).
- B4. Community and global consciousness and responsibility (consideration of one's role in society at the local, regional, national, and global level in the context of cultural constructs and historical and contemporary events and issues).
- B5. Information competency (ability to identify an information need, to find, evaluate and use information to meet that need in a legal and ethical way) and digital literacy (to teach and assess basic computer concepts and skills so that people can use computer technology in everyday life to develop new social and economic opportunities for themselves, their families, and their communities).

#### Depth Criteria for Area VII - Lifelong Learning:

Courses in this area provide students with the skills needed to continue learning after they leave college. Courses focus on the study of humans as integrated intellectual, physiological, social and psychological beings in relation to society and the environment. Full understanding and synthesis of a subject area usually occurs when the skills mastered in a course of study are applied to the context of another discipline. Students are given an opportunity to experience this concept in courses that provide opportunities that bridge subject areas so that students learn to function as independent and effective learners.

Physical activity courses are given inclusion to this area in recognition of the reality that you have to be healthy and live a long life in order to take advantage of lifelong learning. Foothill College deems that: Physical activity courses are acceptable, if they entail movement by the student and are overseen by a faculty member or coach. These courses can be taken for up to 2 units.

A course meeting the Lifelong Learning General Education Requirement *must* help students:

- L1. Acquire and demonstrate knowledge, skills, and attitudes that support the application of information across two or more disciplines of study;
- L2. Develop practical tools that can be integrated into problem solving and decision making with current day-to-day issues and which can be adapted to future situations;
- L3. Identify current issues and concerns that influence health, communication or learning;
- L4. Comprehend and apply health and well-being issues to the individual and to society;
- L5. Find, evaluate, use and communicate information in all of its various formats and understand the ethical and legal implications of the use of that information.

In addition, a course meeting this requirement *must* include *at least one* of the following student learning outcomes:

- L6. Define career and life planning strategies and resources including goal setting and time management, learning styles and self-awareness, building a positive work ethic and leadership qualities;
- L7. Analyze beliefs, attitudes, biases, stereotypes, and behaviors in individuals and communities regarding temporary needs, problems and concerns facing society;
- L8. Understand the importance of physical fitness and its impact on an individual's physical and mental health;
- L9. Use technology to analyze problems and create solutions.

## Course Number & Title: Plumbing Technology Apprenticeship Program

Please map each appropriate component from the **Course Outline of Record** to the appropriate depth and breadth criteria. You can use any part of your COR including course outcomes, expanded content, methods of instruction/evaluation, and/or lab content.

# Depth Map: <u>Must</u> include the following:

L1. Acquire and demonstrate knowledge, skills, and attitudes that support the application of information across two or more disciplines of study;

Matching course component(s):

Demonstrate proficiency in the use of common tools; **APPT 121**; Instruction in identification and tying various types of knots, study hands on safe practices of rigging and hoisting piping materials. This course provides students with a working knowledge of mathematics and science as it applies to the plumbing industry; **APPT 162** 

**L2.** Develop practical tools that can be integrated into problem solving and decision making with current day-to-day issues and which can be adapted to future situations;

#### Matching course component(s):

Instruction in the use of a transit, builder's level, laser level and other measuring instruments in the layout and installation of piping systems. Establish the invert elevations and coordination of piping systems by means of profile drawings; APPT 134A; Students will identify information from various plan pages, details and specifications to coordinate workable drawings that do not conflict with other trades. APPT 138

L3. Identify current issues and concerns that influence health, communication or learning;

#### Matching course component(s):

Learn use and care of pipe trade tools, practice safety and heritage of the United Association. Also provides OSHA 30 certification; APPT 161; This course provides students with a working knowledge of Advanced Drawing, Plumbing Layout and Building Detailing. Practical field knowledge of plumbing duties, processes, objectives and code callouts is covered in-depth APPT 169

L4. Comprehend and apply health and well-being issues to the individual and to society;

#### Matching course component(s):

Study in the requirements for emergency response to and handling of hazardous materials. Laws of chemical hazards, electrical hazards, personal protective equipment, and confined spaces, monitoring equipment, and Federal and Cal-OSHA Standards for the construction industry will be covered; **APPT 134B** 

L5. Find, evaluate, use and communicate information in all of its various formats and understand the ethical and legal implications of the use of that information.

#### Matching course component(s):

Employment information and procedures, history and heritage of plumbing, organization and construction safety. Necessary trade skills include cutting and threading, use and care of tools, and soldering and brazing are taught along with construction terminology and plumbing definitions; **APPT 121**; The student will be able to: Perform pipefitting and welding; Perform oxy-acytelene cutting in the pipefitting industry; Learn safety related to welding and burning; **APPT 189** 

## Depth Map: <u>Additionally</u>, <u>must</u> include <u>at least one</u> of the following:

**L6.** Define career and life planning strategies and resources including goal setting and time management, learning styles and self-awareness, building a positive work ethic and leadership qualities;

## Matching course component(s):

Students will demonstrate management techniques through planning and organizing a complex piping project. Students will develop project schedules and complete coordination exercises. Students will complete their DISC profile to learn their management style and learn how to manage people through adapting to their learning styles. APPT 129

# General Education Review Request AREA VII - LIFELONG LEARNING

**L7.** Analyze beliefs, attitudes, biases, stereotypes, and behaviors in individuals and communities regarding temporary needs, problems and concerns facing society;

## Matching course component(s):

**L8.** Understand the importance of physical fitness and its impact on an individual's physical and mental health;

## Matching course component(s):

L9. Use technology to analyze problems and create solutions.

#### Matching course component(s):

This course provides students with a working knowledge of Advanced Drawing, Plumbing Layout and Building Detailing. Practical field knowledge of plumbing duties, processes, objectives and code callouts is covered indepth; APPT 169

# Breadth Mapping: please indicate all that apply (if applicable)

**B1.** Communication (analytical reading, writing, speaking, and listening skills including evaluation, synthesis, and research).

Matching course component(s): Along with prompting students to identify and analyze their individual learning and communication styles, the Project Management classes JRYM 105 & 106 empowers students to collaborate with one another in groups and team building exercises. During these activities apprenticeship students develop listening, team building, writing and public speaking skills—guided by the Instructor—and provide each other with critiques of their development along with suggestions for increased synthesis.

**B2.** Computation (application of mathematical concepts, and/or using principles of data collection and analysis to solve problems).

Matching course component(s):

In addition to completing **APPT 142** 'Related Math, Drawing & Rigging' entailing the SLO to calculate complex piping off-sets using mathematical calculations numerical values, square roots and pipe measurements. The Project Management course requires students to assess then strategize personnel resources, materials needed, estimated timeline of project completion, then clearly articulate the logic utilized to prospective industry professionals accounting for scope and tasks within construction projects.

**B3.** Clearly and precisely express their ideas in a logical and organized manner using the discipline-appropriate language.

## Matching course component(s):

The Project Management course teaches interpersonal communication techniques to deal with conflicts occurring from scheduling, resource allocation, meeting Cal/OSHA requirements regulations, specifications for contracts / requests for proposals (RFPs) including a variety of professional interactions and responsibilities.

**B4.** Community and global consciousness and responsibility (consideration of one's role in society at the local, regional, national, and global level in the context of cultural constructs and historical and contemporary events and issues).

## Matching course component(s):

Module #1 Union Heritage holds apprenticeship students accountable for knowing the communities they service both commercial and residential. Union 393 maintains a high standard of national consciousness and ethical practice, by requiring students to read and demonstrate understanding of United Association "Your Heritage and Future in the Pipe Trades" a compendium documenting the historical legacy of Union standards, practice along with service to surrounding communities.

# General Education Review Request AREA VII - LIFELONG LEARNING

**B5.** Information competency (ability to identify an information need, to find, evaluate and use information to meet that need in a legal and ethical way) and digital literacy (to teach and assess basic computer concepts and skills so that people can use computer technology in everyday life to develop new social and economic opportunities for themselves, their families, and their communities).

#### Matching course component(s):

**APPT 138** 'Advanced Drawing & Blueprint Reading' course requires apprenticeship students to maintain familiarization with up-to-date computer skills, data analysis. In this class apprentices learn the interpretation of orthographic and isometric drawings and building plans that make up working drawings for the proper installation of piping systems. The program infuses basic computing concepts and skills focused on computer technology in everyday life to develop new social and economic opportunities for themselves, their families, and their communities.

Requesting Faculty: Paul Starer	Date: <u>4/11/21</u>
Division Curriculum Rep: Brian Murphy	Date: <u>4/11/21</u>

## FOR USE BY GE SUBCOMMITTEE:

Review Committee Members: N/A

Recommended for Approval: \_\_\_\_\_ Not Recommended for Approval: \_\_\_\_\_ Date: \_\_\_\_

In the box below, please provide rationale regarding the subcommittee's recommendation:

Note: application did not go to subcommittee

## FOR USE BY CURRICULUM OFFICE:

Approved:	Denied:	CCC Co-Chair Signature:	Date:	

## Foothill College Credit Program Narrative Certificate of Achievement in Cybersecurity

# Item 1. Program Goals and Objectives

Students who earn the Certificate of Achievement in Cybersecurity will be prepared for entrylevel cybersecurity jobs in less than one year. The certificate also serves as a strong foundation for those who wish to continue their training to achieve further certificates and degrees for higher-wage positions.

There are multiple career paths in the field of cybersecurity that require different skills and abilities. Companies and institutions need thousands of individuals who can perform business and operations analysis, risk assessment of processes and systems, expose operational and technological vulnerabilities, identify potential threats, and develop recommendations and technological solutions to strengthen defenses.

Program Learning Outcome:

• Upon completion of the program, students will be able to design and implement security policies for organizations of all sizes.

# Item 2. Catalog Description

The Certificate of Achievement in Cybersecurity is designed for people who are seeking employment with companies of all types. The scope of cybersecurity is very broad, including both open-source and proprietary solutions. All organizations have a need for cybersecurity professionals. For example, a website developer is responsible for securing their website against different types of attacks; or a database engineer is responsible for granting secure access to data. The program provides 27 units of instruction on deploying secure networks, and the fundamentals of cybersecurity, ethical hacking, computer forensics and firewalls.

Requirements	Course #	Title	Units	Sequence
Core Courses	C S 30A	INTRODUCTION TO LINUX	4.5	Year 1, Winter
(27 units)	C S 50A	NETWORK BASICS (CCNA)	4.5	Year 1, Fall
	C S 53A	CYBERSECURITY FUNDAMENTALS	4.5	Year 1, Fall
	C S 53B	FIREWALLS & THREAT MANAGEMENT	4.5	Year 1, Winter
	C S 53C	ETHICAL HACKING	4.5	Year 1, Spring
	C S 53D	INTRODUCTION TO COMPUTER FORENSICS	4.5	Year 1, Spring

# Item 3. Program Requirements

# **TOTAL UNITS: 27 units**

# **Proposed Sequence:**

Year 1, Fall = 9 units Year 1, Winter = 9 units Year 1, Spring = 9 units **TOTAL UNITS: 27 units** 

## Item 4. Master Planning

Foothill College offers programs and services that empower students to achieve goals as members of the workforce. There is currently a high demand for qualified individuals who are well-versed in cybersecurity. It is one of the required disciplines in technology today. This certificate program will provide companies with individuals who are familiar with cybersecurity policy creation and the technical tools and techniques to secure all of their computing resources.

# **Item 5. Enrollment and Completer Projections**

Currently, there is a significant undersupply of cybersecurity workers compared to the demand in the Bay Area region. The median hourly wage for jobs in cybersecurity is slightly under \$60/hr. Due to the high demand and relatively high wages for cybersecurity jobs, we foresee that the demand for the certificate will be at least 40 students per year. In addition, we expect to offer the courses as hybrid/online split format, which will attract a number of students statewide.

		Year 1	Year 1: 2018-19		2: 2019-20
		Annual	Annual	Annual	Annual
Course #	<b>Course Title</b>	Sections	Enrollment	Sections	Enrollment
C S 30A	INTRODUCTION TO LINUX	4	153	4	153
C S 50A	NETWORK BASICS (CCNA)	6	107	3	81
C S 53A	CYBERSECURITY	4	62	4	48
	FUNDAMENTALS				
C S 53B	FIREWALLS & THREAT	2	26	2	28
	MANAGEMENT				
C S 53C	ETHICAL HACKING	2	39	4	71
C S 53D	INTRODUCTION TO	1	30	1	38
	COMPUTER FORENSICS				

# Item 6. Place of Program in Curriculum/Similar Programs

Foothill College offers many different computer science courses, some of which are programming-based, while others are in the enterprise-networking arena. However, there is no other program similar to the Certificate of Achievement in Cybersecurity at Foothill.

## Item 7. Similar Programs at Other Colleges in Service Area

Currently, there is a similar program at San Francisco City College. The proposed program is based on the highly successful CSSIA Training offered at Moraine Valley Community College in Illinois.

# Additional Information Required for State Submission:

**TOP Code:** 0708.00 - Computer Infrastructure and Support

**Annual Completers:** 20 plus

**Net Annual Labor Demand:** 7,053

Faculty Workload: 1

**New Faculty Positions:** 0 (courses will be taught from current FT/PT faculty)

**New Equipment:** \$0

**New/Remodeled Facilities:** \$0

**Library Acquisitions:** \$0

**Gainful Employment:** Yes

Program Review Date: December, 2025, or earlier as required by the state.

**Distance Education:** 50 – 99%



# Cybersecurity Occupations Labor Market Information Report Foothill College

# Prepared by the San Francisco Bay Center of Excellence for Labor Market Research April 2021

# Recommendation

Based on all available data, there appears to be an "undersupply" of Cybersecurity workers compared to the demand for this cluster of occupations in the Bay region and in the Silicon Valley sub-region (Santa Clara county). There is a projected annual gap of about 4,277 students in the Bay region and 1,678 students in the Silicon Valley Sub-Region.

## Introduction

This report provides student outcomes data on employment and earnings for TOP 0708.00 - Computer Infrastructure and Support programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Foothill College and in the region.

This report profiles Cybersecurity Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College.

• Computer and Information Systems Managers (11-3021): Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming. Excludes "Computer Occupations" (15-1111 through 15-1199).

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 21%

Information Security Analysts (15-1212): Plan, implement, upgrade, or monitor security measures for the
protection of computer networks and information. May ensure appropriate security controls are in place that will
safeguard digital files and vital electronic infrastructure. May respond to computer security breaches and viruses.
Excludes "Computer Network Architects" (15-1143).

Entry-Level Educational Requirement: Bachelor's degree Training Requirement: None Percentage of Community College Award Holders or Some Postsecondary Coursework: 27%

# **Occupational Demand**

#### Table 1. Employment Outlook for Cybersecurity Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Computer and Information Systems Managers	38,017	41,772	3,755	10%	19,146	3,829	\$ 73.85	\$ 91.71
Information Security Analysts	3,714	4,835	1,121	30%	2,595	519	\$ 44.51	\$ 59.46
Total	41,731	46,607	4,876	12%	21,741	4,348	\$71.24	\$88.84

Source: EMSI 2020.4

**Bay Region includes:** Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Occupation	2019 Jobs	2024 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Computer and Information Systems Managers	15,012	16,431	1,419	9%	7,485	1,497	\$ 77.52	\$ 95.17
Information Security Analysts	1,284	1,680	396	31%	906	181	\$ 46.94	\$ 63.77
Total	16,296	18,111	1,815	11%	8,391	1,678	\$75.11	\$92.70

Source: EMSI 2020.4

Silicon Valley Sub-Region includes: Santa Clara County

#### Job Postings in Bay Region and Silicon Valley Sub-Region

#### Table 3. Number of Job Postings by Occupation for latest 12 months (Mar 2020 - Feb 2021)

Table 2. Employment Outlook for Cybersecurity Occupations in Silicon Valley Sub-region

Occupation	Bay Region	Silicon Valley
Information Security Analysts	7,577	112
Computer and Information Systems Managers	1,951	49

Source: Burning Glass

#### Table 4a. Top Job Titles for Cybersecurity Occupations for latest 12 months (Mar 2020 - Feb 2021) Bay Region

Title	Bay	Title	Bay
Security Engineer	277	Chief Technology Officer	61
Senior Security Engineer	135	Director, Software Engineering	52
Information Security Engineer	115	IT Security Analyst	47
Security Analyst	114	Cyber Security Engineer	45
Information Security Analyst	80	Senior Cloud Security Engineer	40
Network Security Engineer	76	IT Security Specialist	37
Cloud Security Engineer	75	Security Operations Engineer	32
Cyber Security Analyst	68	Penetration Tester	31
Security Architect	64	Chief Information Officer	31

Source: Burning Glass

# Table 4b. Top Job Titles for Cybersecurity Occupations for latest 12 months (Mar 2020 - Feb 2021) Silicon Valley Sub-Region

Title	Silicon Valley	Title	Silicon Valley
Director Of IT	7	Director, Center Of Technology	3
Information Systems Security Officer Isso	5	Cyber Security Engineer	3
Chief Technology Officer	5	Technology Director	2
Security Analyst	4	Sterility Assurance Leader/Specialist Remote	2
Director Of Information Technology	4	Senior IT Internal Auditor	2
IT Security Analyst	3	Senior IT Director - Brm Coronary & Renal Denervation And Cardiac Surgery	2
Information Security Engineer	3	Senior Information Security Engineer	2
Information Security Consultant, Identity And Access Management	3	Security Network Engineer	2
Information Security Analyst	3	IT Director	2

Source: Burning Glass

## **Industry Concentration**

# Table 5. Industries hiring Cybersecurity Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2024)	% Change (2019- 24)	% Occupation Group in Industry (2019)
Custom Computer Programming Services	7,950	9,461	19%	19%
Computer Systems Design Services	4,558	5,127	12%	11%
Internet Publishing and Broadcasting and Web Search Portals	3,623	4,379	21%	9%
Software Publishers	3,325	4,180	26%	8%
Corporate, Subsidiary, and Regional Managing Offices	2,374	2,236	-6%	5%
Data Processing, Hosting, and Related Services	1,770	2,253	27%	4%
Electronic Computer Manufacturing	1,251	1,413	13%	3%
Other Computer Related Services	1,139	1,459	28%	3%
Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	902	1,020	13%	2%
Local Government, Excluding Education and Hospitals	721	747	4%	2%

Source: EMSI 2020.4

# Table 6. Top Employers Posting Cybersecurity Occupations in Bay Region and Silicon Valley Sub-Region(Mar 2020 - Feb 2021)

Employer	Bay	Employer	Silicon Valley
Wells Fargo	198	Capital One	10
Palo Alto Networks	184	Accion Labs	7
Cisco Systems Incorporated	153	Wells Fargo	5
Splunk	139	General Dynamics	5
Facebook	109	Ultragenyx Pharmaceutical	4
IBM	106	Thermo Fisher Scientific Inc	4
Salesforce	90	Lockheed Martin Corporation	4

Employer	Bay	Employer	Silicon Valley	
KPMG	88	Biomarin Pharmaceutical Incorporated	4	
Deloitte	84	Sonoma State University	3	
Accenture	83	Crowdstrike	3	

Source: Burning Glass

## **Educational Supply**

There are three (3) community colleges in the Bay Region issuing 71 awards on average annually (last 3 years ending 2018-19) on TOP 0708.00 - Computer Infrastructure and Support. In the Silicon Valley Sub-Region, there are no community colleges issuing awards on average annually (last 3 years) on this TOP code.

College	Subregion		Certificate Low	Total
Los Medanos	East Bay	6	5	11
Ohlone	East Bay	0	1	1
San Francisco	Mid-Peninsula	46	13	59
Total		52	19	71

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

# **Gap Analysis**

Based on the data included in this report, there is a large labor market gap in the Bay region with 4,348 annual openings for the Cybersecurity occupational cluster and 71 annual (3-year average) awards for an annual undersupply of 4,277 students. In the Silicon Valley Sub-Region, there is also a gap with 1,678 annual openings and no annual (3-year average) awards for an annual undersupply of 1,678 students.

## **Student Outcomes**

# Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0708.00 - Computer Infrastructure and Support

Metric Outcomes	Bay All CTE Program	Foothill All CTE Program	State 0708.00	Bay 0708.00	Silicon Valley 0708.00	Foothill 0708.00
Students with a Job Closely Related to Their Field of Study	75%	88%	69%	73%	77%	N/A
Median Annual Earnings for SWP Exiting Students	\$44,574	\$63,205	\$45,276	\$52,482	\$61,093	\$76,521
Median Change in Earnings for SWP Exiting Students	31%	63%	21%	26%	19%	19%
Exiting Students Who Attained the Living Wage	52%	67%	64%	57%	64%	77%

Source: Launchboard Strong Workforce Program from version 2017-18.

## Skills, Certifications and Education

#### Table 9. Top Skills for Cybersecurity Occupations in Bay Region (Mar 2020 - Feb 2021)

Skill	Posting	Skill	Posting
Information Security	3,547	Software as a Service (SaaS)	817
Python	2,121	Customer Service	802
Linux	1,622	Authentication	775

Skill	Posting	Skill	Posting
Software Development	1,502	C++	763
Information Systems	1,420	Kubernetes	756
Network Security	1,310	Business Process	743
Project Management	1,295	Threat Modeling	732
Java	1,268	Splunk	708
Software Engineering	1,253	Good Clinical Practices (GCP)	673
Cryptography	1,212	Threat Analysis	673
Penetration Testing	946	Health Insurance Portability and Accountability Act (HIPAA)	651
Security Operations	915	JavaScript	620
DevOps	906	Product Management	610
Budgeting	844	UNIX	609

Source: Burning Glass

## Table 10. Certifications for Cybersecurity Occupations in Bay Region (Mar 2020 - Feb 2021)

Certification	Posting	Certification	Posting
Certified Information Systems Security Professional (CISSP)	1,858	Cisco Certified Security Professional	210
Certified Information Systems Auditor (CISA)	921	Project Management Certification	185
Certified Information Security Manager (CISM)	807	GIAC Certified Incident Handler (GCIH)	179
SANS/GIAC Certification	730	GIAC Security Essentials Certification	168
Information Systems Certification	539	Cisco Certified Network Professional (CCNP)	128
Certified in Risk and Information Systems Control	344	GIAC Certified Intrusion Analyst	123
CompTIA Security+	296	Driver's License	120
Security Clearance	279	Project Management Professional (PMP)	105
IT Infrastructure Library (ITIL) Certification	229	Certified Ethical Hacker (CEH)	99
Cisco Certified Network Associate (CCNA)	226	Systems Security Certified Practitioner (SSCP)	83

Source: Burning Glass

Note: 68% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

#### Table 11. Education Requirements for Cybersecurity Occupations in Bay Region

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings		
High school or vocational training	348	6%		
Associate's degree	85	1%		
Bachelor's degree	5,036	87%		
Master's degree and higher	335	6%		

Source: Burning Glass

## Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and

Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

# Sources

O\*Net Online Labor Insight/Jobs (Burning Glass) Economic Modeling Specialists International (EMSI) CTE LaunchBoard www.calpassplus.org/Launchboard/ Statewide CTE Outcomes Survey Employment Development Department Unemployment Insurance Dataset Living Insight Center for Community Economic Development Chancellor's Office MIS system

# Contacts

For more information, please contact:

• Leila Jamoosian, Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), <u>leila@baccc.net</u>

• John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, <u>icarrese@ccsf.edu</u> or (415) 267-6544

## FOOTHILL COLLEGE Temporary Program Creation Process Feedback Form for New Programs

Until the new permanent program creation process has been determined, as part of the temporary program creation process this form shall be used by a department to gather feedback on a new program from key governance committees on campus. A complete program narrative and supporting documentation must be submitted to the groups listed below (simultaneous submission is recommended). Each committee will provide initial feedback via email within two weeks but might also provide additional feedback after their monthly meetings.

After a two-week period, regardless of whether feedback has been received from the three committees, the Division Curriculum Committee may consider the new program for approval. Following Division CC approval, please forward this completed form to the Office of Instruction.

**Faculty Author(s):** Mike Murphy and Bita Mazloom **Division:** STEM (PSME)

**Program Title:** Cybersecurity **Program Units:** 27

## Workforce/CTE Program (Y/N): Y

*Please note that Workforce/CTE status is dependent on the TOP Code assigned to the program.* 

## Type of Award:

\_\_\_\_\_ Non-transcriptable credit certificate

AA/AS Degree (local) AA-T/AS-T Degree (ADT)

\_\_\_\_ Noncredit certificate

X Certificate of Achievement

# EQUITY & EDUCATION

https://foothill.edu/gov/equity-and-education/

# Date of meeting:

## **Comments:**

Submitted to Equity & Education committee on February 11, 2021. No feedback has been received.

# **REVENUE & RESOURCES**

https://foothill.edu/gov/revenue-and-resources/

## Date of meeting:

## **Comments:**

Submitted to Revenue & Resources committee on February 11, 2021. No feedback has been received.

# ADVISORY COUNCIL

https://foothill.edu/gov/council/

# Date of meeting:

**Comments:** 

Submitted to Advisory Council on February 11, 2021. No feedback has been received.

## **Division Curriculum Committee Approval Date:** 2/25/21

Division CC Representative: Zach Cembellin

## Foothill College Credit Program Narrative Certificate of Achievement in IT Support

# Item 1. Program Goals and Objectives

Students who earn the Certificate of Achievement in IT Support will be prepared for entry-level IT support jobs in less than one year. The certificate also serves as a strong foundation for those who wish to continue their training to achieve further certificates and degrees for higher-wage positions.

IT support certification exposes students to skills and knowledge necessary to support end users who run Linux, Windows and the Microsoft Office applications. Of primary importance for the IT support technician is the development of soft skills. These interpersonal competencies are fostered to enable the IT support technician to successfully communicate in both written and verbal forms, as well as utilize techniques in conflict management.

Program Learning Outcome:

• Upon completion of the program, students will be able to provide desktop and helpdesk support in organizations of all sizes.

# Item 2. Catalog Description

The Certificate of Achievement in IT Support is designed for people who are seeking employment with companies of all types. All organizations have a need for IT support professionals. The program provides 18 units of instruction on industry standard skills to understand, deploy and maintain computing devices and network devices. Students learn a range of topics that cover the technical principals of networking, the fundamentals of cybersecurity, hardware configuration, operations systems and soft skills.

Requirements	Course #	Title	Units	Sequence
Core Courses (18 units)	C S 30A	INTRODUCTION TO LINUX	4.5	Year 1, Spring
(18 units)	C S 50A	NETWORK BASICS (CCNA)	4.5	Year 1, Winter
	C S 53A	CYBERSECURITY FUNDAMENTALS	4.5	Year 1, Spring
	C S 56B	IT ESSENTIALS	4.5	Year 1, Fall

# Item 3. Program Requirements

TOTAL UNITS: 18 units

## **Proposed Sequence:**

Year 1, Fall = 4.5 units Year 1, Winter = 4.5 units Year 1, Spring = 9 units **TOTAL UNITS: 18 units** 

# Item 4. Master Planning

Foothill College offers programs and services that empower students to achieve goals as members of the workforce. There is currently a high demand for qualified individuals who are well-versed in IT support. It is one of the required disciplines in technology today. This certificate program will provide companies with individuals who are familiar with IT support in both the desktop and server environments.

# **Item 5. Enrollment and Completer Projections**

Currently, there is a significant undersupply of IT support workers compared to the demand in the Bay Area region. The median hourly wage for jobs in IT support is slightly over \$40/hr. Due to the high demand and relatively high wages for IT support jobs, we foresee that the demand for the certificate will be at least 20 students per year. In addition, we expect to offer the courses as hybrid/online split format, which will attract a number of students statewide.

		Year 1: 2018-19		Year 2: 2019-20	
		Annual	Annual	Annual	Annual
Course #	<b>Course Title</b>	Sections	Enrollment	Sections	Enrollment
C S 30A	INTRODUCTION TO LINUX	4	153	4	153
C S 50A	NETWORK BASICS (CCNA)	6	107	3	81
C S 53A	CYBERSECURITY	4	62	4	48
	FUNDAMENTALS				
C S 56B*	IT ESSENTIALS	Not yet		Not yet	
		offered		offered	

\*C S 56B is newly offered, so recent historical enrollment data is not applicable.

# Item 6. Place of Program in Curriculum/Similar Programs

Foothill College offers many different computer science courses, some of which are programming-based, while others are in the enterprise-networking arena. However, there is no other program similar to the Certificate of Achievement in IT Support at Foothill.

# Item 7. Similar Programs at Other Colleges in Service Area

Currently, there is a similar program at San Francisco City College and Ohlone College. The proposed program is based on the highly successful CompTIA model.

# Additional Information Required for State Submission:

**TOP Code:** 0708.00 - Computer Infrastructure and Support

Annual Completers: 20 plus

Net Annual Labor Demand: 3,411

Faculty Workload: 1

**New Faculty Positions:** 0 (courses will be taught from current FT/PT faculty)

**New Equipment:** \$0

**New/Remodeled Facilities:** \$0

**Library Acquisitions:** \$0

Gainful Employment: Yes

Program Review Date: December, 2025, or earlier as required by the state.

**Distance Education:** 50 – 99%



# IT Essentials Occupations Labor Market Information Report Foothill College

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research May 2019

# Recommendation

Based on all available data, there appears to be a significant undersupply of IT Essentials workers compared to the demand for this cluster of occupations in the Bay region and in the Silicon Valley sub-region (Santa Clara County). There is a projected annual gap of about 3,349 students in the Bay region and 1,414 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0708.00 - Computer Infrastructure and Support in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Foothill College and in the region.

# Introduction

This report profiles IT Essentials Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College.

• Computer Systems Analysts (SOC 15-1121): Analyze science, engineering, business, and other data processing problems to implement and improve computer systems. Analyze user requirements, procedures, and problems to automate or improve existing systems and review computer system capabilities, workflow, and scheduling limitations. May analyze or recommend commercially available software.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 21%

• Computer, Automated Teller, and Office Machine Repairers (SOC 49-2011): Repair, maintain, or install computers, word processing systems, automated teller machines, and electronic office machines, such as duplicating and fax machines.

Entry-Level Educational Requirement: Some college, no degree

Training Requirement: Short-term on-the-job training

Percentage of Community College Award Holders or Some Postsecondary Coursework: 53%

# **Occupational Demand**

Table 1. Employment Outlook for IT Essentials Occupations in Bay Region

Occupation	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open- ings	Average Annual Open- ings	10% Hourly Wage	Median Hourly Wage
Computer Systems Analysts	32,337	36,472	4,136	13%	14,989	2,998	\$33.10	\$53.23
Computer, Automated Teller, and Office Machine Repairers	4,265	4,094	(171)	(4%)	2,064	413	\$12.89	\$18.54
Total	36,602	40,566	3,964	11%	17,053	3,411	\$30.75	\$49.19

Source: EMSI 2019.2

Bay Region includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Occupation	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open- ings	Average Annual Open- ings	10% Hourly Wage	Median Hourly Wage
Computer Systems Analysts	14,086	15,593	1,507	11%	6,305	1,309	\$32.22	\$55.60
Computer, Automated Teller, and Office Machine Repairers	1,114	1,076	(37)	(3%)	536	106	\$12.15	\$17.78
TOTAL	15,199	16,670	1,470	10%	6,841	1,415	\$30.75	\$52.83

#### Table 2. Employment Outlook for IT Essentials Occupations in Silicon Valley Sub-Region

Source: EMSI 2019.2

Silicon Valley Sub-Region includes Santa Clara County

# Job Postings in Bay Region and Silicon Valley Sub-Region

#### Table 3. Number of Job Postings by Occupation for latest 12 months (May 2018 - April 2019)

Occupation	Bay Region	Silicon Valley
Computer Systems Analysts	15,565	6,392
Computer, Automated Teller, and Office Machine Repairers	177	65
Total	15,742	6,457

Source: Burning Glass

#### Table 4a. Top Job Titles for IT Essentials Occupations for latest 12 months (May 2018 - April 2019) Bay Area Region.

Common Title	Bay	Common Title	Bay
Business Systems Analyst	2,566	Implementation Consultant	140
Developer	930	Technical Business Analyst	136
Systems Analyst	870	Sap Fico	105
Technical Consultant	590	Computer Systems Analyst	94
Information Technology Analyst	337	Hybris Developer	92
Information Technology Consultant	308	Fullstack Developer	86
Technical Analyst	290	Systems Integrator	84
Software Development Engineer	225	Reactis Developer	81
Information Technology Business Analyst	217	React Js Developer	76
Business Analyst	217	Systems Engineer	75
Oracle Consultant	185	Technology Analyst	73
Aem Developer	180	Services Engineer	72
Team Lead	175	Financial Systems Analyst	72
Oracle Functional Consultant	146	Nodejs Developer	69
Mulesoft Developer	143	Lead Java Technician	66

#### Table 4.b Top Job Titles for IT Essentials Occupations for latest 12 months (May 2018 - April 2019) Silicon Valley

Common Title	Silicon Valley	Common Title	Silicon Valley
Business Systems Analyst	886	Information Technology Business Analyst	57
Developer	459	Spark Developer	55
Systems Analyst	332	Systems Engineer	49
Technical Consultant	268	Computer Systems Analyst	49
Software Development Engineer	118	Technology Analyst	46
Information Technology Analyst	108	Implementation Consultant	46
Oracle Consultant	102	Golang Developer	43
Information Technology Consultant	102	Fullstack Developer	43
Aem Developer	100	Lead Java Technician	42
Oracle Functional Consultant	97	Team Lead	41
Technical Analyst	94	Node js Developer	40

Business Analyst	90	Services Engineer	36
Sap Fico	78	React Js Developer	31
Systems Integrator	67	Technical Business Analyst	30
Mulesoft Developer	60	Sap Functional Analyst	30

Source: Burning Glass

# **Industry Concentration**

## Table 5. Industries hiring IT Essentials Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2018)	Jobs in Industry (2022)	% Change (2018- 22)	% in Industry (2018)
Custom Computer Programming Services (541511)	9,055	10,203	13%	24.2%
Computer Systems Design Services (541512)	6,042	5,461	11%	14.6%
Electronic Computer Manufacturing (334111)	2,133	2,038	5%	5.5%
Internet Publishing and Broadcasting and Web Search Portals (519130)	2,405	1,857	30%	5.0%
Corporate, Subsidiary, and Regional Managing Offices (551114)	1,873	1,776	5%	4.8%
Data Processing, Hosting, and Related Services (518210)	1,960	1,498	31%	4.0%
Other Computer Related Services (541519)	1,533	1,303	18%	3.5%
Software Publishers (511210)	1,467	1,263	16%	3.4%
Computer and Computer Peripheral Equipment and Software Merchant Wholesalers (423430)	777	809	(4%)	2.2%
Electronics Stores (443142)	555	653	(15%)	1.7%
Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) (541715)	481	517	(7%)	1.4%
Local Government, Excluding Education and Hospitals (903999)	500	486	3%	1.3%
Administrative Management and General Management Consulting				
Services (541611)	454	384	18%	1.0%
Temporary Help Services (561320)	401	381	5%	1.0%
Source: EMSL 2019 2				

Source: EMSI 2019.2

# Table 6. Top Employers Posting IT Essentials Occupations in Bay Region and Silicon Valley Sub-Region (May 2018 - April 2019)

Employer			Bay	Employer	Silicon Valley
Business Systems Analyst	886	Computer Systems Analyst	49	Cynet Systems Inc	122
Developer	459	Technology Analyst	46	Google Inc.	119
Systems Analyst	332	Implementation Consultant	46	Apple Inc.	77
Technical Consultant	268	Golang Developer	43	Cisco Systems Incorporated	51
Software Development Engineer	118	Fullstack Developer	43	Infosys	44
Information Technology					
Analyst	108	Lead Java Technician	42	Accenture	39
Oracle Consultant	102	Team Lead	41	IBM	38
Information Technology					
Consultant	102	Nodejs Developer	40	Cynet Systems	34
Aem Developer	100	Services Engineer	36	Techfetch Com	29
Oracle Functional Consultant	97	React Js Developer	31	Stanford University	28
Technical Analyst	94	Technical Business Analyst	30	Servicenow	26
Business Analyst	90	Sap Functional Analyst	30	Wipro	23
Sap Fico	78	SAP Business Analyst	29	Vmware Incorporated	23
Systems Integrator	67	Solutions Architect	27	Vdart, Inc	23

Mulesoft Developer	60	Reactis Developer	27	Truglobal	23
Information Technology					
Business Analyst	57	Mongodb Developer	26	Dgn Technologies	23
Spark Developer	55	Systems Architect	25	Intellipro Incorporated	22
Systems Engineer	49	Service Developer	25	Inficare Technologies	22

Source: Burning Glass

# Educational Supply

There are six community colleges in the Bay Region issuing 62 awards on average annually (last 3 years) on TOP 0708.00 - Computer Infrastructure and Support. There is one college in the Silicon Valley Sub-Region issuing one award on average annually (last 3 years) on this TOP code.

College	Sub-Region	Associates	Certificates	Noncredit	Total
Contra Costa	East Bay		1		1
Gavilan	Silicon Valley	1			1
Los Medanos	East Bay	4	4		8
Ohlone	East Bay		1		1
San Francisco	Mid-Peninsula	39	9		48
San Mateo	Mid-Peninsula	1	2		3
Total Bay Region		44	18	0	62
Total Silicon Valley Sub-Region		1	0	0	1

Source: IPEDS, Data Mart and Launchboard

NOTE: Headcount of students who took one or more courses is for 2016-17. The annual average for awards is 2014-17 unless there are only awards in 2016-17. The annual average for other postsecondary is for 2013-16.

## Table 8. Related Bay Region programs listed in Chancellor's Office Curriculum Inventory (COCI).

There are 15 colleges in the Bay Region with programs on TOP 0708.00 - Computer Infrastructure and Support, TOP 0708.10 - Computer Networking and TOP 0708.20 - Computer Support in the Bay Region per COCI.

Cabrillo	Foothill	Monterey Peninsula
Chabot	Hartnell	Ohlone
Contra Costa	Laney	San Francisco City
De Anza	Las Positas	San Jose City
Diablo Valley	Merritt	Skyline

# **Gap Analysis**

Based on the data included in this report, there is a large labor market gap in the Bay region with 3,411 annual openings for the IT Essentials occupational cluster and 62 annual (3-year average) awards for an annual undersupply of 3,349 students. In the Silicon Valley Sub-Region, there is also a gap with 1,415 annual openings and 1 annual (3-year average) awards for an annual undersupply of 1,414 students.

# **Student Outcomes**

 Table 9. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0708.00 - Computer

 Infrastructure and Support

2015-16	Bay (All CTE Programs)	Foothill College (All CTE Programs)	State (0708.00)	Bay (0708.00)	Silicon Valley (0708.00)	Foothill College (0708.00)
% Employed Four Quarters After Exit	74%	77%	66%	72%	75%	n/a

Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$15,301	\$10,986	\$13,156	\$15,231	n/a
Median % Change in Earnings	46%	82%	37%	47%	73%	n/a
% of Students Earning a Living Wage	63%	76%	62%	68%	76%	n/a

Source: Launchboard Pipeline (version available on 5/9/19)

# Skills, Certifications and Education

## Table 10. Top Skills for IT Essentials Occupations in Bay Region (May 2018 - April 2019)

Skill	Postings	Skill	Postings	Skill	Postings
Cynet Systems Inc	184	Salesforce	45	Stanford University	29
Google Inc.	143	Workday, Inc	43	Amazon	29
Accenture	134	Techfetch Com	43	Intellipro Incorporated	28
Kaiser Permanente	103	Genentech	40	Inficare Technologies	28
Apple Inc.	80	University California	39	Fiserv	28
Cisco Systems				University Of California	
Incorporated	71	Truglobal	34	Berkeley	27
IBM	68	Vdart, Inc	33	Uber	27
Infosys	66	Republic Bancorp	33	Xoriant	26
Facebook	63	Mumba Technologies	33	Vmware Incorporated	26
Cynet Systems	55	Microsoft Corporation	33	Technosoft	26
Wells Fargo	53	Scoop Technologies	31	Servicenow	26
Matchpoint Solutions		University Of California San			
Incorporated	52	Francisco	30	Bayone Solutions	26
Deloitte	52	SAP	30	Adobe Systems	26
		Lucile Packard Childrens		-	
Bio-Rad Laboratories	51	Hospital	30	Walmart / Sam's	25
Wipro	45	K Anand Corporation	30	Oracle	25

Source: Burning Glass

## Table 11. Certifications for IT Essentials Occupations in the Bay Region (May 2018 - April 2019)

Note: 91% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Certification	Postings	Certification	Postings
SQL	3,196	Budgeting	863
Business Process	2,982	Scheduling	846
Business Systems	2,781	Software Engineering	841
Business Systems Analysis	2,713	Scrum	835
Oracle	2,623	Change Management	771
Project Management	2,598	Extensible Markup Language (XML)	752
Systems Analysis	2,227	Project Planning and Development Skills	699
Java	2,167	Systems Development Life Cycle (SDLC)	662
		Extraction Transformation and Loading	
Business Analysis	1,937	(ETL)	653
Software Development	1,808	Software as a Service (SaaS)	636
SAP	1,689	User Acceptance Testing (UAT)	621
JavaScript	1,589	Process Improvement	620
Python	1,517	Data Warehousing	616
Salesforce	1,399	Customer Contact	598
Customer Service	1,371	Bank Secrecy Act (BSA)	593
Enterprise Resource Planning (ERP)	1,259	Tableau	592
Information Systems	1,199	Unit Testing	589
Quality Assurance and Control	1,093	Atlassian JIRA	589
Technical Support	1,015	Technical Writing / Editing	586

Linux	879	Microsoft Visio	584
Data Analysis	879	Business Solutions	583

Source: Burning Glass

## Table 12. Education Requirements for IT Essentials Occupations in Bay Region

Note: 50% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	328	4%
Associate Degree	228	3%
Bachelor's Degree or Higher	6,836	93%

Source: Burning Glass

# Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

## Sources

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# Contacts

For more information, please contact:

- Doreen O'Donovan, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), <u>doreen@baccc.net</u> or (831) 479-6481
- John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, <u>icarrese@ccsf.edu</u> or (415) 267-6544

## FOOTHILL COLLEGE Temporary Program Creation Process Feedback Form for New Programs

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After a two-week period, regardless of whether feedback has been received from the three committees, the Division Curriculum Committee may consider the new program for approval. Following Division CC approval, please forward this completed form to the Office of Instruction.

**Faculty Author(s):** Mike Murphy and Bita Mazloom **Division:** STEM (PSME)

**Program Title:** IT Support **Program Units:** 18

## Workforce/CTE Program (Y/N): Y

*Please note that Workforce/CTE status is dependent on the TOP Code assigned to the program.* 

## Type of Award:

\_\_\_\_\_ Non-transcriptable credit certificate

AA/AS Degree (local) AA-T/AS-T Degree (ADT)

\_\_\_\_ Noncredit certificate

X Certificate of Achievement

# EQUITY & EDUCATION

https://foothill.edu/gov/equity-and-education/

## Date of meeting:

## **Comments:**

Submitted to Equity & Education committee on February 11, 2021. No feedback has been received.

# **REVENUE & RESOURCES**

https://foothill.edu/gov/revenue-and-resources/

## Date of meeting:

## **Comments:**

Submitted to Revenue & Resources committee on February 11, 2021. No feedback has been received.

# ADVISORY COUNCIL

https://foothill.edu/gov/council/

# Date of meeting:

**Comments:** 

Submitted to Advisory Council on February 11, 2021. No feedback has been received.

## **Division Curriculum Committee Approval Date:** 2/25/21

Division CC Representative: Zach Cembellin

# **FOOTHILL COLLEGE Noncredit Program Narrative** Certificate of Competency in English as a Second Language for College and Careers (High-Intermediate)

# Item 1. Program Goals and Objectives

Students will demonstrate aural, written, and spoken English at increasingly more complex levels of expression in preparation for pursing a degree, transferring to a university, or increasing career opportunities.

# **Program Learning Outcomes:**

After completing the program, students will be prepared to begin level 4 ESLL credit course work through gaining proficiency in the following areas:

- increase English proficiency in academic reading, writing, listening, speaking, and grammar skills necessary to be successful in more advanced ESLL courses and courses in other disciplines.
- develop awareness of student success strategies for reading, writing, and classroom communication.
- gain confidence to seek assistance in class and around campus as needed to selfadvocate.

# **Item 2. Catalog Description**

The Certificate of Competency in English as a Second Language for College and Careers (High-Intermediate) prepares students to advance to higher levels of ESL, both credit and non-credit mirrored, by providing foundational English-language skills for students to progress towards higher level coursework as they continue their educational pathways. Students will be exposed to academic skills courses for learners of English as an additional language in which they will learn and practice how to identify main ideas in short texts. apply words learned in their given form by using them to write original sentences, and correctly use a wide range of grammatical forms, including modals in the past and present to express advisability, regret, and certainty, and appropriately use verb forms.

Requirement	Course #	Title	Hours	Sequence
<b>Required Core</b>	NCEL 426	High-Intermediate	60	Year 1, fall
(168-240		Grammar		
hours)	NCEL 427	High-Intermediate Reading	60	Year 1, winter
		Skills		
	NCEL 425	Developing Listening &	120	Year 1, spring
		Speaking Skills		
	OR			
	NCEL 480	ESL for Job Searching	48	
TOTAL HOURS 169-240 hours				

# **Item 3. Program Requirements**

TOTAL HOURS: 168-240 hours

# Item 4. Master Planning

# History of the program proposal origins and curriculum offerings

The courses in the Certificate of Competency in English as a Second Language for College and Careers (High-Intermediate), which were originally written as credit courses three levels below transfer, can better serve students as noncredit classes, particularly for students who are transitioning from local adult schools to community college. The faculty who developed these courses worked with their colleagues in the adult schools in our service area to ensure that the courses in the certificate created a ladder from the adult school ESL curriculum to the college's ESL curriculum.

This program prepares students to advance to higher levels of ESL, both credit and noncredit, and provides the foundations for students to advance to higher levels of ESL, both credit and noncredit mirrored, by providing foundational English-language skills for students to progress towards higher level coursework as they continue their educational pathways.

# **College Mission**

The Foothill College mission statement articulates: "Believing a well-educated population is essential to sustaining and enhancing a democratic society, Foothill College offers programs and services that empower students to achieve their goals as members of the workforce, as future students and as global citizens. We work to obtain equity in achievement of student outcomes for all California student populations, and are guided by our core values of honesty, integrity, trust, openness, transparency, forgiveness, and sustainability."

This program is in keeping with the Foothill College mission statement in that students who complete the certificate are "empowered to achieve their" educational goals. Whether students are advancing into credit instruction, or refining their language skills for work, this program will provide students with the linguistic preparation they need to succeed.

The program also aligns with the college's mission by providing opportunities for students to enhance their language skills including listening, speaking, reading, and writing. Since the courses in this program have no prerequisites, students completing the certificate will be encouraged to continue through the ESL credit sequence.

# College/District Master Plan

According to the Foothill Educational Master Plan, "the college seeks to fulfill its education mission by supporting student achievement of certain learning outcomes, which emphasize knowledge and skills development beyond those of a specific discipline. Regardless of their educational goal or the number of courses and quarters completed successfully, Foothill college students should demonstrate equitable outcomes and student success in areas that include written and oral communication in English, mathematics, critical and analytical thinking, creativity, teamwork, responsibility, and other proficiencies."

Furthermore, to address the achievement gap displayed among student population groups, the college prioritized success course completion rates and Basic Skills/ESL completion rates, with a specific equity goal to "collaborate with K-12, adult education, and four-year institutions in ways that serve students and society." As stated in the Plan, "Strengthening the pathway to transfer by collaborating with K-12, adult education, and four-year institutions can also contribute to developing a quality workforce who participates in higher-wage, higher-skill positions." The faculty who developed these courses worked with their colleagues in the adult schools in our service area to ensure that the courses in the program created a ladder from the adult school ESL curriculum to the college's ESL curriculum.

Finally, the Foothill Educational Master Plan indicates that "increases in the senior population may affect course offerings, perhaps increasing emphasis on non-credit, community education, skills building, or advanced technical training." This program would be part of an overall endeavor in which the college has increased offerings in noncredit, with noncredit enrollment increasing from 1,566 to 4,389 students (+180%).

# *Objectives and conditions of higher education and community college education in California - statewide master planning*

The report, "Preparing Students for Careers and College through Noncredit Enhanced Funding: Fiscal Year 2015-16," highlights the role of the California Community Colleges in advancing students' basic education and employment skills through the use of noncredit enhanced funding, stating, "Students who attain this education and training are better equipped to succeed in the world."

According to the report, "There are still opportunities to develop Career Development and College Preparation certificates in the future," and advises that "more colleges may develop certificates of competency or certificates of completion *in basic skills and English as a second language.*" The report also suggests that "alternatively, colleges may decide to transition credit basic skills and credit English as a second language programs to noncredit," as has been done for the courses in this program. The report states, "Students will benefit from the reduced costs and preservation of their federal financial aid status. Currently students are capped at 30 credit units of basic skills under federal regulations. This change can create a more even distribution of noncredit use throughout the system."

# Additional Information Required for State Submission:

TOP Code: 4930.87 - English as a Second Language-Integrated

Program Review Date: AY 2025-26

**Distance Education:** 0%

**CDCP Eligibility Criteria:** English as a Second Language (ESL)

# **FOOTHILL COLLEGE Temporary Program Creation Process Feedback Form for New Programs**

Until the new permanent program creation process has been determined, as part of the temporary program creation process this form shall be used by a department to gather feedback on a new program from key governance committees on campus. A complete program narrative and supporting documentation must be submitted to the groups listed below (simultaneous submission is recommended). Each committee will provide initial feedback via email within two weeks but might also provide additional feedback after their monthly meetings.

After a two-week period, regardless of whether feedback has been received from the three committees, the Division Curriculum Committee may consider the new program for approval. Following Division CC approval, please forward this completed form to the Office of Instruction.

Faculty Author(s): Amy Sarver, Katie Ha **Division:** Language Arts

**Program Title:** Certificate of Competency in English as a Second Language for College and Careers (High-Intermediate) **Program Units:** 0

## Workforce/CTE Program (Y/N): N

Please note that Workforce/CTE status is dependent on the TOP Code assigned to the program.

## **Type of Award:**

\_\_\_\_\_ Non-transcriptable credit certificate \_\_ Certificate of Achievement

\_\_\_\_\_ AA/AS Degree (local) \_\_\_\_ AA-T/AS-T Degree (ADT)

X Noncredit certificate

## **EQUITY & EDUCATION**

https://foothill.edu/gov/equity-and-education/

## Date of meeting:

**Comments:** 

Submitted to Equity & Education committee in spring 2020 quarter. The only feedback we received was on June 3, 2020, from Ram: "Approved. Beautiful."

## **REVENUE & RESOURCES**

https://foothill.edu/gov/revenue-and-resources/

## Date of meeting:

#### **Comments:**

Submitted to Revenue & Resources committee in spring 2020 quarter. No feedback was provided within the 2-week period.

## **ADVISORY COUNCIL**

https://foothill.edu/gov/council/

## Date of meeting:

## **Comments:**

Submitted to Advisory Council in spring 2020 quarter. No feedback was provided within the 2-week period.

## **Division Curriculum Committee Approval Date:** 3/11/21

Division CC Representative: Allison Herman

# FOOTHILL COLLEGE Noncredit Program Narrative Certificate of Competency in English as a Second Language for College and Careers (Advanced)

# **Item 1. Program Goals and Objectives**

Students will demonstrate aural, written, and spoken English at increasingly more complex levels of expression in preparation for pursing a degree, transferring to a university, or increasing career opportunities.

Program Learning Outcomes:

After completing the program, students will be prepared to begin transfer-level credit course work through gaining proficiency in the following areas:

- increase English proficiency in academic reading, writing, listening, speaking, and grammar skills necessary for academic success and professional advancement.
- develop awareness of student success strategies for reading, writing, and classroom communication.
- gain confidence to seek assistance in class and around campus as needed to selfadvocate.

# Item 2. Catalog Description

The Certificate of Competency in English as a Second Language for College and Careers (Advanced) prepares students for transfer-level credit course work by providing foundational English-language skills for students to progress towards higher level coursework as they continue their educational and career pathways. Students will be exposed to academic skills courses for learners of English as an additional language in which they will learn and practice how to identify main ideas in a variety of texts, apply new vocabulary in original student writing, and use a wide range of accurate grammatical forms critical to classroom and workplace success.

Requirement	Course #	Title	Hours	Sequence
<b>Required</b> Core	NCEL 436	Advanced Grammar	60	Year 1, fall
(168-180	NCEL 437	Basic Composition Skills	60	Year 1, winter
hours)	NCEL 435	Listening/Speaking for Academic Purposes	60	Year 1, spring
	OR	_		
	NCEL 480	ESL for Job Searching	48	

# **Item 3. Program Requirements**

# TOTAL HOURS: 168-180 hours

# Item 4. Master Planning

# History of the program proposal origins and curriculum offerings

The courses in the Certificate of Competency in English as a Second Language for College and Careers (Advanced), which were originally written as credit courses three levels below transfer, can better serve students as noncredit classes, particularly for students who are transitioning from local adult schools to community college. The faculty who developed these courses worked with their colleagues in the adult schools in our service area to ensure that the courses in the certificate created a ladder from the adult school ESL curriculum to the college's ESL curriculum.

This program prepares students to advance to higher levels of ESL, both credit and noncredit, and provides the foundations for students to advance to higher levels of ESL, both credit and noncredit mirrored, by providing foundational English-language skills for students to progress towards higher level coursework as they continue their educational pathways.

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This program is in keeping with the Foothill College mission statement in that students who complete the certificate are "empowered to achieve their" educational goals. Whether students are advancing into credit instruction, or refining their language skills for work, this program will provide students with the linguistic preparation they need to succeed.

The program also aligns with the college's mission by providing opportunities for students to enhance their language skills including listening, speaking, reading, and writing. Since the courses in this program have no prerequisites, students completing the certificate will be encouraged to continue through the ESL credit sequence.

# College/District Master Plan

According to the Foothill Educational Master Plan, "the college seeks to fulfill its education mission by supporting student achievement of certain learning outcomes, which emphasize knowledge and skills development beyond those of a specific discipline. Regardless of their educational goal or the number of courses and quarters completed successfully, Foothill college students should demonstrate equitable outcomes and student success in areas that include written and oral communication in English, mathematics, critical and analytical thinking, creativity, teamwork, responsibility, and other proficiencies."

Furthermore, to address the achievement gap displayed among student population groups, the college prioritized success course completion rates and Basic Skills/ESL completion rates, with a specific equity goal to "collaborate with K-12, adult education, and four-year institutions in ways that serve students and society." As stated in the Plan, "Strengthening the pathway to transfer by collaborating with K-12, adult education, and four-year institutions can also contribute to developing a quality workforce who participates in higher-wage, higher-skill positions." The faculty who developed these courses worked with their colleagues in the adult schools in our service area to ensure that the courses in the program created a ladder from the adult school ESL curriculum to the college's ESL curriculum.

Finally, the Foothill Educational Master Plan indicates that "increases in the senior population may affect course offerings, perhaps increasing emphasis on non-credit, community education, skills building, or advanced technical training." This program would be part of an overall endeavor in which the college has increased offerings in noncredit, with noncredit enrollment increasing from 1,566 to 4,389 students (+180%).

# *Objectives and conditions of higher education and community college education in California - statewide master planning*

The report, "Preparing Students for Careers and College through Noncredit Enhanced Funding: Fiscal Year 2015-16," highlights the role of the California Community Colleges in advancing students' basic education and employment skills through the use of noncredit enhanced funding, stating, "Students who attain this education and training are better equipped to succeed in the world."

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#### Additional Information Required for State Submission:

TOP Code: 4930.87 - English as a Second Language-Integrated

Program Review Date: AY 2025-26

**Distance Education:** 0%

**CDCP Eligibility Criteria:** English as a Second Language (ESL)

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After a two-week period, regardless of whether feedback has been received from the three committees, the Division Curriculum Committee may consider the new program for approval. Following Division CC approval, please forward this completed form to the Office of Instruction.

Faculty Author(s): Amy Sarver, Katie Ha **Division:** Language Arts

**Program Title:** Certificate of Competency in English as a Second Language for College and Careers (Advanced) **Program Units:** 0

#### Workforce/CTE Program (Y/N): N

Please note that Workforce/CTE status is dependent on the TOP Code assigned to the program.

#### **Type of Award:**

\_\_\_\_\_ Non-transcriptable credit certificate \_\_ Certificate of Achievement

\_\_\_\_\_ AA/AS Degree (local) \_\_\_\_ AA-T/AS-T Degree (ADT)

X Noncredit certificate

#### **EQUITY & EDUCATION**

https://foothill.edu/gov/equity-and-education/

#### Date of meeting:

**Comments:** 

Submitted to Equity & Education committee in spring 2020 quarter. The only feedback we received was on June 3, 2020, from Ram: "Approved. Beautiful."

#### **REVENUE & RESOURCES**

https://foothill.edu/gov/revenue-and-resources/

#### Date of meeting:

#### **Comments:**

Submitted to Revenue & Resources committee in spring 2020 quarter. No feedback was provided within the 2-week period.

#### **ADVISORY COUNCIL**

https://foothill.edu/gov/council/

#### Date of meeting:

#### **Comments:**

Submitted to Advisory Council in spring 2020 quarter. No feedback was provided within the 2-week period.

#### **Division Curriculum Committee Approval Date:** 3/11/21

Division CC Representative: Allison Herman

### **Course Reactivation Proposal**

## R T F070B : ADVANCED CLINICAL EXPERIENCE: INTERVENTIONAL RADIOGRAPHY II

**Effective Term** Summer 2021

Subject Radiologic Technology (R T) Course Number F070B

**Department** Radiologic Technology (R T)

#### **Division** Biological and Health Sciences (1BH)

Units

13

Course Title ADVANCED CLINICAL EXPERIENCE: INTERVENTIONAL RADIOGRAPHY II

Former ID

Cross Listed

**Related Courses** 

Maximum Units 13

**Does this course meet on a weekly basis?** Yes

Weekly Lecture Hours

Weekly Lab Hours 40

Weekly Out of Class Hours 0

**Special Hourly Notation** 

This is a clinical laboratory course.

**Total Contact Hours** 480

**Total Student Learning Hours** 480

Repeatability Statement Not Repeatable

**Credit Status** Credit

**Degree Status** Non-Applicable

Is Basic Skills applicable to this course? No

**Grading** Letter Grade (Request for P/NP)

Will credit by exam be allowed for this course? No

Honors No

Distance Learning No

**Degree or Certificate Requirement** None of the above (Stand Alone course)

## Stand Alone

If a Foothill credit course is not part of a state-approved associate's degree, certificate of achievement, or the Foothill GE pattern, it is considered by the state to be a "Stand Alone Course." Per Title 5, local curriculum committees must review and approve proposed Stand Alone courses to ensure that they are consistent with credit course standards (§55002), the community college mission, and that there is sufficient need and resources for the course. To be compliant with state regulations, there must be a completed, approved Stand Alone form on file in the Office of Instruction. Per our local process, the same process of review and approval is used for noncredit Stand Alone courses.

Are you requesting Stand Alone approval for the course on a temporary or permanent basis?

• Temporary means the course will be incorporated into a new degree or certificate that is not yet State approved.

• Permanent means there are no plans to add the course to a State approved degree or certificate, nor to the Foothill GE pattern.

#### Please select Permanent

The Curriculum Committee must evaluate this application based on the following criteria:

#### Criteria A. Appropriateness to Mission

The Foothill College Mission states: Believing a well-educated population is essential to sustaining and enhancing a democratic society, Foothill College offers programs and services that empower students to achieve their goals as members of the workforce, as future students, and as global citizens. We work to obtain equity in achievement of student outcomes for all California student populations, and are guided by our core values of honesty, integrity, trust, openness, transparency, forgiveness, and sustainability. Foothill College offers associate degrees and certificates in multiple disciplines, and a baccalaureate degree in dental hygiene.

Please indicate how your course supports the Foothill College Mission: Workforce/CTE

#### Criteria B. Need

A course may only be granted Stand Alone Approval if there is demonstrable need for the course in the college service area. Please provide evidence of the need or demand for your course, such as ASSIST documentation for transfer courses or Labor Market Information for workforce/CTE courses (if LMI is unavailable, advisory board minutes or employer surveys may be submitted). For basic skills courses, assessment-related data or information may be provided. Evidence may be provided in the box below and/or uploaded as an attachment.

#### Evidence

This course is in response to a request from our clinical partners to expand the Interventional Fellowship from one to two quarters. This course would provide the hands on education necessary for graduates of the Radiologic Technology program to advance into Interventional Radiology immediately upon graduating. The current course, R T 70A, was deemed to be an insufficient amount of time to educate the students in a highly technical arena.

#### Attach evidence

#### **Need/Justification**

This course is an opportunity for graduates of the Radiologic Technology program to gain focused clinical experience in Interventional Radiology necessary for the pursuit of an additional certification.

#### **Course Description**

Continuation of R T 70A, with emphasis on patient care, abdominal and pelvic procedures, thoracic procedures and neurological procedures.

#### **Course Prerequisites**

Prerequisite: R T 70A.

#### **Course Corequisites**

#### **Course Advisories**

#### **Course Objectives**

The student will be able to:

- 1. demonstrate understanding of radiation protection for the patient, personnel, and self.
- 2. exhibit knowledge in the proper use of the angiography equipment.
- 3. adhere to standards of attendance, punctuality and dependability.
- 4. conduct self in a professional manner.
- 5. apply theory to practice by exhibiting ongoing, satisfactory job performance skills.
- 6. select appropriate equipment, devices and patient positioning as outlined by the department protocols.
- 7. demonstrate knowledge and application of various patient care techniques.
- 8. differentiate anatomy and pathophysiology as it relates to various diagnostic, interventional, and nonvascular procedures, with an emphasis on abdominal and pelvic, thoracic and neurological procedures.
- 9. present a case study poster presentation based on literature search and clinical experience.

#### **Course Content**

- 1. Radiation protection
  - 1. Patients
  - 2. Personnel
- 2. Angiography equipment
  - 1. Fluoroscopy
  - 2. Digital angiography
  - 3. Automatic injectors
- 3. Punctuality and dependability
  - 1. Clinic time reporting
  - 2. Absenteeism
  - 3. Communicating whereabouts appropriately
- 4. Professional conduct

- 1. Taking initiative
- 2. Communicating effectively
- 3. Conducting oneself in a professional manner
- 5. Job performance
  - 1. Effective procedural participation
  - 2. Planning and organizing work efficiently
  - 3. Being alert and interested in procedures
  - 4. Reading and understanding requisitions
  - 5. Communicating effectively
- 6. Procedures
  - 1. Patient positioning
  - 2. Tray set-up
  - 3. Guidewires
  - 4. Catheters
  - 5. Sheaths
  - 6. Needles
  - 7. Vessel access
- 7. Patient care
  - 1. Patient communication
  - 2. Patient assessment and monitoring
  - 3. Contrast administration
  - 4. Asepsis and sterile technique
  - 5. Patient discharge/post-procedure instructions
  - 6. Emergency care
- 8. Diagnostic, interventional and nonvascular procedures
  - 1. Abdominal and pelvic procedures
    - 1. Aortography
    - 2. Selective visceral angiography
    - 3. Renal angiography
    - 4. Adrenal angiography
    - 5. Pelvic angiography
    - 6. Inferior vena cavagram
    - 7. Paracentesis
    - 8. Angioplasty
    - 9. Stent placement
    - 10. Endograft placement
    - 11. Caval filter placement
    - 12. Caval filter removal
    - 13. Venous sampling
    - 14. TIPS
    - 15. Chemoembolization
    - 16. Radioembolization
    - 17. Embolization
  - 2. Thoracic procedures

- 1. Aortography
- 2. Pulmonary arteriography
- 3. Superior vena cavagram
- 4. Embolization
- 5. Endograft placement
- 6. Chest tube/drain placement
- 7. Thoracentesis
- 8. Thrombolysis/thrombectomy
- 9. Angioplasty
- 10. Stent placement
- 3. Neurological procedures
  - 1. Neurologic angiography
  - 2. Spinal arteriography
  - 3. Embolization
  - 4. Thrombolysis/thrombectomy
  - 5. Angioplasty
  - 6. Stent placement
  - 7. Vertebroplasty and/or kyphoplasty
  - 8. Discography
  - 9. Procedural based anatomy identification
- 9. Case study poster
  - 1. Poster presentation
  - 2. Oral presentation

#### Lab Content

- 1. Radiologic Technology clinical practice
  - 1. Radiation protection
  - 2. Equipment operation
  - 3. Image production
  - 4. Image evaluation
  - 5. Abdominal and pelvic, thoracic and neurological interventional procedures
  - 6. Patient care in a clinical setting

#### Special Facilities and/or Equipment

Clinical setting: interventional radiology procedures equipment

#### **Methods of Evaluation**

#### **Methods of Evaluation**

Presentation project: case study Clinical performance evaluation

#### Method(s) of Instruction

	Method(s) of Instruction	
Discussion		
Demonstration		
Clinical practice		

#### **Representative Text(s)**

Author(s)	Title	<b>Publication Date</b>
	IR Playbook: A Comprehensive	
Keefe, N., and Z. Haskal	Introduction to Interventional	2018
	Radiology	

#### Please provide justification for any texts that are older than 5 years

#### **Other Required Materials**

#### Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

Reading assignments as required by the Interventional Radiology Department. Development of a case study presentation.

Authorized Discipline(s):

Radiological Technology

Faculty Service Area (FSA Code) HEALTH CARE SERVICES

#### **Taxonomy of Program Code (TOP Code)** \*1225.00 - Radiologic Technology

#### Attach Historical Forms/Documents (if applicable)

Articulation Office Only

**C-ID Notation** 

**IGETC Notation** 

**CSU GE Notation** 

Transferability CSU

Validation Date

3/2/2021

Division Dean Only

Seat Count

3

**Load** 0.556

**FOAP Codes:** 

**Fund Code** 114000 - General Operating- Unrestricted

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**Org Code** 141141 - Radiologic Technology

Account Code 1320

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**Program Code** 122500 - Radiologic Technology

### **New Course Proposal**

## D A F065. : DENTAL ASSISTING APPRENTICESHIP CLINICAL SKILLS I

Effective Term Fall 2021

Subject Dental Assisting (D A) Course Number F065.

**Department** Dental Assisting (D A)

**Division** Biological and Health Sciences (1BH)

Units

2

Course Title DENTAL ASSISTING APPRENTICESHIP CLINICAL SKILLS I

Former ID

Cross Listed

**Related Courses** 

Maximum Units

2

**Does this course meet on a weekly basis?** Yes

Weekly Lecture Hours

Weekly Lab Hours

Weekly Out of Class Hours 2

**Special Hourly Notation** 

**Total Contact Hours** 60

**Total Student Learning Hours** 84

**Repeatability Statement** Not Repeatable

**Credit Status** Credit

Degree Status Applicable

Is Basic Skills applicable to this course? No

**Grading** Letter Grade Only

Will credit by exam be allowed for this course? No

Honors No

Distance Learning No

**Degree or Certificate Requirement** None of the above (Stand Alone course)

## Stand Alone

If a Foothill credit course is not part of a state-approved associate's degree, certificate of achievement, or the Foothill GE pattern, it is considered by the state to be a "Stand Alone Course." Per Title 5, local curriculum committees must review and approve proposed Stand Alone courses to ensure that they are consistent with credit course standards (§55002), the community college mission, and that there is sufficient need and resources for the course. To be compliant with state regulations, there must be a completed, approved Stand Alone form on file in the Office of Instruction. Per our local process, the same process of review and approval is used for noncredit Stand Alone courses.

## Are you requesting Stand Alone approval for the course on a temporary or permanent basis?

• Temporary means the course will be incorporated into a new degree or certificate that is not yet State approved.

• Permanent means there are no plans to add the course to a State approved degree or certificate, nor to the Foothill GE pattern.

Please select Temporary

In this case, identify the degree/certificate to which the course will be added:

#### Dental Assisting Apprenticeship Certificate of Achievement

What is the specific timeline for program application/approval? (e.g., is your program application locally approved, or is it still in development and if so, what is your anticipated submission date?)

#### June 2021

The Curriculum Committee must evaluate this application based on the following criteria:

#### Criteria A. Appropriateness to Mission

The Foothill College Mission states: Believing a well-educated population is essential to sustaining and enhancing a democratic society, Foothill College offers programs and services that empower students to achieve their goals as members of the workforce, as future students, and as global citizens. We work to obtain equity in achievement of student outcomes for all California student populations, and are guided by our core values of honesty, integrity, trust, openness, transparency, forgiveness, and sustainability. Foothill College offers associate degrees and certificates in multiple disciplines, and a baccalaureate degree in dental hygiene.

Please indicate how your course supports the Foothill College Mission: Workforce/CTE

#### Criteria B. Need

A course may only be granted Stand Alone Approval if there is demonstrable need for the course in the college service area. Please provide evidence of the need or demand for your course, such as ASSIST documentation for transfer courses or Labor Market Information for workforce/CTE courses (if LMI is unavailable, advisory board minutes or employer surveys may be submitted). For basic skills courses, assessment-related data or information may be provided. Evidence may be provided in the box below and/or uploaded as an attachment.

#### Evidence

Labor market data reports there is a shortage of dental assistants in California. In the Bay Area there is approximately 1 dental assistant per every 3 dentists.

#### Attach evidence

#### Foothill RDA Apprenticeship Program Support Letter CDA 2021.pdf

#### **Need/Justification**

This course teaches basic chairside assisting skills to dental assisting apprenticeship students and will be included in an upcoming certificate of achievement.

#### **Course Description**

Preparation for apprenticeship in a dental environment. Includes sexual harassment and diversity training. Introduction to chairside assisting skills; use and care of dental equipment, instrument identification; overview of common dental procedures such as patient intake, patient assessments, examination and prophylaxis appointments. Intended for students in the Dental Assisting Apprenticeship Program; enrollment is limited to students accepted in the program.

#### **Course Prerequisites**

**Course Corequisites** 

**Course Advisories** 

#### **Content Review**

#### **Content Review Attachments**

**Baccalaureate Institution Attachments** 

#### Statute and/or Regulation Attachments

#### **Course Objectives**

The student will be able to:

- 1. Identify and react appropriately to sexual harassment situations in the workplace
- 2. Demonstrate an understanding of cultural diversity and the importance of cultural competence
- 3. Identify all parts and functions of a standard dental treatment room
- 4. Don and doff appropriate personal protective equipment when performing dental assisting duties
- 5. Perform set-up and breakdown of the dental unit using recommended infection control standards
- 6. Demonstrate proper positioning of the patient, the operator, and the assistant
- 7. Define a medical/dental history and identify contradictions or precautions for elective dental treatment
- 8. Accurately take and record an adult patient's vital signs without assistance
- 9. Describe and chart G.V. Black's classification for cavities and restorations

- 10. Identify and describe common dental restorations
- 11. Describe findings other than dental restorations found in the oral cavity
- 12. Describe a restorative dental chart form
- 13. Describe common periodontal assessments which are performed by the dental hygienist or dentist
- 14. Describe basic/exam, local anesthesia, rubber dam, matrix band and wedge, and dental prophylaxis procedures
- 15. Prepare tray set-ups for basic/exam, local anesthesia, rubber dam, matrix band and wedge, and dental prophylaxis procedures
- 16. Transfer instruments using the 4-handed technique to an operator
- 17. Apply and remove a rubber dam, in any specific region
- 18. Place the matrix band on the tooth and place necessary wedges to assure confinement of the filling material and adaptation to marginal areas
- 19. Perform high volume evacuation on a manikin and patient-partner to effectively remove oral fluids during dental procedures

#### **Course Content**

- 1. Identify and react appropriately to sexual harassment situations in the workplace
  - 1. Overview of the laws and policies at the state and federal level
  - 2. Meaning of sexual harassment
  - 3. Proactive approach to respond and mange sexual harassment
  - 4. Manage reactions and behaviors
  - 5. Employees rights and manager's responsibilities
- 2. Demonstrate an understanding of cultural diversity and the importance of cultural competence
  - 1. Characteristics of cultural competency
  - 2. Assess biases, stereotypes, and levels of cultural competence
  - 3. Health disparities of diverse populations
  - 4. Cultural communication
  - 5. Cultural competency strategies
- 3. Identify all parts and functions of a standard dental treatment room
  - 1. Dental equipment and maintenance
  - 2. Operation and identification of equipment
- 4. Don and doff appropriate personal protective equipment when performing dental assisting duties
  - 1. Order of donning and doffing
    - 1. Protective clothing
    - 2. Mask or respirator
    - 3. Gloves
      - 1. Handwashing and hand sanitizer use
    - 4. Protective eyewear and/or face shield
    - 5. Headcover

- 5. Perform set-up and breakdown of the dental unit using recommended infection control standards
  - 1. Beginning of day procedures
    - 1. Turn on vacuum system
  - 2. Set-up of treatment room
    - 1. Flush water and suction lines
    - 2. Place barriers and disposable items
    - 3. Prepare unit for patient arrival
    - 4. Escorting patient to and from dental unit
      - 1. Preparing unit for safe seating and dismissal of patient
  - 3. Break-down
    - 1. Transferring contaminated instruments to sterilization area
    - 2. Sharps and hazardous waste disposal
    - 3. Disposal of barriers
    - 4. Avoiding cross contamination
  - 4. End of day procedures
    - 1. Turn off vacuum system
- 6. Demonstrate proper positioning of the patient, the operator, and the assistant
  - 1. Ergonomics
  - 2. Right and left handed operators
  - 3. Zones using clock concept
- 7. Define a medical/dental history and identify contradictions or precautions for elective dental treatment
  - 1. Contradictions and precautions
  - 2. Prophylactic antibiotic premedication
    - 1. Indications
    - 2. Preferred antibiotic, dosage, and timing
    - 3. Alternatives for antibiotic allergies or complications
- 8. Accurately take and record an adult patient's vital signs without assistance
  - 1. Types of vital signs
  - 2. Armamentarium
  - 3. Respiration
    - 1. Procedure
    - 2. Blood pressure
      - 1. Procedure
- 9. Describe and chart G.V. Black's classification for cavities and restorations
  - 1. Classifications
    - 1. Caries
    - 2. Restorations
  - 2. Line angle and point angles
- 10. Identify and describe common dental restorations
- 11. Describe findings other than dental restorations found in the oral cavity
  - 1. Common abbreviations
- 12. Describe a restorative dental chart form

- 13. Describe common periodontal assessments which are performed by the dental hygienist or dentist
  - 1. Periodontal charting conditions
  - 2. Common abbreviations
- 14. Describe common dental procedures
  - 1. Basic/exam tray
  - 2. Local anesthesia
  - 3. Rubber dam, matrix band, and wedge
  - 4. Dental prophylaxis
- 15. Prepare tray set-ups for common dental procedures
  - 1. Basic/exam tray
    - 1. Armamentarium and disposable products
  - 2. Local anesthesia set-up
    - 1. Topical anesthetic
      - 1. Types of topical anesthetics
      - 2. Armamentarium and disposable products
    - 2. Local anesthesia
      - 1. Types of local anesthetic solutions
        - 1. Contraindications
      - 2. Armamentarium and disposable products
      - 3. Set-up and break-down of local anesthetic syringe
      - 4. Safety precautions
        - 1. Sharps container
        - 2. Recapping techniques
        - 3. Needlestick protocol
      - 5. Types of injections
        - 1. Injection sites
    - 3. Rubber dam, matrix band, and wedge
      - 1. Armamentarium and disposable products
    - 4. Dental prophylaxis
      - 1. Deposits on the teeth
      - 2. Gingivitis and periodontal disease
      - 3. Types of non-surgical periodontal procedures
      - 4. Armamentarium and disposable products for routine prophylaxis
- 16. Transfer instruments using the 4-handed technique to an operator
  - 1. Instrument grasp
  - 2. One-handed and two-handed transfer
  - 3. Exam/basic tray
  - 4. Prophylaxis tray
  - 5. Rubber dam tray
- 17. Apply and remove a rubber dam, in any specific region
  - 1. Types of rubber dam and frames
  - 2. Placement and removal

- 18. Place the matrix band on the tooth and place necessary wedges to assure confinement of the filling material and adaptation to marginal areas
  - 1. Types of mataricies
  - 2. Placement and removal
- 19. Perform high volume evacuation on a manikin and patient-partner to effectively remove oral fluids during dental procedures
  - 1. Types of high volume evacuator tips
  - 2. Evacuator tip placement

#### Lab Content

- 1. Clinic equipment identification
- 2. Handwashing and PPE
- 3. Infection control set-up and break-down in clinic
- 4. Patient/operator positioning in clinic
- 5. Take and record vital signs
- 6. Basic tray set-up
- 7. Instrument transfer in clinic
- 8. Local anesthesia syringe set-up
- 9. Rubber dam on typodont
- 10. Rubber dam in clinic
- 11. Prophylaxis tray set-up
- 12. Matrix band and wedge(s)
- 13. Oral evacuation

#### Special Facilities and/or Equipment

- 1. Dental clinic
- 2. Patient dental chair with bracket table
- 3. Operator and assistant stools
- 4. Sinks
- 5. Steam autoclave
- 6. Miele dishwasher/disinfector
- 7. Dental vibrator
- 8. Dental manikin

#### Methods of Evaluation

#### Methods of Evaluation

Exams
Lab competencies
Lab quizzes
Assignments
Projects

#### Method(s) of Instruction

	Method(s) of Instruction
Lecture	
Discussion	
Cooperative learning exercises	
Laboratory	
Demonstration	
Internship/preceptorship	

#### **Representative Text(s)**

Author(s)	Title	<b>Publication Date</b>
Bird, DL, and DS Robinson	Modern Dental Assisting	2021

#### Please provide justification for any texts that are older than 5 years

#### **Other Required Materials**

#### Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

This course requires reading of textbook chapters and completing short answers for worksheets related to the required reading.

Authorized Discipline(s): Dental Technology

Faculty Service Area (FSA Code) HEALTH CARE SERVICES

#### Taxonomy of Program Code (TOP Code) \*1240.10 - Dental Assistant

#### Attach Historical Forms/Documents (if applicable)

Articulation Office Only

**C-ID Notation** 

**IGETC Notation** 

**CSU GE Notation** 

Transferability CSU Validation Date 3/9/2021

Division Dean Only

Seat Count 30

**Load** .085

**FOAP Codes:** 

**Fund Code** 115000 - Apprenticeship-Foothill

**Org Code** 141041 - Dental Assisting

Account Code 1320

**Program Code** 124010 - Dental Assistant Ram Subramaniam Dean, BioHealth & STEM Foothill College 12345 El Monte Rd. Los Altos Hills, CA 94022

Submitted Electronically

# RE: Foothill College Registered Dental Assistant Apprenticeship Program Support

January 15, 2021

Dear Mr. Subramaniam:

On behalf of our 27,000 member dentists across the state, California Dental Association (CDA) supports the Foothill College Registered Dental Assisting (RDA) Apprenticeship Program and strongly supports the college's efforts and continued financial investment in all of its dental assisting course offerings, including the expeditious approval of apprenticeship courses and the erection of a separate dental assisting training facility to help accommodate scheduling labs, pre clinic/clinic session for both dental hygiene and assisting students.

Millions of Californians face barriers to access the dental care they need, and ensuring a properly trained workforce is crucial to expanding access to care. For many parts of the state, there is only one RDA for every licensed dentist, and in many parts of the Bay Area, there is only one RDA for every three licensed dentists. RDAs are the essential extra hands, eyes and ears of the dentist, significantly expanding the care a dental office or clinic can provide. The lack of educational programs for dental assistants and the resulting insufficiency of trained staff has become a real problem in many parts of the state. This issue is so significant that CDA has recently developed a taskforce focused on addressing workforce shortage issues.

Dentists have consistently found graduates of the Foothill College RDA educational program to be of very high quality, as evidenced by the consistently high passage rates of students on RDA licensure examinations. What's more, students often have secured employment upon graduation and successful licensure, contributing significantly to the wellbeing of their families and communities.

**California Dental Association** 1201 K Street, 14th Floor Sacramento, CA 95814 916.443.0505 800.232.7645 916.443.2943 fax For these reasons, CDA strongly supports Foothill College's continued support and investment in its dental assisting program offerings.

Sincerely,

Many un cane.

Mary McCune Community Programs & Regulatory Affairs Director

Cc: Teresa Ong, Associate Vice President, Workforce Development & CTE Cara Miyasaki, RDA, RDHEF, MS, Department Chair, Dental Assisting Program

### **New Course Proposal**

## D A F066. : DENTAL ASSISTING APPRENTICESHIP CLINICAL SKILLS II

Effective Term Fall 2021

Subject Dental Assisting (D A) Course Number F066.

**Department** Dental Assisting (D A)

**Division** Biological and Health Sciences (1BH)

Units

2

Course Title DENTAL ASSISTING APPRENTICESHIP CLINICAL SKILLS II

Former ID

Cross Listed

**Related Courses** 

Maximum Units

2

**Does this course meet on a weekly basis?** Yes

Weekly Lecture Hours

Weekly Lab Hours

Weekly Out of Class Hours 2

**Special Hourly Notation** 

**Total Contact Hours** 60

**Total Student Learning Hours** 84

**Repeatability Statement** Not Repeatable

**Credit Status** Credit

Degree Status Applicable

Is Basic Skills applicable to this course? No

**Grading** Letter Grade Only

Will credit by exam be allowed for this course? No

Honors No

Distance Learning No

**Degree or Certificate Requirement** None of the above (Stand Alone course)

## Stand Alone

If a Foothill credit course is not part of a state-approved associate's degree, certificate of achievement, or the Foothill GE pattern, it is considered by the state to be a "Stand Alone Course." Per Title 5, local curriculum committees must review and approve proposed Stand Alone courses to ensure that they are consistent with credit course standards (§55002), the community college mission, and that there is sufficient need and resources for the course. To be compliant with state regulations, there must be a completed, approved Stand Alone form on file in the Office of Instruction. Per our local process, the same process of review and approval is used for noncredit Stand Alone courses.

## Are you requesting Stand Alone approval for the course on a temporary or permanent basis?

• Temporary means the course will be incorporated into a new degree or certificate that is not yet State approved.

• Permanent means there are no plans to add the course to a State approved degree or certificate, nor to the Foothill GE pattern.

Please select Temporary

In this case, identify the degree/certificate to which the course will be added:

#### Dental Assisting Apprenticeship Certificate of Achievement

What is the specific timeline for program application/approval? (e.g., is your program application locally approved, or is it still in development and if so, what is your anticipated submission date?)

#### June 2021

The Curriculum Committee must evaluate this application based on the following criteria:

#### Criteria A. Appropriateness to Mission

The Foothill College Mission states: Believing a well-educated population is essential to sustaining and enhancing a democratic society, Foothill College offers programs and services that empower students to achieve their goals as members of the workforce, as future students, and as global citizens. We work to obtain equity in achievement of student outcomes for all California student populations, and are guided by our core values of honesty, integrity, trust, openness, transparency, forgiveness, and sustainability. Foothill College offers associate degrees and certificates in multiple disciplines, and a baccalaureate degree in dental hygiene.

Please indicate how your course supports the Foothill College Mission: Workforce/CTE

#### Criteria B. Need

A course may only be granted Stand Alone Approval if there is demonstrable need for the course in the college service area. Please provide evidence of the need or demand for your course, such as ASSIST documentation for transfer courses or Labor Market Information for workforce/CTE courses (if LMI is unavailable, advisory board minutes or employer surveys may be submitted). For basic skills courses, assessment-related data or information may be provided. Evidence may be provided in the box below and/or uploaded as an attachment.

#### Evidence

Labor market data reports there is a shortage of dental assistants in California. In the Bay Area there is approximately 1 dental assistant per every 3 dentists.

#### Attach evidence

#### Foothill RDA Apprenticeship Program Support Letter CDA 2021.pdf

#### Need/Justification

This course is needed for the dental assisting apprenticeship pathway to teach clinical skills, and it will be included in an upcoming certificate of achievement.

#### **Course Description**

Overview of common dental procedures, such as composite, amalgam, partials, dentures, root canals, dental implants, crown and bridge appointments; manipulation of dental materials commonly prepared or used by the dental assistant, including impression materials, cement bases and liners, composites, and amalgams. Intended for students in the Dental Assisting Apprenticeship Program; enrollment is limited to students accepted in the program.

**Course Prerequisites** 

**Course Corequisites** 

**Course Advisories** 

#### **Content Review**

#### **Content Review Attachments**

Baccalaureate Institution Attachments

#### Statute and/or Regulation Attachments

#### **Course Objectives**

The student will be able to:

- 1. Prepare on an adult patient without assistance an acceptable alginate and scanned impressions of the upper and lower arches, including all teeth, retromolar and vestibular areas
- 2. Select, collect the materials and armamentarium, and prepare, mix and pour a dental cast with no large irregularities or faults
- 3. Trim a plaster/stone model for bleaching splints or nightguard
- 4. Describe composite, amalgam, partials, dentures, root canals, dental implants, crown and bridge dental procedures
- 5. Prepare tray set-ups for composite, amalgam, and crown and bridge dental procedures
- 6. Describe the common dental cements and restorative materials and describe their uses and limitations

- 7. Prepare and mix without assistance at a satisfactory level any of the commonly used dental cements or materials, as allowed and specified by legally defined duties
- 8. Select, collect the materials and armamentarium, and prepare and/or mix without assistance final impression materials so that a satisfactory impression could be obtained

#### **Course Content**

- 1. Prepare on an adult patient without assistance an acceptable alginate and scanned impressions of the upper and lower arches, including all teeth, retromolar and vestibular areas
  - 1. Types of preliminary impressions
    - 1. Alginate
      - 1. Indications
      - 2. Composition
      - 3. Appropriate handling
      - 4. Infection control considerations
      - 5. Types of impression trays
        - 1. Selection and fitting of impression tray
      - 6. Safety precautions
        - 1. Risk of aspiration or swallowing
        - 2. Avoiding injury to the patient
      - 7. Procedure
        - 1. Armamentarium
        - 2. Dispensing and mixing
        - 3. Loading tray and insertion of tray
        - 4. Removal of tray
        - 5. Evaluation of impression
      - 8. Alginate alternatives
        - 1. Composition
        - 2. Armamentarium
          - 1. Dispensing gun, cartridge, and mixing tip
      - 9. Scanning
        - 1. Types of scanners
        - 2. Technology considerations
        - 3. Procedure
          - 1. Armamentarium
          - 2. Scanning of maxillary and mandibular arches
          - 3. Evaluation and manipulation of image
- 2. Select the materials and armamentarium, and prepare, mix and pour a dental cast with no large irregularities or faults
  - 1. Types of dental plaster and stone
  - 2. Appropriate handling of material
  - 3. Armamentarium and disposable products for pouring study models

- 4. Infection control considerations
- 5. Safety precautions
- 6. Dispensing and mixing material
- 7. Loading tray with plaster or stone
- 8. Removal of study model from tray
- 9. Evaluation of study model
- 3. Trim a plaster/stone
  - 1. Preparation of model
  - 2. Safety precautions
  - 3. Trimming procedure
- 4. Describe composite, amalgam, partials, dentures, root canals, dental implants, crown and bridge dental procedures
  - 1. Amalgam procedures
  - 2. Composite procedures
  - 3. Crown and bridge procedures
    - 1. Prep appointment
    - 2. Cementation appointment
    - 3. Implant crown and bridge
  - 4. Endodontics
  - 5. Partials and dentures
- 5. Prepare tray set-ups for composite, amalgam, and crown and bridge dental procedures
  - 1. Amalgam
    - 1. Armamentarium and disposable products
  - 2. Composite procedures
    - 1. Armamentarium and disposable products
  - 3. Crown and bridge procedures
    - 1. Prep appointment
      - 1. Armamentarium and disposable products
    - 2. Cementation appointment
      - 1. Armamentarium and disposable products
    - 3. Implant crown and bridge
      - 1. Armamentarium and disposable products
- 6. Describe the common dental cements and restorative materials and describe their uses and limitations
  - 1. Types
  - 2. Indications
  - 3. Contraindications
- 7. Prepare and mix without assistance at a satisfactory level any of the commonly used dental cements or materials, as allowed and specified by legally defined duties. These procedures include but are not restricted to:
  - 1. Cement bases and liners
    - 1. Armamentarium and disposable products
    - 2. Procedure

- 2. Temporary and permanent cements
  - 1. Armamentarium and disposable products
  - 2. Procedure
- 3. Restorative materials for insertion
  - 1. Armamentarium and disposable products
  - 2. Procedure
- 8. Select and collect the materials and armamentarium, and prepare and/or mix without assistance final impression materials so that a satisfactory impression could be obtained
  - 1. Dental cements and restorative materials
    - 1. Liners
      - 1. Calcium hydroxide
      - 2. Glass ionomer
    - 2. Temporary cements
      - 1. Zinc oxide and eugenol
      - 2. TempBond
    - 3. Permanent cements
      - 1. Zinc phosphate
      - 2. Glass ionomer
      - 3. Resin cements
    - 4. Crown and bridge impression materials
      - 1. Polyether
      - 2. Polysulfide
      - 3. Vinylpolysiloxane
        - 1. Bite registration material
          - 1. Wax
          - 2. Polyvinylsiloxane cartridge and gun dispenser
      - 4. Composite
  - 2. Dental cements and material
    - 1. Temporary dressings
      - 1. Zinc oxide eugenol temporary restoration
    - 2. Bases and liners
      - 1. Mixing procedure
    - 3. Restorative materials
      - 1. Mixing procedure
  - 3. Final impression
    - 1. Polyvinylsiloxane
      - 1. Putty-wash technique
      - 2. 2-gun technique
    - 2. Pentamix
      - 1. Armamentarium
      - 2. Procedure
    - 3. Mixing study model materials
      - 1. Plaster

- 1. Water and powder ratio
- 2. Mixing
- 2. Stone
  - 1. Water and powder ratio
  - 2. Mixing
- 3. Alginate impressions
  - 1. Types of impression trays
  - 2. Armamentarium
  - 3. Mixing process
  - 4. Impression procedure
- 4. Matrix band selection
  - 1. Types
  - 2. Placement
  - 3. Wedges
- 9. Infection control and hazardous waste management
  - 1. Dental unit waterlines
    - 1. Plaque biofilms
    - 2. Flushing waterlines
  - 2. Perform set-up and breakdown of the dental unit
    - 1. Appropriate PPE
    - 2. Barrier placement
    - 3. Flushing waterlines and evacuation system
  - 3. Personal protective equipment
    - 1. Gloves
      - 1. Types
      - 2. Uses
    - 2. Masks
      - 1. Types
      - 2. Uses
    - 3. Protective attire
      - 1. Types
      - 2. Uses
  - 4. Cross contamination
    - 1. Types
    - 2. Prevention
  - 5. Instrument processing
    - 1. Decontamination
    - 2. Disinfection
    - 3. Sterilization
  - 6. Sharps and hazardous waste
    - 1. Sharps container
      - 1. Uses
    - 2. Hazardous waste
      - 1. Regulated waste

- 2. Unregulated waste
- 10. Ethical and legal principles
  - 1. Patient records
    - 1. Documentation protocols
    - 2. Medical/dental history
    - 3. Treatment record
    - 4. Confidentiality
  - 2. Professional behavior and appearance
    - 1. Policy and procedures
    - 2. Ethical code of conduct

#### Lab Content

- 1. Lab orientation
- 2. Sizing of alginate trays
- 3. Instrument assignments
- 4. Clinic equipment identification
- 5. Handwashing and PPE
- 6. Infection control video
- 7. Infection control set-up in clinic
- 8. Oral evacuation
- 9. Patient/operator positioning in clinic
- 10. Basic tray set-up
- 11. Local anesthesia syringe set-up
- 12. Instrument transfer in clinic
- 13. Rubber dam on typodont
- 14. Rubber dam in clinic
- 15. Matrix band and wedge(s)
- 16. Alginate impressions
- 17. Study models

#### Special Facilities and/or Equipment

- 1. Dental clinic
- 2. Patient dental chair
- 3. Operator and assistant stool
- 4. Sinks
- 5. Steam autoclave
- 6. Miele dishwasher/disinfector
- 7. Dental vibrator
- 8. Oral evacuation equipment
- 9. Air compressor

#### Methods of Evaluation

#### Methods of Evaluation

Exams
Lab competencies
Lab quizzes
Alginate impressions
Study models

#### Method(s) of Instruction

Method(s) of Instruction	

#### **Representative Text(s)**

Author(s)	Title	<b>Publication Date</b>
Bird, DL, and DS Robinson	Modern Dental Assisting	2021

#### Please provide justification for any texts that are older than 5 years

#### **Other Required Materials**

#### Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

This course requires reading of textbook chapters and completing short answers for worksheets related to the required reading.

Authorized Discipline(s): Dental Technology

Faculty Service Area (FSA Code) HEALTH CARE SERVICES

Taxonomy of Program Code (TOP Code) \*1240.10 - Dental Assistant

#### Attach Historical Forms/Documents (if applicable)

Articulation Office Only

**C-ID Notation** 

#### **IGETC Notation**

#### **CSU GE Notation**

#### Transferability CSU

Validation Date 3/9/2021

#### Division Dean Only

Seat Count 30

**Load** .085

FOAP Codes:

**Fund Code** 115000 - Apprenticeship-Foothill

**Org Code** 141041 - Dental Assisting

Account Code 1320

**Program Code** 124010 - Dental Assistant Ram Subramaniam Dean, BioHealth & STEM Foothill College 12345 El Monte Rd. Los Altos Hills, CA 94022

Submitted Electronically

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January 15, 2021

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Dentists have consistently found graduates of the Foothill College RDA educational program to be of very high quality, as evidenced by the consistently high passage rates of students on RDA licensure examinations. What's more, students often have secured employment upon graduation and successful licensure, contributing significantly to the wellbeing of their families and communities.

**California Dental Association** 1201 K Street, 14th Floor Sacramento, CA 95814 916.443.0505 800.232.7645 916.443.2943 fax For these reasons, CDA strongly supports Foothill College's continued support and investment in its dental assisting program offerings.

Sincerely,

Many un cane.

Mary McCune Community Programs & Regulatory Affairs Director

Cc: Teresa Ong, Associate Vice President, Workforce Development & CTE Cara Miyasaki, RDA, RDHEF, MS, Department Chair, Dental Assisting Program

# **New Course Proposal**

# D A F200L : GUIDE FOR SUCCESS: A DENTAL ASSISTING PREREQUISITE COURSE

Effective Term Fall 2021

Subject Dental Assisting (D A) Course Number F200L

**Department** Dental Assisting (D A)

**Division** Biological and Health Sciences (1BH)

Units

1

**Course Title** GUIDE FOR SUCCESS: A DENTAL ASSISTING PREREQUISITE COURSE

Former ID

Cross Listed

**Related Courses** 

**Maximum Units** 

1

**Does this course meet on a weekly basis?** Yes

Weekly Lecture Hours

Weekly Lab Hours

Weekly Out of Class Hours 0

**Special Hourly Notation** 

**Total Contact Hours** 36

**Total Student Learning Hours** 36

Repeatability Statement Not Repeatable

**Credit Status** Credit

**Degree Status** Non-Applicable

Is Basic Skills applicable to this course? No

**Grading** Letter Grade (Request for P/NP)

Will credit by exam be allowed for this course? No

Honors No

Distance Learning No

**Degree or Certificate Requirement** None of the above (Stand Alone course)

# **Stand Alone**

If a Foothill credit course is not part of a state-approved associate's degree, certificate of achievement, or the Foothill GE pattern, it is considered by the state to be a "Stand Alone Course." Per Title 5, local curriculum committees must review and approve proposed Stand Alone courses to ensure that they are consistent with credit course standards (§55002), the community college mission, and that there is sufficient need and resources for the course. To be compliant with state regulations, there must be a completed, approved Stand Alone form on file in the Office of Instruction. Per our local process, the same process of review and approval is used for noncredit Stand Alone courses.

# Are you requesting Stand Alone approval for the course on a temporary or permanent basis?

• Temporary means the course will be incorporated into a new degree or certificate that is not yet State approved.

• Permanent means there are no plans to add the course to a State approved degree or certificate, nor to the Foothill GE pattern.

#### Please select Permanent

The Curriculum Committee must evaluate this application based on the following criteria:

Criteria A. Appropriateness to Mission

The Foothill College Mission states: Believing a well-educated population is essential to sustaining and enhancing a democratic society, Foothill College offers programs and services that empower students to achieve their goals as members of the workforce, as future students, and as global citizens. We work to obtain equity in achievement of student outcomes for all California student populations, and are guided by our core values of honesty, integrity, trust, openness, transparency, forgiveness, and sustainability. Foothill College offers associate degrees and certificates in multiple disciplines, and a baccalaureate degree in dental hygiene.

Please indicate how your course supports the Foothill College Mission: Basic Skills Workforce/CTE

#### Criteria B. Need

A course may only be granted Stand Alone Approval if there is demonstrable need for the course in the college service area. Please provide evidence of the need or demand for your course, such as ASSIST documentation for transfer courses or Labor Market Information for workforce/CTE courses (if LMI is unavailable, advisory board minutes or employer surveys may be submitted). For basic skills courses, assessment-related data or information may be provided. Evidence may be provided in the box below and/or uploaded as an attachment.

#### Evidence

Advisory board recommended a soft skills and safety class prior to dental assisting students externing in their office.

#### Attach evidence

final minutes mini adv Jan meeting 2020.docx

#### Need/Justification

This course is being created following recommendation by the Advisory board of dentists, for a soft skills and safety class to be taken by dental assisting students prior to externing in their office.

#### **Course Description**

This course is for students considering a career in the dental field. Introduction to communication, anatomy, terminology, equipment, and infection control procedures relevant to dentistry. Also includes time management, study skills and test taking strategies. Provides information concerning PPE related to COVID-19 and other infectious diseases as required safety measures when working in a dental environment.

#### **Course Prerequisites**

**Course Corequisites** 

**Course Advisories** 

# **Content Review**

#### **Content Review Attachments**

#### **Baccalaureate Institution Attachments**

#### Statute and/or Regulation Attachments

#### **Course Objectives**

The student will be able to:

- 1. Effectively communicate with patients and colleagues
- 2. Create time management calendar and analyze time management to create a balance between classes, personal and other obligations
- 3. Develop effective study skills to prepare for competency evaluations and written tests
- 4. Recognize effective methods for preparing for lectures and evaluations
- 5. Recognize and utilize dental and medical terminology relevant to the practice of dental assisting
- 6. Recognize and identify common dental equipment
- 7. Perform appropriate and safe methods for infection control and PPE recommendations for COVID-19 and other infectious diseases

## **Course Content**

- 1. Effectively communicate with patients and colleagues
  - 1. Electronic communication
    - 1. Professional email addresses
    - 2. Writing professional emails to other dental/medical professionals
      - 1. Appropriate terminology
      - 2. Inappropriate terminology

- 2. Verbal communication in the office and at school
  - 1. Communicating questions prior to exposing dental x-rays
    - 1. Using terminology that is familiar to the student and the patient
  - 2. Post-operative instructions
    - 1. Using terminology that is familiar to the student and the patient
  - 3. Conflict management/resolution with classmates and faculty
    - 1. Understanding the appropriate measures when having a conflict
      - 1. Student to student
      - 2. Student to professor
      - 3. Student communicating with internship office
      - 4. Inappropriate measures when having a conflict
  - 4. Request clarification for terminology when appropriate
- 3. Telephone interactions
  - 1. Personal cell phone voicemail outgoing messages
  - 2. Personal phone etiquette
  - 3. Personal use of phone at work/dental office/internships
  - 4. Phone calls with patients and dental offices
    - 1. Confirming dental appointments
    - 2. Follow-up phone calls regarding dental treatment
- 4. Zoom etiquette
  - 1. Appropriate behavior
    - 1. Attire
    - 2. Mute/unmute
    - 3. Stop or start video
    - 4. Zoom environment
  - 2. Break out rooms
- 2. Create time management calendar and analyze time management to create a balance between classes, personal and other obligations
  - 1. Document schedule for classes
  - 2. Document schedule for studying
  - 3. Document personal commitments
  - 4. Document work schedule
  - 5. Submit weekly schedule considering all mentioned above
  - 6. Learning styles
  - 7. Following instructions
- 3. Recognize effective methods for preparing for lectures and evaluations
  - 1. Recognize required reading
  - 2. Use course materials for note-taking
    - 1. Preparing notes for evaluation purposes
- 4. Develop effective study skills to prepare for competency evaluations and written tests

- 1. Written tests/evaluations
  - 1. Create strategies for studying of course materials
  - 2. Compare and contrast various types of exam questions
    - 1. True/False
    - 2. Multiple choice
    - 3. Multiple-multiple choice
    - 4. Short answer
  - 3. Test taking strategies
- 2. Create strategies for competency evaluations
  - 1. Lab skills evaluations
  - 2. Clinic skill evaluations
- 5. Recognize and utilize dental and medical terminology relevant to the practice of dental assisting
  - 1. Common medical and dental terminology
    - 1. Terminology relative to dental assisting
  - 2. Tissues of the teeth
    - 1. Enamel
    - 2. Dentin
    - 3. Cementum
    - 4. Pulp
  - 3. Periodontium
    - 1. Gingiva
    - 2. Periodontal ligament
    - 3. Alveolar bone
    - 4. Cementum
  - 4. Tooth names and numbers
    - 1. Deciduous teeth
    - 2. Names and location
    - 3. Universal tooth numbering
      - 1. Permanent teeth
        - 1. Names and location
        - 2. Universal tooth numbering
      - 2. Mixed dentition
  - 5. Tooth surfaces
    - 1. Incisal/Occlusal
    - 2. Meisal
    - 3. Distal
    - 4. Lingual
    - 5. Facial
      - 1. Labial
      - 2. Buccal
  - 6. Tooth descriptors
    - 1. Thirds of the teeth/roots
    - 2. Long axis of the tooth

- 3. Parallel to the occlusal or incisal plane
- 6. Recognize and identify common dental equipment
  - 1. Common layout of dental offices
    - 1. Patient reception area
      - 1. Personnel and duties
        - 1. COVID screener
          - 1. Mange patient traffic
          - 2. Temperature
          - 3. COVID screening questions
      - 2. Equipment and items
        - 1. Chairs
        - 2. Touchless thermometer
        - 3. Hand sanitizer
        - 4. Extra masks
        - 5. COVID recommendations
          - 1. No paper products
          - 2. Magazines, books, posters or unlaminated postings
          - 3. COVID signage
          - 4. No toys
    - 2. Front desk/financial coordinator
      - 1. Personnel and duties
        - 1. Receptionist
          - 1. Appointments
          - 2. Medical consults
          - 3. Specialist referrals
        - 2. Insurance biller
          - 1. Pre-authorize for procedures
          - 2. Submit billing
      - 2. Equipment and items
        - 1. Plexiglass shield
        - 2. Paper charts
        - 3. Business equipment
          - 1. Computers and printer
          - 2. Fax machine
          - 3. Office phone
          - 4. Shredder
          - 5. Scanner
    - 3. Back office
      - 1. Staff break room
      - 2. Equipment and items
        - 1. Dental treatment areas/rooms
          - 1. Patient chair
          - 2. Operator and assistant stools

- 3. Bracket table
- 4. Computer/laptop and monitor
- 5. X-ray tube head
- 6. Rheostat
- 7. Overhead light
- 8. Sharps container
- 9. Sink
- 2. Sterilization area
  - 1. Sink(s)
  - 2. Ultrasonic cleaner/dishwasher-disinfector
  - 3. Heat sterilizers
  - 4. Washer/dryer
- 3. Darkroom or processing area
  - 1. Film developing or automatic processors
- 4. Dental lab
  - 1. Model trimmer
  - 2. Lab handpiece
  - 3. Dental vibrator
  - 4. Lathe
  - 5. Vacuformer
  - 6. CAD CAM
- 3. Designated areas
  - 1. Dental treatment areas/rooms
  - 2. Sterilization area
  - 3. Dental lab
  - 4. Restroom(s)
- 4. Personnel and duties
  - 1. Dental Assistant/Registered Dental Assistant
  - 2. Dental Hygienist
  - 3. Dentist
  - 4. Sterilization technician
- 4. Supporting equipment
  - 1. Air filtration system
  - 2. Nitrous/oxygen tanks and accessories
  - 3. Compressed air system
  - 4. Vacuum system
- 7. Perform appropriate and safe methods for infection control and PPE recommendations for COVID-19 and other infectious diseases
  - 1. Introduction to infectious disease important to the practice of dentistry
  - 2. Introduction to OSHA and CDC
  - 3. Personal protective equipment
    - 1. Hand hygiene
      - 1. Handwashing
      - 2. Hand sanitizer

- 2. Masks and respirators
  - 1. Types
  - 2. Placement and removal
- 3. Protective eyewear
  - 1. Types
  - 2. Placement and removal
  - 3. Decontamination and disinfection process
- 4. Protective clothing
  - 1. Types
  - 2. Placement and removal
  - 3. Decontamination and disinfection process
- 5. Donning and doffing personal protective equipment
- 4. COVID screening questions and protocols
  - 1. Faculty and student screening
  - 2. Patient screening
- 5. Respiratory protection plan
  - 1. Medical clearance for N95
    - 1. Completion of medical clearance questionnaire
    - 2. Fit testing for N95

## Lab Content

- 1. Student participation with discussions
- 2. Oral communication with medical and dental terminology
- 3. Identification of teeth, tooth surfaces, tooth numbering, and other tooth descriptors
- 4. Identification of dental equipment
- 5. Note-taking
- 6. Performing lab evaluations
- 7. Handwashing and hand sanitization
- 8. Placement and removal of personal protective equipment
- 9. N95 respirator fit testing

## Special Facilities and/or Equipment

- 1. Dental clinic
- 2. Patient dental chair with bracket table
- 3. Operator and assisting stools
- 4. Sinks
- 5. Steam autoclave
- 6. Instrument dishwasher/disinfector
- 7. Personal protective equipment
- 8. Hand sanitizer and hand soap
- 9. N95 respirator

# **Methods of Evaluation**

#### Methods of Evaluation

Multiple choice weekly quizzes Verbal communication assignments

Written assignments

#### Method(s) of Instruction

#### Method(s) of Instruction

Lecture Small group discussion and evaluation

#### **Representative Text(s)**

#### Please provide justification for any texts that are older than 5 years

#### **Other Required Materials**

No required textbook or other materials.

#### Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- 1. Time management schedule
- 2. Labeling tooth structures
- 3. Labeling dental equipment
- 4. Reflection paper

#### Authorized Discipline(s):

**Dental Technology** 

Faculty Service Area (FSA Code) HEALTH CARE SERVICES

Taxonomy of Program Code (TOP Code)

\*1240.10 - Dental Assistant

Attach Historical Forms/Documents (if applicable)

Articulation Office Only

**C-ID Notation** 

**IGETC Notation** 

**CSU GE Notation** 

Transferability None

Validation Date 2/8/21

#### Division Dean Only

Seat Count

30

**Load** .048

**FOAP Codes:** 

Fund Code 114000 - General Operating- Unrestricted

**Org Code** 141041 - Dental Assisting

Account Code 1320

**Program Code** 124010 - Dental Assistant

# Foothill College Mini-Advisory Board Meeting January 14, 2020

#### 6:10 Meeting started

Present: Dr. Nabeta, Dr. McBirney, Dr. Vallee, Dr. Leclerc, Dr. A. Joy, Dr. C. Joy, Mary Conway, Dr. Barghouth, Dr. Pendurkar, Dr. Nix, Dr. Singer, Dr. Quo, Dr. Lee, Dr. Kung, Dr. Quo, Ram Subramaniam, Chris Allen, Lizzie Innes, Cara Miyasaki

- 1. Introductions
- 2. Brief update on current dental assisting program (educational pathway accredited by the Commission on Dental Accreditation)
  - a. Review of handout for Advisory Board Meeting Feb 2020
  - b. Pass rate has dropped for Foothill students: still above average
  - c. No more practical exam, just combo law and ethics and national boards
  - d. Most students are ESL and speak 2-3 languages 91% this year
  - e. Tutoring hours increased to assist students beyond classroom hours
  - f. More applicants than in the past, when from 35-40 to 50 -52 applications
  - g. Increased marketing to help with enrollment/applications
  - h. Diverse population of students in program
  - i. 82% of students receive financial aid
  - j. This year many students from East San Jose but home locations vary from Newark to San Francisco. Last year student area from San Leandro to San Francisco.
  - k. Question: Male DA student, None this year. Varies every year, last year 5 male students
- 3. Proposed dental assisting apprenticeship program comparison to current program
  - a. Educational program 9 months versus apprenticeship program 15 months.
    - b. Educational program has 300 hours of unpaid internship required by CODA versus apprenticeship students will be paid dental employees (paid internship) for at least 2000 hours.
  - c. Educational program students can choose to work part-time usually for non-dental employers vs. apprenticeship students will be hired and work in dental offices simultaneously attending courses.
  - d. Educational program is CODA approved versus apprenticeship program will have the individual courses approved as stand-alone courses which are required for RDA work experience pathway. Along with completion of stand-alone courses and 15 months work experience the student can apply to take the RDA written exam. (This is a correction to the minutes Cara mentioned the apprenticeship program would be approved by the Dental Board but this is an error the classes/courses would be approved individually).
  - e. Educational program students 58.5 quarter units versus apprenticeship appx. 14.5 (not counting introductory chairside assisting to include dental terminology, tooth numbering, charting, appearance, soft skills, etc.)
    - i. List of certification courses for apprenticeship program include: Infection control and hazardous waste management, Dental Practice Act, x-ray licensing

courses, and coronal polishing. Some of these courses may be taken simultaneously with the students in the educational pathway.

- ii. Will also include pit & fissure sealants although not required until first renewal can end up costing appx \$600 if take course from private educational company.
- iii. Dentists voiced concern that students will not be prepared to immediately start working in a dental office without prior training. At suggestion of dentists, students should be required to take introductory course prior to working in dental office to include: dental terminology, safety, appearance/hygiene, soft skills, blood-borne pathogens and expectations of dental employees.
- iv. Apprenticeship students could also take DA 85 RDA Review course for written exam and also include 3 hour labs for fabricating provisionals.
- 4. Similarities for both educational program and apprenticeship program
  - a. Cost of program (tuition, books, uniform, quarterly kit) for both appx. \$4000.00 compared to for-profit programs which are appx \$35,000.00.
  - b. Both sets students can qualify for financial aid i.e. Pell Grant, student loans and College Promise. College Promise pays for everything (except parking permit) for first two years of college if student has not attended college before. There is a possibility the apprenticeship students would not be required to pay tuition but right now this is not confirmed.
  - c. All students required to obtain a full physical exam, recommended immunizations, BLS/CPR certification prior to starting either program. The college has a private contracted health services department available, however, it is closed during the summer.
  - d. Apprenticeship students will be paid employees of the dentist/dental office.
  - Both sets of students can track their internship hours with a software called Trajecsys.
     Cost is \$75 per student. Currently being funded by Strong Workforce money from state.
     GPS tracks the apprentice and notifies the clinical supervisor in case the student is logging in or out and not actually at the office.
  - f. Both programs can be advertised by college's marketing and outreach department.
- 5. Justification for proposed apprenticeship program
  - a. College data shows many students need to work while going to school. This information demonstrates a need for a different pathway for dental assistants.
  - b. Shortage of dental assistants in California does not seem to be getting any better.
  - c. Adding another dental assisting pathway may make the program more productive for the college and avoid program closure if district budget declines due to low overall enrollment.
- 6. Overview of proposed apprenticeship program
  - a. Dentist/dental office would register with college to be a apprenticeship site.
  - b. Each dentist would interview each student and decide if they would want to have that student as an employee
    - i. Feedback from dentists: The dentist should meet and review the basic requirements of what the apprentice needs to learn. Should include calibration of dental office as minimal requirement to participate.
  - c. There is a probationary period, if not working out, students would "rotate" to a different office
  - d. The program faculty would visit the apprentice at the dental office on a regular basis
  - e. A schedule of work and classes needs to be established. Initial proposal for working Monday to Thursday. Classes on Fridays and some Saturdays.

- i. Feedback from dentists:
  - 1. Apprentice should not start immediately. Need initial training for safety, infection control, etc.
  - 2. Explore online or hybrid courses.
  - 3. Work ½ day and classes ½ day
- f. There are allocated hours necessary for work processes/standards that need to be determined by feedback from the dentists present. The apprentice does not need to fulfill the hours exactly.
  - i. See sample work processes at end of agenda items
  - ii. Feedback from dentists concerning work processes/standards:
    - 1. Use CODA standards see at end of minutes
    - 2. Other recommendations see at end of minutes
  - iii. Feedback from dentists concerning preparation for RDA exam. The dentist can do the hands-on training but do not have any idea of what is on the RDA written exam. Program director response: The students could also take a RDA review class (DA 85) which has 1 hour lecture for review for the written exam and a 3 hour lab each week to teach fabrication of provisionals.
    - Program director comments: The students have many resources from the program on information on the RDA exam. It seems that the students have difficulty with more sophisticated wording used on the RDA exam i.e. reciprocity, etc. (Post meeting – here are some other words students have difficulty with: inverting, aspirate, toggle, engage (the harpoon), debris, grasp, retrieve, align, long axis, increment)
- 7. Questions by attendees
  - Are there allied health apprenticeship program in California? Traditionally apprenticeship programs are associated with construction and automotive careers. Nursing doesn't have an apprenticeship program because of its strict accreditation standards. The closest program is the Veterinary Assistant Program at Foothill College.
  - b. Will the apprenticeship program be CODA approved? No, the program courses offering certifications will be approved as stand-alone courses by the Dental Board of California.
  - c. **Funding/who pays?** The initial thought was to have students pay for their college courses but there is a possibility the fees may be waived. The college could apply for a grant (once the program is registered with the state) to pay for student fees and books because it is a non-traditional pathway and grant money may be available.
  - d. Is the current educational assisting program at risk of lower enrollment because of the apprenticeship program? That is a possibility and if enrollment is low for the current program the college could consider offering the program every other year and not completely eliminate the program.
  - e. What is the timeline and what do we need to do to make this happen? We are hoping to start Summer or Fall 2020. We mostly need feedback from dentists for curriculum requirements. All guidelines and classes need to be written and given to state. Subject matter experts who work for the dental board will review the material and approve/deny stand alone courses. Once work processes and hours are established we can sign a contract with the state apprenticeship department.
  - f. So there is the office and the didactic, is there proficiency milestones that would be followed? Students currently only evaluated for coronal polishing but more in-office proficiencies could be added. Post meeting note: weekly general evaluations are

currently being used for educational program. Suggestion: Would like students to be proficient in fabricating provisionals. Statement: Proficiently milestones are essential for this program, need licensure via portfolio. Need specific checklist dentist can follow. Can pictures of the final product be available?

- g. Will students be able to rotate to specialty offices if they have an interest? Most likely possible and could mimic medical students. Students go to specialty office but maybe for shorter rotation. Comment: Students having difficult time finding specialty offices, even as unpaid intern.
- h. How should dentist/dental offices be calibrated? Note: needs further discussion/feedback?
  - i. In-office visit with clinical supervisor and dentist?
  - ii. Group calibration meeting?
  - iii. Other suggestions?
- 8. Apprentice schedule
  - a. Program director proposed that apprentice works in dental office Monday to Thursday. Classes on Friday and some Saturdays.
  - b. Suggestion: Apprentice attends class  $\frac{1}{2}$  day and work in office  $\frac{1}{2}$  day.
  - c. Suggestion: Offer online classes to be more efficient
- 9. Salary
  - a. Dentists need apprentice/program to know that the dentist/dental office will be spending appx 40k to pay the apprentice. Also, less production because dentist and office assistants are taking time to train apprentice.
  - b. Dentists in agreement that salary should start at minimum wage (for that city)
  - c. Wage increases are required by the state every six months. Dentists were in agreement should be 5% for each increase (standard and affordable)
  - d. A concern was expressed for current employees that don't received raises but now it's mandated for the apprentice.
  - e. Comment: salary increase should be based on achievement/competency. Achieving certain skills should be rewarded.
- 10. General suggestions
  - a. Post a Youtube informational vide to discuss the apprenticeship program versus the educational program.
  - b. Performance reviews every 3 months be considered? You need some "calibration" and feedback, so they can fix issues before they grow bigger.

Suggestions for Work Processes – Note: needs further discussion and feedback

CODA STANDARDS – only included clinical chairside skills.

#### ESSENTIAL DENTAL ASSISTING SKILLS

- a. Take/review and record medical and dental histories
- b. Take and record vital signs
- c. Assist with and/or perform soft tissue extra/intra oral examinations
- d. Assist with and/or perform dental charting
- e. Manage infection and hazard control protocol consistent with published professional guidelines
- f. Prepare tray set-ups for a variety of procedures and specialty areas
- g. Seat and dismiss patients
- h. Operate oral evacuation devices and air/water syringe
- i. Maintain clear field of vision including isolation techniques
- j. Perform a variety of instrument transfers
- k. Utilize appropriate chairside assistant ergonomics
- I. Provide patient preventive education and oral hygiene instruction
- m. Provide pre-and post-operative instructions prescribed by a dentist
- n. Maintain accurate patient treatment records
- o. Identify and respond to medical and dental emergencies

#### CHAIRSIDE ASSISTING FUNCTIONS

- a. Assist with and/or apply topical anesthetic and desensitizing agents
- b. Assist with and/or place and remove rubber dam
- c. Assist with and/or apply fluoride agents Dental Assisting Standards -20
- d. Assist with and/or apply bases, liners, and bonding agents
- e. Assist with and/or place, fabricate, and remove provisional restorations
- f. Assist with and/or place and remove matrix retainers, matrix bands, and wedges
- g. Assist with and/or remove excess cement or bonding agents
- h. Assist with a direct permanent restoration
- i. Fabricate trays, e.g., bleaching, mouthguard, custom
- j. Preliminary impressions
- k. Clean removable dental appliances

# Dental Assisting Apprenticeship Program

# Work Processes Feedback from Dentists

Procedures	Hours needed
Seat and Dismiss Patient	
Instrument Processing/	
Sterilization	
Coronal polishing/	
Sealants	
Alginate impressions	
Digital X-Rays	
CBCT scanning	
Scanning impressions?	
Dental/Med Hx Review	
Sending out lab orders	
Computer skills: Word, PPT,	
outlook, Excel	
Dental Photography	
Stainless steel crowns	
Extra/intraoral exam	
Front office/administrative	
duties i.e. phone calls,	
scheduling apt, presenting	
treatment plan etc.	
Dismissing patients	
HIPAA	
Spelling grammer for	
charting	
Communicating with	
patients chairside and	
email	
Fitting orthodontic bands	

ASSISTING WITH:	Hours needed
Comprehensive Oral	
Exam	
Emergency	
Prophylaxis or SC/RP	
Composite/Glass	
lonomer	
Crown Prep	
Crown Cementation	
Bridge Prep	
Bridge Cementation	
Cosmetic	
Endodontic	
Partial/Denture	
Implants	
Scanning	
Charting	
Computer	
OSHA awareness	
Subjective objective	
assessment plan	
Orthodontic	
procedures	

1

## FOOTHILL COLLEGE College Curriculum Committee Proposal to Create New Ad Hoc Committee: Instructional Program Creation Process

# **Committee Details**

Name: Instructional Program Creation Process CCC & Academic Senate Co-Chairs: Eric Kuehnl & Kathryn Maurer Co-Chaired with the Office of Instruction: Kurt Hueg

# **Background**

The creation of our new governance structure a few years ago resulted in the need to establish a new instructional program creation process due to the loss of PaRC, the body which used to ensure college-wide input into and approval of new program creation after College Curriculum Committee (CCC) approval, and prior to submission to the FHDA Board of Trustees for approval. The Presidents of the Academic and Classified Senates (faculty and staff), who were serving as Advisory Council tri-chairs at the time (2017), created a <u>Temporary Program Creation Process</u> for faculty to follow while a permanent process could be established.

## <u>Charge</u>

This committee will review current policies for program creation as well as the temporary process mentioned above, analyze what is working well and what needs improvement, and draft a (permanent) Instructional Program Creation Process, to be reviewed and approved by CCC, the Academic Senate, the Office of Instruction, and the Advisory Council. This procedure should also include mechanisms to identify and evaluate potential district-wide impacts of program creation, and specify the points and mechanisms by which the two colleges will communicate and address any concerns.

For purposes of the scope of this committee, we are using the following definition of "instructional program": any degree or certificate submitted to the California Community Colleges Chancellor's Office for approval/chaptering, including noncredit certificates; and any non-transcriptable credit certificate.

The committee acknowledges that a separate *non-instructional* (student services/support) program creation procedure also needs to be developed, but is beyond the scope of this charter.

# <u>Membership</u>

Any full- or part-time Foothill faculty member is welcome to volunteer. Priority will be given to faculty who are current or past members of CCC and/or the Executive Committee of the Academic Senate. Additionally, the committee welcomes any student, staff, or administrator appointed by CCC to the committee.

The target size for the committee is 4-6 members, with a minimum of 4 and a maximum of 10 (for scheduling purposes), and a minimum of 50% of the committee members being faculty.

# <u>Structure</u>

The CCC faculty chair and the Academic Senate President will co-chair the committee together with the Office of Instruction. The faculty co-chairs will schedule and convene meetings and

manage the creation and execution of a work plan. The Office of Instruction will facilitate the gathering of all relevant documents and support the committee with needed data. All members will help identify and review documents, gather input and feedback as needed, and help draft the new process. The committee will work both synchronously with regular meetings (likely every two weeks) and asynchronously (via a shared online workspace). The committee will bring their work to CCC first for discussion and approval, and then to the other bodies.

# <u>Time Frame</u>

Appointments to the committee will begin on April 20, 2021, and work will begin immediately and end with the formal approval by all bodies, with a target date of June, 2021.