

College Curriculum Committee Meeting Agenda
Tuesday, June 2, 2020
2:00 p.m. – 3:30 p.m.
Meeting will be held virtually via ConferZoom

Item	Action	Attachment(s)	Presenter(s)
1. Minutes: May 19, 2020	Action	#6/2/20-1	Kuehnl
2. Report Out from Division Reps	Discussion		All
3. Announcements a. New Course Proposals b. Division Reps for 2020-21 c. Upcoming COR Deadline—June 19	Information	#6/2/20-2-8	CCC Team
4. Consent Calendar a. GE Applications	Action	#6/2/20-9-10	Kuehnl
5. New Program Application: Online and Blended Instruction Certificate of Achievement	1st Read	#6/2/20-11	Kuehnl
6. Program Deactivation: Field Ironworking Certificate of Achievement	1st Read	#6/2/20-12	Kuehnl
7. Stand Alone Approval Request: APSM 123	1st Read	#6/2/20-13	Kuehnl
8. Stand Alone Approval Request: ART 15D	1st Read	#6/2/20-14	Kuehnl
9. Stand Alone Approval Request: LINC 82B	1st Read	#6/2/20-15	Kuehnl
10. Stand Alone Approval Request: LINC 82C	1st Read	#6/2/20-16	Kuehnl
11. Stand Alone Approval Request: LINC 87	1st Read	#6/2/20-17	Kuehnl
12. Stand Alone Approval Request: THTR 7	1st Read	#6/2/20-18	Kuehnl
13. Honors Institute Course Prerequisite Ad Hoc Committee Presentation	Discussion		Kuehnl/ Lankford
14. Update Distance Learning Application	Discussion	#6/2/20-19-20	Kuehnl
15. Revisiting Local Policy Requiring “C” Grade or Better for Major Courses	Discussion		Kuehnl
16. Good of the Order			Kuehnl
17. Adjournment			Kuehnl

Consent Calendar:

Foothill General Education (attachment #6/2/20-9-10)

Area V—Communication & Analytical Thinking: Plumbing Technology Apprenticeship Program

Area VI—United States Cultures & Communities: Plumbing Technology Apprenticeship Program

Attachments:

- #6/2/20-1 Draft Minutes: May 19, 2020
- #6/2/20-2 New Course Proposal: ENGL 27G
- #6/2/20-3 New Course Proposal: LINC 68G
- #6/2/20-4 New Course Proposal: LINC 78D
- #6/2/20-5 New Course Proposal: LINC 84
- #6/2/20-6 New Course Proposal: LINC 84D
- #6/2/20-7 New Course Proposal: LINC 84E
- #6/2/20-8 New Course Proposal: LINC 84F

- #6/2/20-11 New Program Application: Online and Blended Instruction Certificate of Achievement
- #6/2/20-12 Program Deactivation: Field Ironworking Certificate of Achievement
- #6/2/20-13 Stand Alone Course Approval Request: APSM 123
- #6/2/20-14 Stand Alone Course Approval Request: ART 15D
- #6/2/20-15 Stand Alone Course Approval Request: LINC 82B
- #6/2/20-16 Stand Alone Course Approval Request: LINC 82C
- #6/2/20-17 Stand Alone Course Approval Request: LINC 87
- #6/2/20-18 Stand Alone Course Approval Request: THTR 7
- #6/2/20-19 Distance Learning Application
- #6/2/20-20 Ohlone College Distance Education Addendum draft

2019-2020 Curriculum Committee Meetings:

<u>Fall 2019 Quarter</u>	<u>Winter 2020 Quarter</u>	<u>Spring 2020 Quarter</u>
10/8/19	1/21/20	4/21/20
10/22/19	2/4/20	5/5/20
11/5/19	2/18/20	5/19/20
11/19/19	3/3/20	6/2/20
12/3/19	3/17/20	6/16/20

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

2019-2020 Curriculum Deadlines:

- ~~12/1/19~~ Deadline to submit courses to CSU for CSU GE approval (Articulation Office).
- ~~12/1/19~~ Deadline to submit courses to UC/CSU for IGETC approval (Articulation Office).
- ~~2/18/20~~ Deadline to submit local GE applications for 2020-21 catalog (Faculty/Divisions).
- ~~2/18/20~~ Curriculum Sheet updates for 2020-21 catalog (Faculty/Divisions).
- ~~6/1/20~~ Deadline to submit new/revised courses to UCOP for UC transferability (Articulation Office).
- 6/19/20 COR/Title 5 updates for 2021-22 catalog (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), Ben Armerding (LA), Rachelle Campbell (BH), Zachary Cembellin (PSME), Anthony Cervantes (Dean, Enrollment Services), Stephanie Chan (LA), Isaac Escoto (AS President), Mark Ferrer (SRC), Valerie Fong (Acting Dean, LA), Marnie Francisco (PSME), Evan Gilstrap (Articulation Officer), Hilary Gomes (FA), Allison Herman (LA), Kurt Hueg (Dean, BSS), Marc Knobel (PSME), Eric Kuehnl (Faculty Co-Chair), Debbie Lee (Acting Dean, FA & KA), Kristy Lisle (VP Instruction), Kent McGee (Evaluations), Dokesha Meacham (CNSL), Allison Meezan (BSS), Ché Meneses (FA), Brian Murphy (APPR), Teresa Ong (AVP Workforce), Ron Painter (PSME), Katy Ripp (KA), Lisa Schultheis (BH), Lety Serna (CNSL), Matt Stanley (KA), Paul Starer (Administrator Co-Chair), Ram Subramaniam (Dean, BH & PSME), Nick Tuttle (BSS), Mary Vanatta (Curriculum Coordinator), Anand Venkataraman (PSME)

COLLEGE CURRICULUM COMMITTEE

Committee Members – 2019-20

Meeting Date: 6/2/20Co-Chairs (2)

<input checked="" type="checkbox"/>	Eric Kuehnl	7479	Vice President, Academic Senate (tiebreaker vote only)	kuehneric@fhda.edu
<input checked="" type="checkbox"/>	Paul Starer	7179	Interim Associate Vice-President of Instruction	starerpaul@fhda.edu

Voting Membership (12 total; 1 vote per division)

<input checked="" type="checkbox"/>	Micaela Agyare	7086	Library	agyaremicaela@fhda.edu
<input type="checkbox"/>	Ben Armerding	7453	LA	armerdingbenjamin@fhda.edu
<input checked="" type="checkbox"/>	Rachelle Campbell	7469	BH	campbellrachelle@fhda.edu
<input type="checkbox"/>	Zachary Cembellin	7383	PSME	cembellinzachary@fhda.edu
<input checked="" type="checkbox"/>	Stephanie Chan		LA	chanstephanie@fhda.edu
<input checked="" type="checkbox"/>	Mark Ferrer		SRC	ferrermark@fhda.edu
<input checked="" type="checkbox"/>	Valerie Fong	7135	Acting Dean—LA	fongvalerie@fhda.edu
<input checked="" type="checkbox"/>	Marnie Francisco	7420	PSME	franciscomarnie@fhda.edu
<input checked="" type="checkbox"/>	Evan Gilstrap	7675	Articulation	gilstrapevan@fhda.edu
<input checked="" type="checkbox"/>	Hilary Gomes	7585	FA	gomeshilary@fhda.edu
<input type="checkbox"/>	Allison Herman	7460	LA	hermanallison@fhda.edu
<input type="checkbox"/>	Kurt Hueg	7394	Dean—BSS	huegkurt@fhda.edu
<input checked="" type="checkbox"/>	Marc Knobel	7049	PSME	knobelmarc@fhda.edu
<input checked="" type="checkbox"/>	Dokesha Meacham	7211	CNSL	meachamdokesha@fhda.edu
<input checked="" type="checkbox"/>	Allison Meezan	7166	BSS	meezankaren@fhda.edu
<input checked="" type="checkbox"/>	Ché Meneses	7015	FA	menesesche@fhda.edu
<input checked="" type="checkbox"/>	Brian Murphy		APPR	brian@pttc.edu
<input checked="" type="checkbox"/>	Ron Painter		PSME	painterron@fhda.edu
<input checked="" type="checkbox"/>	Lisa Schultheis	7780	BH	schultheislisa@fhda.edu
<input checked="" type="checkbox"/>	Lety Serna	7059	CNSL	sernaleticia@fhda.edu
<input checked="" type="checkbox"/>	Matt Stanley	7222	KA	stanleymatthew@fhda.edu
<input checked="" type="checkbox"/>	Ram Subramaniam	7472	Dean—BH & PSME	subramaniamram@fhda.edu
<input checked="" type="checkbox"/>	Nick Tuttle	7056	BSS	tuttlenick@fhda.edu
<input checked="" type="checkbox"/>	Anand Venkataraman	7495	PSME	venkataramananand@fhda.edu

Non-Voting Membership (4)

<input type="checkbox"/>			ASFC Rep.	
<input checked="" type="checkbox"/>	Mary Vanatta	7439	Curr. Coordinator	vanattamary@fhda.edu
<input type="checkbox"/>	Kent McGee	7298	Evaluations	mcgeekent@fhda.edu
<input type="checkbox"/>			SLO Coordinator	

Visitors

Chris Allen, Patricia Gibbs, Katie Ha, Scott Lankford, Debbie Lee, Kristy Lisle, Teresa Ong

**College Curriculum Committee
Meeting Minutes
Tuesday, May 19, 2020
2:00 p.m. – 3:30 p.m.
Meeting held virtually via ConferZoom**

Item	Discussion
1. Minutes: April 30, 2020	Approved by consensus.
2. Minutes: May 5, 2020	Approved by consensus.
3. Report Out from Division Reps	<p>Speaker: All Articulation: CSU announced virtual instruction for fall 2020, with the exception of a few in-person classes. No update from UC re: their plans.</p> <p>BSS: Child Development dept. working on converting non-transcriptable certificates; LINC dept. creating new courses around teaching/learning strategies for online environments/technologies.</p> <p>PSME: Working on Title 5 updates.</p> <p>SRC: Working on Title 5 updates.</p> <p>Language Arts: Working on Title 5 updates, Distance Ed for noncredit ESL.</p> <p>Fine Arts: Working on Title 5 updates, Stand Alone forms; ensuring full-time faculty own CORs in C3MS.</p> <p>Library: Mentioned email sent by Kristy Lisle, VP of Instruction, re: new software to integrate all library holdings, online resources, and educational resources, into Canvas. Seeking faculty feedback—encourage your constituents to take a look and provide feedback. Reach out to Library rep with any questions.</p> <p>Kinesiology: Working on Distance Ed for activity courses.</p> <p>Counseling: Working on drop-in counseling process to make it as simple as possible for students. In summer, majority of counseling services are drop-in to try to help as many students as possible during transition to fall.</p> <p>Bio Health: Working on Title 5 updates. Received response from faculty regarding fall quarter DE planning discussions—will send to Kuehnl.</p> <p>Apprenticeship: Dean Chris Allen provided update. Working on Title 5 updates. Planning to deactivate Ironworkers program, as that site is no longer with Foothill.</p> <p>Instruction: Starer mentioned email sent today announcing he is returning to Language Arts as dean. No plans yet re: AVP of Instruction position.</p>
4. Announcements a. New Course Proposals	<p>Speakers: CCC Team The following proposals were presented: LINC 57A, 57B, 84C. Please share with your constituents. Gilstrap noted proposed discipline for 84C is Education and asked if this is an issue—Vanatta noted that both departments/disciplines are within BSS, so no additional sign-off required on proposal form. BSS rep responded that LINC faculty regarded as content experts, so division CC deferred to them. Hueg stated the discipline should not be listed as Education; Starer mentioned conversation with LINC faculty, believes Education is the intended discipline. Hueg noted that LINC faculty will need to confer with Education faculty; BSS rep will reach out to</p>

<p>b. New Program Approvals: GID Certificates, Bridge to College Level English Noncredit Certificate, Environmental Science ADT</p> <p>c. CCC Priorities for 2019-20— Survey Results</p>	<p>LINC faculty for follow-up, and division CC will determine if proposal needs re-approval. Discussion occurred regarding the difference between discipline and subject/department code; Vanatta noted that we don't have any local rule stating that they must match.</p> <p>Starer made general observation re: creation of new courses—concerned that given our current budget crisis we are approving new courses which may require new resources, without knowing if they will be available. Suggested new courses be approved with caveat that resources will be dependent on the outcome of the budget situation. Noted this also includes new programs which contain new courses. Kuehnl agreed this is an important consideration. BSS rep asked how this would work in practice, re: new courses such as these LINC courses that have “no track record” to help gauge level of student interest. Hueg noted that many such discussions will occur in the next few years; believes these particular LINC courses will be okay. Fine Arts rep suggested working with Institutional Research and getting feedback from students re: the courses they would like to take.</p> <p>The CCCCO has approved the four GID Certificates of Achievement (Game Design, Graphic Design, Illustration, Web Design), the Bridge to College Level English Noncredit Certificate, and the Environmental Science ADT!</p> <p>Kuehnl shared the results of the survey he conducted. Noted the topics are all clustered closely together, in terms of voting outcome. At the top is updating the Distance Ed form, which is on today's agenda. Noted that most topics will be addressed next year.</p>
<p>5. Update Distance Learning Application</p>	<p>Speaker: Eric Kuehnl Lené Whitley-Putz, Dean of Instructional Technology, present for discussion. Whitley-Putz advised that recent Title 5 changes affect the DE addendum, including honing definitions of “online” and “hybrid” courses, and addition of two features. First, regular and effective contact defined as not only instructor-to-student but also now student-to-student—subtle change that can have big impact. Addendum will need to address how instructor enables student-to-student interaction. Second, process must be in place to ensure ADA compliance. Language clarifies that even a single document used in a course which is not accessible means the course is not ADA compliant. Need to ensure that the class itself is accessible—difference between the course/curriculum and the actual class being taught. Lastly, slight changes in language: “in-person” instead of “face-to-face” or “traditional;” and “online” used for all other.</p> <p>Starer asked if Title 5 language states which entity should be responsible—the CCCCO has listed many different roles across campus that are involved, but have stated that the faculty member teaching the class is the final person responsible for ensuring their class is accessible. This means the campus needs to have infrastructure in place to support faculty; otherwise, both will be out of compliance. Starer asked about DE approval process, in general, not just regarding ADA compliance, and if there are any deadlines being enforced—every campus will look different, and the CCC's level of involvement is a local decision. Whitley-Putz mentioned one example of a college incorporating accessibility into their curriculum process, but also mentioned the need for academic freedom and the ability for faculty to fine-tune their offerings.</p> <p>Starer clarified that he is asking more about how these Title 5 changes affect the CCC's responsibility; asked if new regulations now require CCC</p>

to follow up to ensure that “regular and effective contact” is taking place as noted on the DE addendum or if CCC may defer to the faculty member to ensure standards are being met. Whitley-Putz noted that Anthony Cervantes, Dean of Enrollment Services, responds to quarterly audit requests re: regular and effective contact—having such information on the DE addendum would be helpful for his process. Would also help ensure compliance and transform addendum from list of checkboxes into more of a campus mission. Starer noted that our current decentralized curriculum process puts trust into the division/department and faculty to do what is required of them; noted that changing our DE approval process could significantly slow it down—similar to our process for GE course approval.

PSME rep agreed with Starer, noting that Foothill regarded as putting a lot of trust in its faculty. Also expressed support for Whitley-Putz. Fine Arts rep involved in the creation of our current DE addendum, and noted that faculty asked to include DE information in syllabi. Asked if changes to addendum would require re-review/approval of all courses already approved for DE; asked if information re: ADA compliance could be included on COR (e.g., Special Facilities section) instead of on DE addendum. Believes faculty more likely to refer to COR rather than DE addendum for this sort of information. Whitley-Putz noted her presence is to provide insight and share Title 5 changes; CCC free to make their own decisions re: level of changes that need to be made. She is not recommending any specific changes.

Other PSME rep believes the CCCC is going to require all courses go through normal DE approval process, starting in January, to be offered online—no more blanket DE approval. Starer also believes this will be the case. Rep noted that PSME has many courses not approved for DE but are currently being taught as such, under emergency circumstances. Suggested amending our current DE addendum to allow for approving a course for DE in case of emergency only; noted that other colleges have already moved forward with this. Would ensure that a course may be taught online/hybrid in an emergency situation, and also make clear that the course not “officially” approved to be taught online/hybrid. Proposed that Foothill consider doing this at the same time as updating DE addendum to incorporate Title 5 changes.

Other PSME rep suggested accessibility be a separate consideration, and not necessarily incorporated into syllabi or courses—Starer unsure if this would be allowed, legally. Starer addressed suggestion to add emergency DE approval checkbox to DE addendum, noting concern about how “emergency” could be defined, as some could misinterpret it and offer a course online/hybrid in non-emergency situations. PSME rep agreed that “emergency” would need to be defined; for example, if the FHDA Board closes campus in the case of a fire or earthquake. Kuehnl noted additional consideration that, when campus initially re-opens, certain faculty may not feel safe returning right away if they are in a high-risk group—may need to address such nuances. Whitley-Putz noted fast-moving field of DE—curriculum process is not quite as fast. Can anticipate situation in which a new DE addendum created, but then technology changes occur. Noted that just because a course is DE approved doesn’t mean it must be taught online; suggested that, similarly, approving emergency DE for a course would not necessarily mean that a faculty member forced to teach online.

Bio Health rep asked for clarification; believes that if a course approved for DE, faculty could be asked/compelled to teach online/hybrid—Starer noted this is not his understanding, but there could be a situation in which the only available offerings left for a faculty member are online/hybrid. Does not

	<p>recall any situation in Language Arts in which a full-time faculty member was compelled to teach DE who didn't want to. Kuehnl and Starer noted the same may not be true for part-time faculty, who may end up having only DE classes available for them to teach. Lee agreed, noting there could be a lack of student interest in a certain course being offered in-person, so only DE scheduled.</p> <p>Fine Arts rep noted new scheduling codes being created for online/hybrid offerings, re: synchronous and asynchronous—suggested new DE addendum mention these codes. Noted that certain faculty in Fine Arts uncomfortable teaching certain types (a/synchronous).</p> <p>Starer has heard a lot of concern re: how rapidly the emergency DE approvals came forward, and suggested the group think ahead to fall quarter to be prepared in the case of something similar occurring. Kuehnl noted the CCCCO does want local approval to occur in the fall quarter (of courses which fell under blanket approvals); planning to update our DE addendum in fall quarter to coincide with local approval. Whitley-Putz shared link to Title 5 language; offered to continue to be involved in discussions and/or revision of DE addendum.</p>
<p>6. Revisiting Local Policy Requiring “C” Grade or Better for Major Courses</p>	<p>Speaker: Eric Kuehnl</p> <p>Continuing discussion from previous meeting. Kuehnl noted that Isaac Escoto, AS President, requested CCC discuss issue, which is that Pass/No Pass grades currently being accepted for major courses (due to COVID-19), but this is counter to our local policy. Noted that De Anza already does allow for P/NP for certain programs. Starer noted that ASFC leadership has heard concern from students that selecting P/NP would impact their transfer ability. Issue was discussed at President’s Cabinet. Starer suggested that if CCC doesn’t feel compelled to continue discussion, we can move on. Gilstrap noted that certain transfer institutions allowing P/NP grades, temporarily, due to COVID-19, but most normally do not. Mentioned information in our course catalog re: maximum P/NP units allowed for transfer—this would need to be taken into consideration, if college decides to adjust our local policy.</p> <p>Bio Health rep noted general feedback from division faculty was to not do anything which could negatively impact students, in terms of transfer ability. Gilstrap noted situation is very individualized, based on which school they intend to transfer. Counseling rep would like to have larger discussion within division before CCC settles discussion (have not had time to do so, yet)—Kuehnl agreed with this. PSME rep noted concern that many students will be taking gap years, since many universities plan to be virtual in the fall—this could create a throughput issue for Foothill students. Concerned that our students will be less competitive, and wondered if having a lot of P/NP grades on transcript could create additional risk. Counseling rep agreed that issue is very complicated; has talked to students who have been accepted to universities but are unsure what to do (e.g., defer, etc.). Noted there are also risks associated with a student deferring, and we don’t yet know what university environments will look like post-COVID-19. Kuehnl would like Counseling reps to bring discussion back to their division, and will continue discussion at CCC following that. Gilstrap noted not every Foothill course has the option to take P/NP; also noted our course catalog does not state that a Pass grade is equal to a C or higher grade—suggested this language may need to be updated if local policy is changed to allow Pass grades for major courses.</p>
<p>7. Requisite Recency</p>	<p>Speaker: Eric Kuehnl</p> <p>Reviving discussion that occurred earlier this year. Kuehnl noted research has revealed we are locally allowed to make decision about whether to enforce recency requirement for requisites; Title 5 does mandate a 36-</p>

	<p>month minimum. PSME rep noted concern originally came from Physics dept., but Chemistry dept. faculty currently more concerned, especially re: safety concerns in lab classes. Recalled suggestion that faculty confer with counterparts at De Anza, and noted was hoping Starer could help facilitate such discussions—Starer happy to do so. Fine Arts rep noted that ceramics faculty interested in setting recency requirement; also interest in setting requirement for higher-level painting courses (when offered in-person). Noted that current virtual instruction situation creating extra level of concern, in terms of students being ready to take advanced courses when lower-level taken virtually. Recalled ceramics faculty suggested seven years for recency. Kuehnl offered to speak with AS reps at De Anza to gauge interest in discussing. Starer and Kuehnl will move forward with initiating discussions with De Anza.</p>
8. Good of the Order	
9. Adjournment	3:27 PM

Attendees: Micaela Agyare (LIBR), Chris Allen (Dean, APPR), Stephanie Chan (LA), Mark Ferrer (SRC), Valerie Fong (Acting Dean, LA), Marnie Francisco (PSME), Evan Gilstrap (Articulation Officer), Hilary Gomes (FA), Allison Herman (LA), Kurt Hueg (Dean, BSS), Marc Knobel (PSME), Eric Kuehnl (Faculty Co-Chair), Debbie Lee (Acting Dean, FA & KA), Dokesha Meacham (CNSL), Allison Meezan (BSS), Ché Meneses (FA), Teresa Ong (AVP Workforce), Ron Painter (PSME), Katy Ripp (KA), Lisa Schultheis (BH), Lety Serna (CNSL), Matt Stanley (KA), Paul Starer (Administrator Co-Chair), Ram Subramaniam (Dean, BH & PSME), Nick Tuttle (BSS), Mary Vanatta (Curriculum Coordinator), Anand Venkataraman (PSME), Lené Whitley-Putz (Dean, Instructional Technology)

Minutes Recorded by: M. Vanatta

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**Foothill College
College Curriculum Committee
New Course Proposal**

*This form should be completed by the faculty author as preparation to writing a new course. Your division CC rep can assist you in completing it appropriately, and will forward it to the Office of Instruction for inclusion as an announcement at the next available CCC meeting. The purpose of this form is **interdisciplinary communication**. The responsibility to rigorously review and approve new courses remains with the divisional curriculum committees.*

Faculty Author: Benjamin Armerding

Proposed Number: ENGL 27G

Proposed Units: 4

Proposed Hours: 4 hours lecture

Proposed Transferability: UC & CSU

Proposed Title: Detective & Mystery Fiction

Proposed Catalog Description & Requisites:

A study of mystery, detective, and crime fiction from the 19th to 21st centuries, paying attention to the evolution of various sub-genres, such as Golden Age mysteries, hard-boiled detective novels, the police procedural, courtroom drama, etc. Reading and analysis of multicultural texts contextualized historically and interculturally, tracing the correlations between detective and mystery fiction and other literary genres.

Proposed Discipline: English

(For guidance, refer to the Minimum Quals handbook, available on [the CCC webpage.](#))

Note: If any proposed discipline falls within the purview of another division, please verify approval from that division. Division Rep: _____ Date: _____

To which Degree(s) or Certificate(s) would this course potentially be added?

English AA and ADT

Are there any other departments that may be impacted from the addition of this course? Please identify those departments and the effect:

Comments & Other Relevant Information for Discussion:

Instruction Office:

Date presented at CCC:

Number assigned:

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Faculty Author: Cassandra Pereira

Proposed Number: LINC 68G

Proposed Units: 3

Proposed Hours: 3 hours lecture

Proposed Transferability: CSU

Proposed Title: Teaching & Learning with Google Apps for Education

Proposed Catalog Description & Requisites:

Intended for educators seeking to become Google Level 1 Certified, this course covers all Google Applications for Education, including Classroom, Docs, Drive, Sites, Forms, Sheets, Slides, YouTube, Maps, Gmail, Calendar, and Chrome. With a focus on achieving educational outcomes, participants will learn the fundamentals of each application, and will design integrations between multiple applications to create a seamless workflow. Emphasis will be placed on bringing teaching and learning into the online environment, organizing and managing online work, and utilizing application features to expand and improve student learning opportunities. Upon completing the course, participants will be prepared to take the Google Certified Educator Level 1 Examination.

Advisory: Experience with internet software tools, browsers, hyperlinks, online media resources, and basic skills using a computer.

Proposed Discipline: Education

To which Degree(s) or Certificate(s) would this course potentially be added?

C.A. in Online and Blended Instruction (currently in development)

Are there any other departments that may be impacted from the addition of this course? Please identify those departments and the effect:

None

Comments & Other Relevant Information for Discussion:

The Krause Center for Innovation is a Google Education Partner

Instruction Office:

Date presented at CCC:

Number assigned:

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**Foothill College
College Curriculum Committee
New Course Proposal**

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Faculty Author: Cassandra Pereira

Proposed Number: LINC 78D

Proposed Units: 2

Proposed Hours: 2 hours lecture

Proposed Transferability: CSU

Proposed Title: Physical Computing Fundamentals

Proposed Catalog Description & Requisites:

This introductory makerspace-oriented course covers the foundational components of physical computing, specifically as it relates to makerspace projects and activities. Participants will build and use a basic computer by connecting circuits, creating inputs and outputs, writing code, and programming physical devices to interact with users. Computational and design thinking practices will be emphasized throughout. Participants will gain a fundamental knowledge of the form and functions of computers, as well as the ways in which computers can solve simple and complex problems. Practical skills include model construction, circuitry, algorithm design, troubleshooting, debugging, and engineering for design.

Advisory: Experience with internet software tools, browsers, hyperlinks, online media resources, and basic skills using a computer.

Proposed Discipline: Instructional Design/Technology

To which Degree(s) or Certificate(s) would this course potentially be added?

Certificate of Achievement in Makerspace Coordinator

Are there any other departments that may be impacted from the addition of this course? Please identify those departments and the effect:

No

Comments & Other Relevant Information for Discussion:

Instruction Office:

Date presented at CCC:

Number assigned:

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College Curriculum Committee
New Course Proposal**

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Faculty Author: Cassandra Pereira

Proposed Number: LINC 84

Proposed Units: 3

Proposed Hours: 3 hours lecture

Proposed Transferability: CSU

Proposed Title: Fundamentals of Makerspace Design & Instruction

Proposed Catalog Description & Requisites:

This introductory course in makerspace coordination is for students, teachers, educators, and trainers who are interested in becoming Makerspace Coordinators in schools, libraries, or business settings. Students will develop foundational knowledge and skills in makerspace design, set-up, and management. Practiced skills include: designing engaging spaces with learners in mind; developing learning activities that promote creativity, making, and design thinking; creating policies and procedures to ensure safety and accessibility; selecting and maintaining equipment; and managing instructional materials. Special emphasis is placed on applying best practices for managing and using makerspaces in instructional settings.

Advisory: Basic computer skills and internet-based technologies.

Proposed Discipline: Instructional Design/Technology

To which Degree(s) or Certificate(s) would this course potentially be added?

C.A. in Makerspace Coordinator

Are there any other departments that may be impacted from the addition of this course? Please identify those departments and the effect:

None

Comments & Other Relevant Information for Discussion:

Instruction Office:

Date presented at CCC:

Number assigned:

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

**Foothill College
College Curriculum Committee
New Course Proposal**

*This form should be completed by the faculty author as preparation to writing a new course. Your division CC rep can assist you in completing it appropriately, and will forward it to the Office of Instruction for inclusion as an announcement at the next available CCC meeting. The purpose of this form is **interdisciplinary communication**. The responsibility to rigorously review and approve new courses remains with the divisional curriculum committees.*

Faculty Author: Cassandra Pereira

Proposed Number: LINC 84D

Proposed Units: 1

Proposed Hours: 1 hour lecture

Proposed Transferability: CSU

Proposed Title: Vector Based Graphic Design for Makerspaces

Proposed Catalog Description & Requisites:

This course provides an overview of web-based graphic design software, with a specific focus on designing for use with makerspace tools. Students will learn the basic procedures of vector design, including drawing objects, adjusting stroke outline and fill patterns, and working with layers. Students will both design new vector graphics and import and adapt existing graphics in order to facilitate their physical production using makerspace tools. Special emphasis will be placed on formatting vector graphics to meet the import requirements of different production tools including laser cutters, vinyl cutters, CNC machines, and 3D printers.

Advisory: Experience with internet software tools, browsers, hyperlinks, online media resources, and basic skills using a computer.

Proposed Discipline: Instructional Design/Technology

To which Degree(s) or Certificate(s) would this course potentially be added?

C.A. in Makerspace Coordinator

Are there any other departments that may be impacted from the addition of this course? Please identify those departments and the effect:

None

Comments & Other Relevant Information for Discussion:

Instruction Office:

Date presented at CCC:

Number assigned:

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

**Foothill College
College Curriculum Committee
New Course Proposal**

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Faculty Author: Cassandra Pereira

Proposed Number: LINC 84E

Proposed Units: 1

Proposed Hours: 1 hour lecture

Proposed Transferability: CSU

Proposed Title: Laser Cutter Fundamentals

Proposed Catalog Description & Requisites:

Intended for Makerspace educators and interested makers, this course provides an overview of the safe use and maintenance of laser cutter machines. Students design and produce projects on the laser cutter, using a variety of materials (cardboard, paper, wood, acrylic, stone, glass, fabric, etc.) and serving a variety of functions (flatpack assembly, art, display, engineering solutions, etc.). Advanced topics include rotary tools, filtration methods, machine maintenance, and bed installment/changes. Special emphasis will be placed on reinforcing design thinking concepts and the development of laser cutter makerspace projects to meet the needs of a variety of users.

Advisory: Experience with basic computer and internet functions. Experience with vector-based graphic design software is recommended, but not required.

Proposed Discipline: Instructional Design/Technology

To which Degree(s) or Certificate(s) would this course potentially be added?

C.A. in Makerspace Coordinator

Are there any other departments that may be impacted from the addition of this course? Please identify those departments and the effect:

None

Comments & Other Relevant Information for Discussion:

Instruction Office:

Date presented at CCC:

Number assigned:

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

**Foothill College
College Curriculum Committee
New Course Proposal**

*This form should be completed by the faculty author as preparation to writing a new course. Your division CC rep can assist you in completing it appropriately, and will forward it to the Office of Instruction for inclusion as an announcement at the next available CCC meeting. The purpose of this form is **interdisciplinary communication**. The responsibility to rigorously review and approve new courses remains with the divisional curriculum committees.*

Faculty Author: Cassandra Pereira

Proposed Number: LINC 84F

Proposed Units: 1

Proposed Hours: 1 hour lecture

Proposed Transferability: CSU

Proposed Title: Vinyl Cutter Fundamentals

Proposed Catalog Description & Requisites:

Intended for Makerspace educators and interested makers, this course provides an overview of the safe use and maintenance of vinyl cutter machines, ranging from hobbyist to industrial capacities. Students will design and produce projects on the vinyl cutter, working with a variety of materials, blades, tools, and mats to address different functional needs. Students will use design software to create and import images, separate layers, and determine outcomes based on both hardware and media. Products developed include stickers, pop-up art, t-shirts, mixed media projects, boxes, and large-format vinyl pieces. Special emphasis will be placed on reinforcing design thinking concepts and the development of vinyl cutter makerspace projects to meet the needs of a variety of users.

Advisory: Experience with basic computer and internet functions. Experience with vector-based graphic design software is recommended, but not required.

Proposed Discipline: Instructional Design/Technology

To which Degree(s) or Certificate(s) would this course potentially be added?

C.A. in Makerspace Coordinator

Are there any other departments that may be impacted from the addition of this course? Please identify those departments and the effect:

None

Comments & Other Relevant Information for Discussion:

Instruction Office:

Date presented at CCC:

Number assigned:

General Education Review Request

AREA V - COMMUNICATION & ANALYTICAL THINKING

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 V - Communication & Analytical Thinking:

Communication and analytical thinking curricula foster the ability to communicate knowledge, information, ideas, and feelings, and enhance the ability to evaluate, solve problems, and make decisions.

To accomplish this, a course meeting the Communication and Analytical Thinking General Education Requirement **must** offer students the opportunity to:

- C1. Apply the analytical skills learned in the course to other disciplines;
- C2. Develop competencies in communication or computation, and apply the appropriate technical, interpretive, and evaluative skills;
- C3. Read, interpret, and analyze statements and then be able to express them in symbolic form when appropriate;
- C4. Clearly and precisely express their ideas in a logical and organized manner using the discipline-appropriate language.

Expected outcomes of a successful course in this area **should** include some or all of the following:

- C5. Critically assess other people's ideas; and organize, edit, and evaluate their own ideas in order to articulate a position;
- C6. Identify goals when applying analytical skills;
- C7. Recognize limitations of applicable methodologies;
- C8. Use current technologies for discovering information and techniques for communication, analysis, evaluation, problem solving, decision-making, and presentation.

General Education Review Request
AREA V - COMMUNICATION & ANALYTICAL THINKING

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: Must include the following:

C1. Apply the analytical skills learned in the course to other disciplines;

Matching course component(s):

P101.1 (communications)

Per the details listed for Module #1 'Union Heritage' apprenticeship students must articulate connections between and among the following: history, tradition and standards of excellence set forth by Pipefitters Local 393, architectural, engineering and construction management layouts.

C2. Develop competencies in communication or computation, and apply the appropriate technical, interpretive, and evaluative skills;

Matching course component(s):

P101.3(12), P101.4(42)

Module #1 Learning Objective 1-8 emphasize applied interpersonal communication competence 1. Identify partners in an apprenticeship 2. Describe how to get off to the right start, this area focuses on mindfulness of both verbal and nonverbal communication with specific intent to establish a professional rapport and trust 3. Identify a collective voice, this area emphasizes principles of group communication, interaction and synergy. 4. Identify your role as a partner closely corresponds to knowing one's role based off personality, experience and self concept covered in both Group Discussion and Interpersonal Communication.

C3. Read, interpret, and analyze statements and then be able to express them in symbolic form when appropriate;

Matching course component(s):

P101.4(42), P102.8(30)

Apprenticeship students in the Project Management class are trained to anticipate and thrive in the constantly evolving and fluctuating construction field. To receive the certificate and graduate from the program apprenticeships students must clearly demonstrate to potential clients, journeymen, project managers and safety supervisors, the ability to articulate construction plans, the logic / reasoning behind decisions, timeliness of the schedule along with adherence to safety regulations.

C4. Clearly and precisely express their ideas in a logical and organized manner using the discipline-appropriate language.

Matching course component(s):

P101.1(6); P101.2(24)

In the culmination of Project Management students are required to address active industry professionals 'Project Managers', 'Site Supervisors' and 'Safe Officials' by clearly demonstrating their company's credibility, quality of work and timeliness of completion while accounting for adherence to all safety protocols per CALOSHA. Both the written proposals and presentations utilize discipline appropriate language.

Depth Map: should include some or all:

C5. Critically assess other people's ideas; and organize, edit, and evaluate their own ideas in order to articulate a position;

Matching course component(s):

P201.12 (63); P301.18(54) 'Job site'

Apprenticeships students strategize the pre-planning of where pipes fit, developmental stages of project, costs, including parts, labor and diligent adherence to safety protocols. Upon gathering this data (ideas) apprenticeship students professionally and coherently express the reasoning behind the proposed

General Education Review Request
AREA V - COMMUNICATION & ANALYTICAL THINKING

implementation in coordination with construction management, building supervisors, engineers and safety officials.

C6. Identify goals when applying analytical skills;

Matching course component(s):

P201.12(63); P301.18(54) 'Job Site'

The project management JRM 105, class holds students accountable for researching clients needs, building specifications, parameters of contract including labor, completion, procedural and chemical hazard safety. The sum total of this course requires students to set goal and meticulously explain how they intend to apply analytical skills to achieve them.

C7. Recognize limitations of applicable methodologies;

Matching course component(s):

P102.9(39); P201.11(27) P 501 Module 23

During apprenticeship training and field work, Local 393 members must maintain update understanding of Uniform Plumbing Code, Cal-OSHA safety standards along with Process Pipe Fitting installation recognizing chemical and physical properties of use.

C8. Use current technologies for discovering information and techniques for communication, analysis, evaluation, problem solving, decision-making, and presentation.

Matching course component(s):

P201.12(63); P202.14(27)

Commercial Plumbing year one Identify the purpose, responsibilities of OSHA and articulate how the project will ensure compliance in coordination with a designated Site Safety Officer. Define regulations for the Resource Conservation Recovery Act. Describe policies and procedures for handling hazardous waste.

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. Creative, critical, and analytical thinking (reasoning, questioning, problem solving, and consideration of consequence).

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.

General Education Review Request

AREA VI - UNITED STATES CULTURES & COMMUNITIES

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 VI - United States Cultures & Communities:

United States Cultures and Communities courses critically explore the current and historical interaction of different groups of Americans. These courses discourage discriminatory attitudes towards others by providing an empirical understanding of and appreciation for the marginalized groups that have been important in the development of United States history and culture, and the value of diverse cultural groups to American society.

Courses meeting the GE requirement in United States Cultures and Communities **must** include **all of the following** student learning outcomes:

- U1. Demonstrate detailed knowledge of and sensitivity to at least one U.S. group categorized by race/ethnicity, gender, class, disability, sexual identity or religious belief who has suffered a history of systematic oppression and discrimination.
- U2. Critically analyze the degree of (or dynamics of) the interaction between at least one marginalized culture or community and the dominant U.S. culture, or between two marginalized communities or cultures.
- U3. Develop and articulate an awareness of one's own culturally-determined perspective and how it might be viewed from the perspective of others.

In addition, courses meeting the GE requirement for United States Cultures and Communities **must include at least three** of the following student learning outcomes:

- U4. Critically examine the contributions of many groups to a particular aspect of United States culture;
- U5. Evaluate and analyze the interaction of at least one marginalized culture with the dominant U.S. culture;
- U6. Evaluate and analyze the interaction between at least two marginalized cultures or communities within the framework of United States society;
- U7. Explain culture as a concept and how it can unite or divide people into various groups;
- U8. Apply information about groups presented in the class to contemporary social and cultural relations;
- U9. Analyze and interpret how culture shapes human development and behavior.

General Education Review Request
AREA VI - UNITED STATES CULTURES & COMMUNITIES

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: Must include the following:

U1. Demonstrate detailed knowledge of and sensitivity to at least one U.S. group categorized by race/ethnicity, gender, class, disability, sexual identity or religious belief who has suffered a history of systematic oppression and discrimination;

Matching course component(s):

Course performance and Learning Objective - Module 1 / Union Heritage delineates that students must identify, explore and demonstrate detailed knowledge of and sensitivity to all partners in the apprenticeship process - this may include groups by race, ethnicity, class, gender, disability, sexual identity or religious belief who have suffered a history of systemic oppression and discrimination. Specifically, Module 1 includes students needing to demonstrate understanding of other groups and the characteristics and goals of proactive interaction for apprentices and journeymen.

U2. Critically analyze the degree of (or dynamics of) the interaction between at least one marginalized culture or community and the dominant U.S. culture, or between two marginalized communities or cultures;

Matching course component(s):

Course performance and Learning Objective - Module 1 / Union Heritage delineates that students must critically analyze the interaction between various partners in the apprenticeship process - this includes groups by race, ethnicity, class, gender, disability, sexual identity or religious belief who have suffered a history of systemic oppression and discrimination. Specifically, Module 1 includes students needing to demonstrate understanding of other groups and the characteristics and goals of proactive interaction for apprentices and journeymen.

Standards of Excellence assignments emphasize critical awareness of social and professional responsibilities as part of the Pipe Trades community including various entities such as the local union (social class group), and as partners collaborating with individual clients with diverse backgrounds and experiences as well as organizations representing multiple locales and interests.

Journal entries require students to reflect on the intersectionality of their role as apprentices and global / community-centered citizens.

U3. Develop and articulate an awareness of one's own culturally-determined perspective and how it might be viewed from the perspective of others.

Matching course component(s):

Standards of Excellence assignments emphasize critical awareness of social and professional responsibilities as part of the Pipe Trades community including various entities such as the local union (social class group), and as partners collaborating with individual clients with diverse backgrounds and experiences as well as organizations representing multiple locales and interests.

Journal entries require students to reflect on the intersectionality of their role as apprentices and global / community-centered citizens.

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

U4. Critically examine the contributions of many groups to a particular aspect of United States culture;

Matching course component(s):

U5. Evaluate and analyze the interaction of at least one marginalized culture with the dominant U.S. culture;

Matching course component(s):

Apprentices research the legacy and influence of unions on workplace protocol and the labor laws under which they operate and then demonstrate competency in this knowledge via research essays; after reading and on-

General Education Review Request
AREA VI - UNITED STATES CULTURES & COMMUNITIES

site experience, apprentices write explorations and utilization of vocation-based written genres (e.g. memos, case studies...) and reflective rationales exploring the importance of the union / labor / trades movement to American culture.

U6. Evaluate and analyze the interaction between at least two marginalized cultures or communities within the framework of United States society;

Matching course component(s):

Standards of Excellence assignments emphasize critical awareness of social and professional responsibilities as part of the Pipe Trades community including various entities such as the local union (social class group), and as partners collaborating with individual clients with diverse backgrounds and experiences as well as organizations representing multiple locales and interests.

Journal entries require students to reflect on the intersectionality of their role as apprentices and global / community-centered citizens.

U7. Explain culture as a concept and how it can unite or divide people into various groups;

Matching course component(s):

U8. Apply information about groups presented in the class to contemporary social and cultural relations;

Matching course component(s):

Apprenticeship students must create multiple drafts of plans, evaluating audience needs and adjusting to take account of cultural and social considerations, and including contemporary local, state and federal laws (an application of information about groups in contemporary social and cultural relations).

Application of their research comes in the form of written analysis of "Standard for Excellence" reading and responses (e.g. consolidating Standards of Excellence questions into actual analytical writing assignments) - which will serve as first stage assignments that lead into a larger analysis of things like union regulations, (historically and to present day), and the ways they manifest, in day to day praxis, with the analysis developing over multiple drafts. Students' detailed and applied trades plans are based on and created from this process.

U9. Analyze and interpret how culture shapes human development and behavior.

Matching course component(s):

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):

Our mapping includes written essays, critical analysis questions, journals and research of issues face by pipe-fitting / plumbing apprentices which necessitate the use of analytical listening, writing and reading to effectively evaluate and synthesize competent grasp of apprenticeship curriculum.

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

Matching course component(s):

The Pipes Trades program exposes students to a variety of on the job problems and requires them to devise solutions based on critical data analysis. Students document and describe the processes of solving these problems in short essays and writing assignments. LEAN project / Blueprint research requires apprentices to gather data and apply it to problem solving.

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

Matching course component(s):

Through essays, critical thinking questions, and appropriate discipline-specific mediums, apprentices manifest their understanding of apprenticeship material and audience through discipline-appropriate language. Students

**General Education Review Request
AREA VI - UNITED STATES CULTURES & COMMUNITIES**

express the process and rationale of the creation of pipes trade documents. Sustained journal practice requires apprentices to practice using discipline-appropriate language to articulate goals and solutions.

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):

Standards of Excellence assignments emphasize critical awareness of individuals' social and professional responsibilities as part of the Pipes Trades community, the local union, and as partners collaborating with individual clients and organization representing multiple locales and interests. Journal entries ask students to reflect on the intersectionality of their roles as apprentices and global / community centered citizens.

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):

Students demonstrate their ability to analyze and assess blueprints by pinpointing errors and making appropriate plans for pipes-based applications. Additionally, students create and or utilize pre-existing digital literacy to generate and pursue curiosity and methods for adhering to necessary job-related protocols (e.g. union regulations, HIPAA regulations, job seeking skills, student-generated research).

Requesting Faculty: Patricia Gibbs Date: October 28, 2019

Division Curriculum Rep: Brian Murphy Date: 5/29/20

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 Online and Blended Instruction

Item 1. Program Goals and Objectives

The Certificate of Achievement in Online and Blended Instruction is designed for students working in or planning for a career in online human resource training and development or education; in-service and pre-service teachers; educators at any level; and those working as trainers for any market sector. The program focuses on the design and development of online coursework through the use of a learning management system, with a focus on the key areas of content presentation, interaction, assessment, and accessibility. The content includes current best practices in instructional design, student engagement, socio-emotional learning, differentiation, equity, collaboration, assessment, and professional responsibilities, all through the lens of online teaching and learning. Skills learned include the ability to develop online courses in learning management systems, design and assess meaningful learning objectives, monitor student progress and engagement, build virtual communities that embrace diversity, create learning materials that are accessible to diverse learners, develop activities to promote engagement, and create interactive multimedia to support learning. Upon completion of the program, students will be prepared to develop and successfully facilitate courses, workshops, and trainings in an online or blended environment.

Program Learning Outcomes:

- Students will be able to demonstrate professional responsibilities in keeping with the best practices of online instruction.
- Students will be able to support learning and facilitate presence (teacher, social, and learner) with digital pedagogy.
- Students will be able to facilitate interactions and collaboration to build a supportive online community that fosters active learning.
- Students will be able to promote learner success through interactions with learners and other stakeholders and by facilitating meaningful learner engagement in learning activities.
- Students will be able to model, guide, and encourage legal, ethical, and safe behavior related to technology use.
- Students will be able to personalize instruction based on the learner's diverse academic, social, and emotional needs.
- Students will be able to create and/or implement assessments in online learning environments in ways that ensure the validity and reliability of the instruments and procedures.
- Students will be able to measure learner progress through assessments, projects, and assignments that meet standards-based learning goals, and evaluate learner understanding of how these assessments measure achievement of the learning objectives.
- Students will be able to curate and create instructional materials, tools, strategies, and resources to engage all learners and ensure achievement of academic goals.

Item 2. Catalog Description

The Certificate of Achievement in Online and Blended Instruction is designed for students

working in or planning for a career in online human resource training and development or education; in-service and pre-service teachers; educators at any level; and those working as trainers for any market sector. The program provides 15 units of instruction and support for developing online courses in learning management systems, designing and assessing meaningful learning objectives, monitoring student progress and engagement, building virtual communities that embrace diversity, developing learning materials that are accessible to diverse audiences, developing activities to promote engagement, and creating interactive multimedia to support learning. Upon completion of the program, students will be prepared to develop and successfully facilitate courses, workshops, and trainings in an online or blended environment.

Item 3. Program Requirements

Requirements	Course #	Name	Units	Sequence
Core Courses (11 units)	LINC 57	Designing Learner-Centered Instruction	1	Year 1, Spring
	LINC 75A	Introduction to Instructional Design & Technology	3	Year 1, Fall
	LINC 75C	Designing Online Instruction	3	Year 1, Winter
	LINC 91B	Evaluating Technology-Based Learning Outcomes	3	Year 1, Spring
	LINC 93B	Assistive Technology & Universal Access	1	Year 1, Winter
Restricted Electives (select 4 units)	LINC 58	Global Project-Based Learning	2	Year 1, Spring
	LINC 66C	Searching & Researching the Internet	2	Year 1, Fall
	LINC 67	Designing Web-Based Learning Projects	1	Year 1, Spring
	LINC 70	Web Page Design Overview	1	Year 1, Fall
	LINC 80	Multimedia Overview	1	Year 1, Winter
	LINC 81	Using Digital Images	1	Year 1, Winter
	LINC 83F	Introduction to Digital Video Editing	1	Year 1, Spring
	LINC 90A	Webinars	1	Year 1, Winter
	LINC 90C	Online Collaboration Tools	2	Year 1, Winter
	LINC 95B	Technology Ethics & Educational Law	1	Year 1, Fall
LINC 98	Teaching & Learning in the Digital Age	1	Year 1, Fall	

TOTAL UNITS: 15 units

Proposed Sequence:

Year 1, Fall = 5 units

Year 1, Winter = 5 units

Year 1, Spring = 5 units

TOTAL UNITS: 15 units

Item 4. Master Planning

Foothill's mission is to offer equitable programs and services that empower students to achieve their goals and become productive global citizens. By offering an Online and Blended Instruction certificate, Foothill will provide an invaluable service to current and future educators and trainers by teaching them to create high quality learning programs in a virtual environment, with a focus

on access and equity. By modeling best practices in online education students in the program will experience a real-life example of successful online learning, and they will be able to apply these skills to their own online learning projects.

Foothill’s 2019-2020 Annual College Strategic Objectives recognizes that classes are being moved from face-to-face to hybrid and/or online; however, the document also recognizes that not all students are equipped with the tools to be successful in an online environment. In this program, students will learn best practices and equity-driven strategies to help ALL students find success in online classes. This will enable K-12 educators to scaffold online learning strategies in traditional and blended classrooms, empowering younger students to become successful learners and leaders in higher-ed virtual environments.

The 2019 California Community College State of the System Report highlighted the California Online College that is helping the needs of stranded workers looking for an opportunity to boost their skills and marketability. Additionally, there is a push to expand the online opportunities for all students so that access is equitable and flexible for the diverse needs of adult learners. Upon completion of the Online and Blended Instruction program, students will be able to offer all learners a high-quality education anywhere in the world.

Item 5. Enrollment and Completer Projections

During its initial year, one cohort of 30 students is projected to complete the program. After the first year, the program will increase its cohort size to 50 students. The intention is to conduct two cohorts of 50 students per year, or 100 students per year. After five years, approximately 400 students are projected to complete the program (accounting for attrition). Events related to COVID-19 and shelter-in-place orders have highlighted the extremely pressing need for a program of this nature. There is expected to be an increased demand for quality online and blended educational models, both as a safeguard against another shelter-in-place event, and as an opportunity to promote more flexible learning opportunities for a variety of educational institutions and workplaces. Because this program can be taught entirely online, there is the potential for a greater reach to students beyond the local area.

		Year 1		Year 2	
Course #	Course Title	Annual Sections	Annual Enrollment	Annual Sections	Annual Enrollment
LINC 57	Designing Learner-Centered Instruction	1	30	1	35
LINC 58	Global Project-Based Learning	1	36	2	59
LINC 66C	Searching & Researching the Internet	N/A	N/A	N/A	N/A
LINC 67	Designing Web-Based Learning Projects	1	37	1	36
LINC 70	Web Page Design Overview	1	60	3	136

LINC 75A	Introduction to Instructional Design & Technology	4	99	3	81
LINC 75C	Designing Online Instruction	N/A	N/A	N/A	N/A
LINC 80	Multimedia Overview	2	107	3	132
LINC 81	Using Digital Images	2	100	1	64
LINC 83F	Introduction to Digital Video Editing	2	126	2	96
LINC 90A	Webinars	N/A	N/A	N/A	N/A
LINC 90C	Online Collaboration Tools	2	59	1	35
LINC 91B	Evaluating Technology-Based Learning Outcomes	1	32	1	25
LINC 93B	Assistive Technology & Universal Access	N/A	N/A	N/A	N/A
LINC 95B	Technology Ethics & Educational Law	1	17	1	17
LINC 98	Teaching & Learning in the Digital Age	1	57	2	73

Item 6. Place of Program in Curriculum

This program is a natural outcome of the Learning in New Media Classes department's focus, and reflects the Krause Center for Innovation's mission to empower teachers and transform the learning experience through innovation and effective practices. The foundational courses of the program connect to the LINC Certificate of Achievement in Instructional Design and Technology before branching into the realm of online-specific instruction. The curriculum sequence is designed to address the key themes and outcomes provided by the CVC-OEI initiative, bringing this excellent model of online instruction to a wider-ranging audience.

Item 7. Similar Programs at Other Colleges in Service Area

There are no similar programs at other colleges in Foothill's service area. However, there are some similarities between this program and programs at other organizations that are connected with educational institutions.

The curricular themes for this program are founded in the CCC California Virtual Campus-Online Education Initiative (CVC-OEI) program for CCC employees. This initiative runs multiple successful programs related to online instruction, but program participation is limited to employees of the California Community College system, so it does not impact K-12 educators, non-CCC college educators, virtual tutors, and industry/corporate trainers and education development managers.

Leading Edge, through the Riverside County Office of Education, offers an Online and Blended Teacher Certification that includes 60 hours of learning and is adapted from CVC-OEI online certification programs. Of the organizations that impact Foothill's service area, the Santa Clara County Office of Education (SCCOE) and the New Tech Network are only ones that are

qualified to offer this program. The last time this program was offered through the SCCOE was June of 2018. This program has not been offered through the New Tech Network in the past 3 years. Currently, no upcoming programs of this kind are scheduled through Leading Edge anywhere in California through 2025.

Leading Edge has offered programs, which includes the Online and Blended Teacher Certification, several times over the past three years in the Southern California area, especially in San Bernardino and Riverside.

The University of California-San Diego Extension offers a 13-unit, \$1705 Online Teaching program that can be completed in 6-9 months. It is offered online exclusively.

There are also other for-cost programs related to online teaching that are not associated with any academic institution, such as the Online Learning Consortium's Online Teaching Certificate Program.

Additional Information Required for State Submission:

TOP Code: 0860.00 – Educational Technology

Annual Completers: 75

Net Annual Labor Demand: 19,304-21,128 (Bay Region)

Faculty Workload: PT Adjunct faculty load would be between .133 and .266 each quarter

New Faculty Positions: 0

New Equipment: 0

New/Remodeled Facilities: 0

Library Acquisitions: 0

Gainful Employment: Yes

Program Review Date: February, 2022

Distance Education: 100%



Online and Blended Instruction Occupations Labor Market Information Report Foothill College

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
May 2020

Recommendation

Based on all available data, there appears to be an undersupply of Online and Blended Instruction 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 2,330 students in the Bay region and 620 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0860.00 - Educational Technology 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 Online and Blended Instruction Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01), therefore, the data shown in Tables 1 and 2 is for Education Administrators, All Other (at the six digit SOC level) and likely overstates demand for Distance Learning Coordinators. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01).

- **Education Administrators, All Other (SOC 11-9039):** All education administrators not listed separately.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
- **Training and Development Managers (SOC 11-3131):** Plan, direct, or coordinate the training and development activities and staff of an organization.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 26%
- **Training and Development Specialists (SOC 13-1151):** Design and conduct training and development programs to improve individual and organizational performance. May analyze training needs.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 31%

- **Instructional Coordinators (SOC 25-9031):** Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Includes educational consultants and specialists, and instructional material directors.

Entry-Level Educational Requirement: Master's degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

Occupational Demand

Table 1. Employment Outlook for Online and Blended Instruction Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Education Administrators, All Other	2,800	2,990	190	7%	1,320	264	\$25.20	\$35.36
Training and Development Managers	1,787	1,909	122	7%	941	188	\$47.43	\$68.57
Training and Development Specialists	9,676	10,802	1,126	12%	6,600	1,320	\$26.00	\$37.83
Instructional Coordinators	5,042	5,427	385	8%	2,815	563	\$24.52	\$32.84
TOTAL	19,304	21,128	1,823	9%	11,676	2,335	\$27.48	\$39.01

Source: EMSI 2020.1

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

Table 2. Employment Outlook for Online and Blended Instruction Occupations in Silicon Valley Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Education Administrators, All Other	483	533	50	10%	248	50	\$26.78	\$41.57
Training and Development Managers	515	555	40	8%	276	55	\$61.55	\$76.42
Training and Development Specialists	2,848	3,219	372	13%	1,993	399	\$24.80	\$35.92
Instructional Coordinators	961	1,074	113	12%	584	117	\$27.24	\$33.54
TOTAL	4,805	5,381	575	12%	3,101	620	\$29.42	\$40.35

Source: EMSI 2020.1

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 (April 2019 - March 2020)

Occupation	Bay Region	Silicon Valley
Training and Development Specialists	2,485	788
Training and Development Managers	963	251

Instructional Designers and Technologists	781	353
Distance Learning Coordinators	42	8
TOTAL	4,271	1,400

Source: Burning Glass

Table 4a. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Bay Region

Common Title	Bay	Common Title	Bay
Instructional Designer	652	Learning Development Specialist	33
Training Coordinator	343	Sales Training Manager	27
Training Specialist	337	Director, Learning, Development	27
Training Manager	296	Developer	25
Technical Trainer	149	Machine Learning Developer	21
Development Coordinator	110	Operations Specialist	20
Trainer	106	Field Trainer	20
Development Specialist	69	Curriculum Designer	19
Director, Staff Development	63	Machine Learning Specialist	18
Sales Trainer	54	Supervisor, Training	17
Education Specialist	52	Sales Training Specialist	17
Learning Specialist	41	Director of Sales	17
Development Trainer	38	Head, Development	16
Training Developer	34	Behavior Technician, Training	16

Table 4b. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Silicon Valley Sub-Region

Common Title	Silicon Valley	Common Title	Silicon Valley
Instructional Designer	327	Developer	11
Training Coordinator	145	Program Analyst	8
Training Specialist	94	Learning Development Specialist	8
Training Manager	92	Staff Assistant	7
Technical Trainer	65	Machine Learning Specialist	7
Trainer	29	Learning Specialist	7
Development Coordinator	23	Field Training Officer	7
Director, Staff Development	18	Education Specialist	7
Sales Trainer	17	Development Trainer	7
Machine Learning Developer	17	Commercial Learning Trainer	7
Training Developer	15	Product Trainer	6
Development Specialist	14	Management Training Program	6
Sales Training Manager	11	Learning Technology Specialist	6
Principal Epic Trainer, Billing, Healthcare Industry	11	Director, Development	6

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Online and Blended Instruction Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2022)	% Change (2019-24)	% Occupation Group in Industry (2019)
Elementary and Secondary Schools (Local Government) (903611)	1,625	1,686	4%	8%
Corporate, Subsidiary, and Regional Managing Offices (551114)	824	864	5%	4%
Internet Publishing and Broadcasting and Web Search Portals (519130)	800	1,042	30%	4%
Colleges, Universities, and Professional Schools (State Government) (902612)	725	695	-4%	4%
Educational Support Services (611710)	719	842	17%	4%
Custom Computer Programming Services (541511)	715	914	28%	4%
Colleges, Universities, and Professional Schools (611310)	665	731	10%	3%
Local Government, Excluding Education and Hospitals (903999)	622	649	4%	3%
Elementary and Secondary Schools (611110)	520	550	6%	3%
Software Publishers (511210)	514	646	26%	3%
Computer Systems Design Services (541512)	404	495	23%	2%
Sports and Recreation Instruction (611620)	316	356	13%	2%
Administrative Management and General Management Consulting Services (541611)	312	383	23%	2%
Exam Preparation and Tutoring (611691)	306	347	13%	2%
State Government, Excluding Education and Hospitals (902999)	294	312	6%	2%
Colleges, Universities, and Professional Schools (Local Government) (903612)	277	261	-6%	1%
Federal Government, Military (901200)	270	261	-3%	1%

Source: EMSI 2020.1

Table 6. Top Employers Posting Online and Blended Instruction Occupations in Bay Region and Silicon Valley Sub-Region (April 2019 - March 2020)

Employer	Bay	Employer	Bay	Employer	Silicon Valley
UC Berkeley	34	Microsoft Corporation	18	Apple Inc.	27
Facebook	33	Workday, Inc	17	Intuitive Surgical Inc	21
Google Inc.	30	US Army	16	Google Inc.	21
Reynolds & Reynolds	28	Pinterest	16	Stanford University	18
Apple Inc.	27	Agiloft	16	Servicenow, Inc	12
Amazon	26	UC San Francisco	15	Reynolds & Reynolds	10
Anthem Blue Cross	25	Medtronic	14	Core Group Technologies Inc	10
Walmart / Sam's	23	Genentech	14	Microsoft Corporation	9
Stanford University	22	Abbott Laboratories	14	Applied Materials	9
Milestone Technologies Inc	21	Servicenow, Inc	13	Anthem Blue Cross	9
Intuitive Surgical Inc	21	Advance Behavioral Therapies	12	Comerica	8
Envision	21	Lucile Packard Childrens Hospital	11	Servicenow	7
Visa	20	Linkedin Limited	11	Abbott Laboratories	7
Kaiser Permanente	20	Health Services Llc	11	Walmart / Sam's	6
University California	19	Tti Incorporated	10	Palo Alto Networks	6
Core Group Technologies Inc	19	GP Strategies Corporation	10	Linkedin Limited	6

Pacific Gas and Electric Co	18	Falcon Cct	10	Intellipro Incorporated	6
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Source: Burning Glass

Educational Supply

There is one (1) community college in the Bay Region issuing 3 awards on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no colleges in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

There is one (1) Other Educational Institution in the Bay Region issuing two (2) Bachelor's Degrees on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no Other Educational Institutions in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

Table 7a. Awards on TOP 0860.00 - Educational Technology in Bay Region

College	Sub-Region	Certificate Low Unit	Total
Merritt	East Bay	3	3
Total Bay Region		3	3
Total Silicon Valley Sub-Region		0	0

Source: Data Mart

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

Table 7b. Other Educational Institutions - Bachelor's Degree Awards on TOP 0860.00 - Educational Technology Bay Region

College	Sub-Region	Bachelor's Degree
Academy of Art University	Mid-Peninsula	2
Total Bay Region		2
Total Silicon Valley Sub-Region		0

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,335 annual openings for the Online and Blended Instruction occupational cluster and 5 annual (3-year average) awards for an annual undersupply of 2,330 students. In the Silicon Valley Sub-Region, there is also a gap with 620 annual openings and no annual (3-year average) awards for an annual undersupply of 620 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0860.00-Educational Technology

2015-16	Bay (All CTE Programs)	Foothill College (All CTE Programs)	State (0860.00)	Bay (0860.00)	Silicon Valley (0860.00)	Foothill College (0860.00)
% Employed Four Quarters After Exit	74%	77%	81%	81%	77%	77%
Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$15,301	\$20,325	\$22,242	\$20,549	\$20,549

Median % Change in Earnings	46%	82%	32%	30%	25%	25%
% of Students Earning a Living Wage	63%	76%	83%	88%	86%	86%

Source: Launchboard Pipeline (version available on 5/6/20)

Skills, Certifications and Education

Table 9. Top Skills for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Training Programs	941	Curriculum Development	264	Multimedia	178
Project Management	903	Needs Assessment	258	Adobe Creative Suite	177
Instructional Design	881	Staff Management	224	Talent Management	174
Training Materials	758	Staff Development	222	Course Development	168
Scheduling	638	Change Management	215	Content Management	167
Teaching	581	Leadership Development	215	Employee Training	166
Customer Service	485	Adobe Acrobat	213	Training Activities	156
Onboarding	455	Organizational Development	209	Technical Writing / Editing	154
Learning Management System	405	Adobe Indesign	196	Software as a Service (SaaS)	153
Technical Training	388	Project Planning and Development Skills	194	Performance Management	152
Budgeting	376	Sales Training	193	Quality Assurance and Control	152
Adobe Captivate	332	Graphic Design	191	New Hire Orientation	151
Sales	308	Stakeholder Management	186	Adobe Illustrator	146
Content Development	296	Technical Support	184	Psychology	136
Adobe Photoshop	286	Salesforce	179	Public Speaking	136

Source: Burning Glass

Table 10. Certifications for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)

Note: 80% 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
Driver's License	314	Basic Life Saving (BLS)	16
Licensed Vocational Nurse (LVN)	75	Microsoft Certified Trainer (MCT)	15

First Aid CPR AED	74	Medical Examiner's License	14
Epic Certification	67	Lean Six Sigma Certification	14
Project Management Certification	59	Six Sigma Yellow Belt	13
Security Clearance	56	Certified Teacher	13
Registered Nurse	39	Adult Learning Certificate	12
Project Management Professional (PMP)	28	Professional in Human Resources	11
Registered Behavior Technician	26	Licensed Practical Nurse (LPN)	10
Hearing Aid Dealers	20	Special Education Certification	9
Board Certified Behavior Analyst (BCBA)	18	ServSafe	9
IT Infrastructure Library (ITIL) Certification	16	Psychologist License	9

Source: Burning Glass

Table 11. Education Requirements for Online and Blended Instruction Occupations in Bay Region

Note: 36% 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	444	17%
Associate Degree	92	4%
Bachelor's Degree or Higher	2,004	79%

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 CCCC 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:

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

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

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): Cassandra Pereira
Division: Business and Social Sciences

Program Title: Online and Blended Instruction
Program Units: 15

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:

- | | |
|--|---|
| <input type="checkbox"/> Non-transcriptable credit certificate | <input type="checkbox"/> AA/AS Degree (local) |
| <input checked="" type="checkbox"/> Certificate of Achievement | <input type="checkbox"/> AA-T/AS-T Degree (ADT) |
| <input type="checkbox"/> Noncredit certificate | |

EQUITY & EDUCATION https://foothill.edu/gov/equity-and-education/
Date of meeting:
Comments: <i>Submitted to Equity and Education committee on April 30, 2020. No reply received.</i>

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

REVENUE & RESOURCES https://foothill.edu/gov/revenue-and-resources/
Date of meeting:
Comments: <i>Submitted to Revenue and Resources committee on April 30, 2020. No reply received.</i>

ADVISORY COUNCIL https://foothill.edu/gov/council/
Date of meeting:
Comments: <i>Submitted to Advisory Council committee on April 30, 2020. No reply received.</i>

Division Curriculum Committee Approval Date: May 22, 2020

Division CC Representative: Allison Meezan

Program Deactivation: Apprenticeship - Field Ironworkers (Certificate of Achievement in Field Ironworking)

Due to Field Ironworkers transitioning on from Foothill College, the Apprenticeship division has decided to deactivate this program in addition to all APIW courses, as per the following list:

APIW 100
APIW 101
APIW 102
APIW 103
APIW 104
APIW 105
APIW 106
APIW 107
APIW 109
APIW 110
APIW 111
APIW 112
APIW 113
APIW 114
APIW 115
APIW 116
APIW 117

Apprenticeship Division Curriculum Committee Approval: May 15, 2020

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FOOTHILL COLLEGE Stand-Alone Course Approval Request

If a Foothill credit course is **NOT** part of a State approved associate's degree, certificate of achievement or the Foothill College 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 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.

Stand Alone Course Approval Requests should be completed and forwarded to your Division Curriculum Committee to begin the approval process.

Course #: APSM 123

Course Title: SMQ-23 Residential Sheet Metal

Credit Status:

- Credit course
 Noncredit course

Catalog Description:

Introduction to sheet metal work specific to residential construction including: the various types of residential heating, ventilation and air conditioning systems, combustion theory, basic air distribution, furnace construction, filters, humidifiers, installation techniques, maintenance procedures and roof drainage system requirements.

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

- The course will be **permanently** Stand Alone; there are no plans to add it to a State approved degree or certificate, nor to the Foothill GE pattern
- The course will be Stand Alone **temporarily**, and it will be incorporated into a new degree or certificate that is not yet State approved. In this case, identify the degree/certificate to which the course will be added:

- 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?)

***NOTE:** If you have not submitted your program application to the State by the end of the current academic year, you must reapply for permanent Stand Alone approval.*

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 (select all that apply):

- Transfer

Workforce/CTE
 Basic Skills

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 attached to this form or provided in the box below.

U.S. Bureau of Labor Statistics

<https://www.bls.gov/ooh/construction-and-extraction/sheet-metal-workers.htm>

U.S. Bureau Of Labor Statistics- Santa Clara County

<https://www.bls.gov/oes/current/oes472211.htm>

Criteria C. Curriculum Standards (please initial as appropriate)

BM The outline of record for this course has been approved the Division Curriculum Committee and meets the requirements of Title 5

Faculty Requestor: Tim Myers **Date:** 5/18/20

Division Curriculum Representative: Brian Murphy **Date:** 5/18/20

Date of Approval by Division Curriculum Committee: 5/15/20

College Curriculum Co-Chairperson: _____ **Date:** _____

Foothill College

Approved Course Outlines

For Faculty and Staff use only

Apprenticeship

APSM 123 SMQ-23 RESIDENTIAL SHEET METAL

Summer 2016

40 hours total: 18 hours lecture, 22 hours laboratory.

2 Units

Total Contact Hours: 0 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 0 (Total of All Lecture, Lab hours and Out of Class X 12)

Lecture
Hours:

Lab Hours:

Weekly Out of Class Hours:

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading:

Letter Grade with P/NP
option

Degree Status: Applicable

Credit Status:

Credit

Degree or Certificate Requirement: Certificate of Achievement, AS Degree

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability:

Validation: 11-16-09

Division Dean Information -

Seat Count:
999

Load Factor:
.060

FOAP Code:
115000142215095640

Instruction Office Information -

FSA Code:

Distance Learning: no

Stand Alone
Designation: no

Program Title: Apprenticeship - Sheet Metal

Program TOPs Code: 095640

Program Unique Code: 11830

Content Review Date:

Former ID:

1. Description -

Introduction to sheet metal work specific to residential construction including: the various types of residential heating, ventilation and air conditioning systems, combustion theory, basic air distribution, furnace construction, filters, humidifiers, installation techniques, maintenance procedures and roof drainage system requirements.

Prerequisite: Per California Code of Regulations, this course is limited to students admitted to the Sheet Metal

2. Course Objectives -

The student will be able to:

- A. Identify various types of sheet metal work specific to residential construction
- B. Name and identify the structural components of residential construction
- C. Identify common types of residential HVAC systems
- D. Identify buy-out items used in residential duct and roof drainage systems
- E. Identify common residential HVAC equipment and typical applications
- F. Properly install furnaces, thermostats, flues, vents, and air conditioning components per code requirements
- G. Compare new construction to retrofit installation

3. Special Facilities and/or Equipment -

- A. Laboratory with sheet metal tools
- B. Personal protective equipment

4. Course Content (Body of knowledge) -

- A. Identify various types of sheet metal work specific to residential construction
 - 1. Kitchen and bath exhaust
 - 2. Heating and cooling systems
 - 3. Architectural sheet metal
 - 4. Drainage and moisture control systems
- B. Name and identify the structural components of residential construction
 - 1. Residential framing nomenclature
 - 2. Bearing and shear walls
 - 3. Foundation and framing allowances for sheet metal work
- C. Identify common types of residential HVAC systems
 - 1. Split or package systems
 - 2. Basic or zone control systems
- D. Identify buy-out items used in residential duct and roof drainage systems
 - 1. Duct components
 - 2. Roof drainage and moisture control components
- E. Identify common residential HVAC equipment and typical applications
 - 1. Furnaces
 - 2. Air conditioning equipment
 - 3. Filtration equipment
 - 4. Humidification and de-humidification equipment
 - 5. Controls
- F. Properly install furnaces, thermostats, flues, vents, and air conditioning components per code and manufacturer requirements
- G. Compare new construction to retrofit installation
 - 1. Applicable codes and standards

5. Repeatability - Moved to header area.

6. Methods of Evaluation -

- A. Results of written quizzes and tests
- B. Shop participation
- C. Comprehensive written final examination
- D. Comprehensive final project
- E. Evaluation of progress by weekly assignments

7. Representative Text(s) -

International Training Institute, Residential HVAC Finish Installer, International Training Institute for the Sheet Metal and Air Conditioning Industry, (Student Manual and Workbook), Alexandria, VA: International Training Institute for the Sheet Metal and Air Conditioning Industry, 2007.

International Training Institute, Residential HVAC New Construction Installer, International Training Institute for the Sheet Metal and Air Conditioning Industry, (Student Manual and Workbook), Alexandria, VA: International Training Institute for the Sheet Metal and Air Conditioning Industry, 2007.

International Training Institute, Residential HVAC Retrofit Technician, International Training Institute for the Sheet

Metal and Air Conditioning Industry (Student Manual and Workbook), Alexandria, VA: International Training Institute for the Sheet Metal and Air Conditioning Industry, 2007.

NOTE: These are the standard Sheet Metal textbooks/workbooks used for this course. Although one or more may not be within 5 years of the required published date, they are the most current books used when teaching this course.

8. Disciplines -

Sheet Metal

9. Method of Instruction -

- A. Discussion
- B. Laboratory instruction
- C. Demonstration

10. Lab Content -

Students will work together in teams and individually. Lab content includes:

- A. Hands-on experience of techniques specific to residential sheet metal installation
- B. Students practice gas-piping and fabrication of residential duct fittings
- C. Students learn how to calculate for the installation of furnaces and flues and practice installation

11. Honors Description - No longer used. Integrated into main description section.

12. Examples of Required Reading and Writing and Outside of Class Assignments -

- A. Reading assignment:
 - 1. Read Module 3, Unit 2, HVAC System Components
- B. Writing assignment:
 - 1. Complete Module 3, Unit 2 "Knowledge Check" review sheets, pages 1.22 and 1.23

13. Need/Justification -

This course is a required core course for the Associate in Science degree and Certificate of Achievement in Sheet Metal Building Trades. This course prepares students to work in various building construction industries as state-registered apprentices.

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

FOOTHILL COLLEGE Stand-Alone Course Approval Request

If a Foothill credit course is **NOT** part of a State approved associate's degree, certificate of achievement or the Foothill College 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 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.

Stand Alone Course Approval Requests should be completed and forwarded to your Division Curriculum Committee to begin the approval process.

Course #: ART 15D

Course Title: DIGITAL ILLUSTRATION FOR FILM & ANIMATION

Credit Status:

- Credit course
 Noncredit course

Catalog Description:

Advanced instruction using computers, digital tablets and software to produce digital illustrations, sketches, images, and drawings for artistic expression and design focused for live-action film and feature film animation media. Emphasis on skills and concepts related to human anatomy, gesture drawing, character design, and basic illustration, visual development, and composition principles.

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

- The course will be **permanently** Stand Alone; there are no plans to add it to a State approved degree or certificate, nor to the Foothill GE pattern
- The course will be Stand Alone **temporarily**, and it will be incorporated into a new degree or certificate that is not yet State approved. In this case, identify the degree/certificate to which the course will be added:

- 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?)

NOTE: *If you have not submitted your program application to the State by the end of the current academic year, you must reapply for permanent Stand Alone approval.*

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 (select all that apply):

- Transfer
- Workforce/CTE
- Basic Skills

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 attached to this form or provided in the box below.

This course supports the college mission and service area by providing tangible opportunities for student success to develop foundational skills in an applied practice of the subject area, one with employment potential, and is transferable towards degree credit at most institutions.

Criteria C. Curriculum Standards (please initial as appropriate)

The outline of record for this course has been approved the Division Curriculum Committee and meets the requirements of Title 5

Faculty Requestor: Jordan C. Fong **Date:** 05/21/2020

Division Curriculum Representative: Hilary Gomes & Che Meneses **Date:** 5/22/20

Date of Approval by Division Curriculum Committee: 05/22/20

College Curriculum Co-Chairperson: _____ **Date:** _____

Foothill College

Approved Course Outlines

For Faculty and Staff use only

Fine Arts and Communication

ART 15D DIGITAL ILLUSTRATION FOR FILM & ANIMATION

Summer 2018

3 hours lecture, 3 hours laboratory.

4 Units

Total Contact Hours: 72 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 144 (Total of All Lecture, Lab hours and Out of Class X 12)

Lecture Hours: 3 **Lab Hours:** 3 **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading:

Letter Grade with P/NP option

Degree Status: Applicable

Credit Status:

Credit

Degree or Certificate Requirement: AA Degree

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: UC/CSU

Validation: 07/01/2013;10/13;5/2017

Division Dean Information -

Seat Count: 40

Load Factor: .115

FOAP Code: 114000143011100210

Instruction Office Information -

FSA Code: 0140 - ART

Distance Learning: yes

Stand Alone Designation: no

Program Title:

Program TOPs Code:

Program Unique Code:

Content Review Date:

Former ID:

1. Description -

Advanced instruction using computers, digital tablets and software to produce digital illustrations, sketches, images, and drawings for artistic expression and design focused for live-action film and feature film animation media. Emphasis on skills and concepts related to human anatomy, gesture drawing, character design, and basic illustration, visual development, and composition principles.

Prerequisite: ART 15A.

Advisory: GID 37; familiarity with current interface operations for desktop computers, laptops and digital tablets.

2. Course Objectives -

The student will be able to:

- A. create concept art that communicates the story content narrative of a live-action film or feature film animation.
- B. demonstrate an awareness of basic principles of visual storytelling and scene composition.
- C. effectively use digital painting and digital drawing tools to visually communicate ideas and information.
- D. compare and contrast styles of contemporary electronic illustrators with illustrators using traditional media.
- E. create hard copy prints for class critique and portfolio presentation.
- F. recognize and appreciate the contributions made in this field by people from diverse cultures and backgrounds.
- G. share through class discussions the cultural and personal strengths of their work.

3. Special Facilities and/or Equipment -

- A. Lecture/lab room with high-resolution color graphics terminals, plotter or ink-jet printers, current computer drawing and painting software, and hardware as required when taught on campus.
- B. When taught via Foothill Global Access: on-going access to computer, digital tablets, and other interface methods with email software and capabilities; email address; JavaScript enabled internet browsing software.

4. Course Content (Body of knowledge) -

- A. Overview of illustration for film and animation
 1. History and development of film and animation styles (Lec)
 2. Artistic contributions by individuals from diverse cultural backgrounds (Lec)
 3. Narrative structure and visual communication (Lec)
 4. Artistic styles using digital media (Lec)
 5. Use of tools and media (Lec)
- B. Software demonstrations and techniques
 1. Vector graphics drawing software (Lab)
 2. Bitmapped painting software (Lec)
 3. Image editing software (Lec)
 4. Technological contributions by individuals from diverse cultural backgrounds (Lec)
- C. Hardware
 1. CPU, monitors, drawing tablets (Lec)
 2. Scanners and digital cameras (Lec)
 3. Printers and color management (Lec)
 4. Principles of form and content
 5. Principles of composition (Lec)
 6. Visual communication (Lec)
 7. Creative problem solving (Lec)
- D. Image creation
 1. Subject matter, content, form (composition), context and technique (Lab)
 2. Research and planning (Lab)
 3. Developing individual styles and interpretations (Lab)
 4. Applying techniques, special effects and short cuts (Lab)
 5. Exploring solutions for achieving visual awareness, mood, dramatic emphasis and professional standards (Lab)
 6. Exploring solutions for achieving visual story, pacing, narrative, and art direction (Lab)
 - a. Visual development (Lab)
 - b. Color scripting (Lab)
 7. The business of digital illustration for film and animation job opportunities (Lec)
 8. Reproduction and digital technology (Lec)
 9. Rendering digital illustrations for film and animation
 - a. Rendering of digital illustrations for film and animation (Lab)
 - b. Rendering of digital illustrations for film and animation that employ emotional expression, clarity of ideas and a definite point of view (Lab)
 - c. Rendering of digital illustrations for film and animation demonstrate facility with hand tools and rendering surfaces (Lab)
 - d. Rendering of digital illustrations for film and animation that utilize contemporary style trends (Lab)
 - e. Rendering of digital illustrations for film and animation that show a sensitivity in response to themes, pop culture, and humanities of multi-cultural populations (Lab)
 10. Ethics of electronic image making (Lec)
 - a. Image appropriation (Lec)

- b. Copyright issues (Lec)
- E. Critique and presentation
 - 1. Presenting works of art for peer review (Lab)
 - a. Artwork preparation (Lab)
 - b. Best practices and portfolio presentations (Lab)
 - 2. Evaluation of content, context, form and technique (Lab)

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

- A. Instructor's review and grading of assigned course work.
- B. Evaluation of digital illustrations for film and animation produced. Evaluation of each project is determined by how completely it fulfills the parameters and goals of the assignment.
- C. Participation in group discussions and critiques.
- D. Reading, research and writing assignments.

7. Representative Text(s) -

Bacher, Hans. Dream Worlds: Production Design for Animation. Focal Press, 2013.

8. Disciplines -

Art or Graphic Arts

9. Method of Instruction -

- A. Lecture
- B. Discussion
- C. Electronic discussions/chat
- D. Laboratory
- E. Demonstration

10. Lab Content -

- A. Using complex digital drawing and painting software and computer operations.
- B. Developing, manipulating, and editing images, drawing, painting in digital formats.
- C. Developing, revising, and editing original live-action film and feature film animation scripts.
- D. Digital painting using software, tablets, computers.
- E. Creating preliminary conceptual sketches in preparation for live-action film and feature film animation pre-production phase.
- F. Completion of multiple digital drawing and digital painting assignments.
- G. Compilation of a digital portfolio inclusive of digital drawing and digital painting assignments.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Examples of Required Reading and Writing and Outside of Class Assignments -

- A. Create multiple versions of digital art work, such as color scripts, color keys, key frames, film and animation stills, expressionistic artwork, and illustrations using drawing and painting software programs
- B. Interface exploration through eight (8) specific painting assignments, using digital tools and techniques to learn how to cut, copy, paste, use layers, use multiple digital paintbrushes and use digital papers and textures
- C. Practice using new technique with digital tablets, iPads, and computers in creating digital artwork using Adobe Photoshop, Adobe Illustrator, and Corel Painter software
- D. Exploring traditional drawing and painting techniques using digital tools such as computers to create no less than eight (8) examples of digital artwork
- E. Reading materials for careers in live-action film and feature film animation
- F. Digital art in cultural contexts
- G. Researching live-action film and feature film animation as part of the course online web-based research
- H. Reading textbook lessons on methods to create art using oil, watercolor, acrylic, and pastel digital painting methods

13. Need/Justification -

This course is a restricted support course for the AA degree and certificate of achievement in Art.

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

FOOTHILL COLLEGE Stand-Alone Course Approval Request

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Per our local process, the same process of review and approval is used for noncredit Stand Alone courses.

Stand Alone Course Approval Requests should be completed and forwarded to your Division Curriculum Committee to begin the approval process.

Course #: LINC 82B

Course Title: Developing Instructional Materials

Credit Status:

- Credit course
 Noncredit course

Catalog Description:

This instructional design and development course builds on the coursework of LINC 82A and focuses on refining the skills needed for making digital media for education or business learning contexts. Students interested in the study of instructional design will rapidly design, develop, and evaluate presentations, infographics, posters, digital resources, multimedia, and web sites for particular learning styles. Special emphasis is given for using collaborative tools to facilitate and manage group projects. This course is part of the Instructional Design & Technology program sequence.

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

- The course will be **permanently** Stand Alone; there are no plans to add it to a State approved degree or certificate, nor to the Foothill GE pattern
 The course will be Stand Alone **temporarily**, and it will be incorporated into a new degree or certificate that is not yet State approved. In this case, identify the degree/certificate to which the course will be added:

- 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?)

***NOTE:** If you have not submitted your program application to the State by the end of the current academic year, you must reapply for permanent Stand Alone approval.*

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 (select all that apply):

- Transfer
- Workforce/CTE
- Basic Skills

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 attached to this form or provided in the box below.

Given that the primary audience for LINC classes is teachers in elementary, middle, and secondary classrooms, the labor market analysis data focuses on this occupational sector. The Employment Development Department for the state of California shows projected growth change of 20.6% and 22.4% in teacher employment in the San Jose and San Mateo areas by 2026. (Source: <https://www.labormarketinfo.edd.ca.gov/data/employment-projections.html>)

In the 19-20 school year, school districts in Santa Clara county hired 1143 new teachers, while districts in San Mateo county hired 464. These new teachers are joining an existing workforce of 13,048 teachers in Santa Clara County and 5,123 in San Mateo County (Source: <https://www.dq.cde.ca.gov>). New teachers will need the educational technology knowledge and skills the KCI offers through LINC classes and existing teachers will need to refresh or upgrade as technological advances occur regularly.

Please also see attached Labor Market Information documents specific to Instructional Design and Technology occupations and Online and Blended Instruction occupations.

Criteria C. Curriculum Standards (please initial as appropriate)

The outline of record for this course has been approved the Division Curriculum Committee and meets the requirements of Title 5

Faculty Requestor: Cassandra Pereira **Date:** 5/13/20

Division Curriculum Representative: K. Allison Lenkeit Meezan **Date:** 5/21/2020

Date of Approval by Division Curriculum Committee: 5/21/20

College Curriculum Co-Chairperson: _____ **Date:** _____



Instructional Design & Technology

Occupation Report For Santa Clara County

March 2016

This occupation report focuses on two occupational codes: Training and Development Specialists (SOC code 13-1151) and Instructional Coordinators/Instructional Designers and Technologists (SOC 25-9031). For purposes of this report, these occupational groupings will be combined into one occupation, Instructional Design and Technology. The occupation summary data predicts there will be ongoing job growth in this area through 2020 (10%). In Santa Clara County, there were 3,533 full- and part-time jobs in 2015, most of these occupations are accounted for by Training and Development Specialists (2,703). It is projected that Santa Clara County will add 362 Instructional Design and Technology jobs by 2020 (10% or 3,895).

Occupation Summary for Industrial Design and Technology

3,533 Jobs (2015) 23% above National average	10.2% % Change (2015-2020) Nation: 8.0%	\$40.50/hr Median Hourly Earnings Nation: \$28.83/hr
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Occupation	2015 Jobs	2020 Jobs	Change	% Change
Training and Development Specialists (13-1151)	2,703	2,962	259	10%
Instructional Coordinators (25-9031)	830	933	103	12%

The range in earnings in Santa Clara County among Industrial Design and Technology show that while the median earnings are \$40.50/hr, the top earning quartile earns \$16.63 more an hour while the lowest quartile earns \$10.12 less an hour. These data show that the range of earnings among Training and Development Specialists is higher than Instructional Coordinators/Instructional Designers and Technologists.

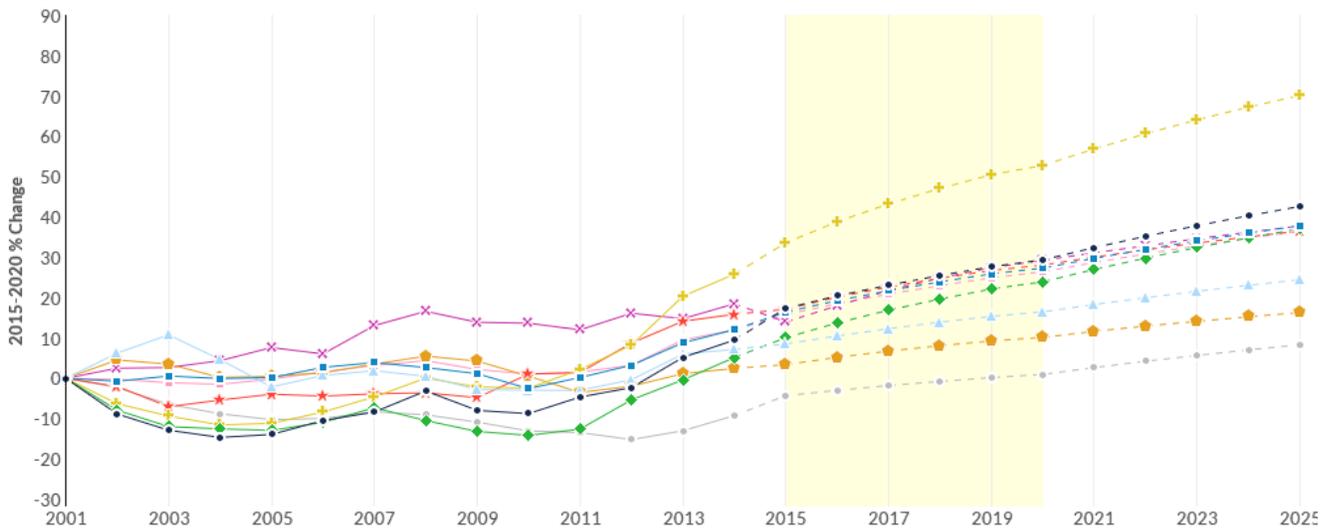
Industrial Design and Technology Percentile Earnings

\$30.38/hr 25th Percentile Earnings	\$40.50/hr Median Earnings	\$57.13/hr 75th Percentile Earnings	
Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings

Training and Development Specialists (13-1151)	\$31.60	\$42.60	\$59.34
Instructional Coordinators (25-9031)	\$26.52	\$33.86	\$50.10

An examination of the projected job growth among the nine counties in the Greater Bay Area region and at the state-level indicates the largest percentage rate change will be the highest In Santa Francisco County (14%), Napa (14%), San Mateo County (13%) and Santa Clara County (10%). Santa Clara County is projected to increase the most number of jobs by 2020 (362), followed by San Francisco (352), Alameda (210) and San Mateo (143) Counties.

Industrial Design and Technology Occupation Change Projections

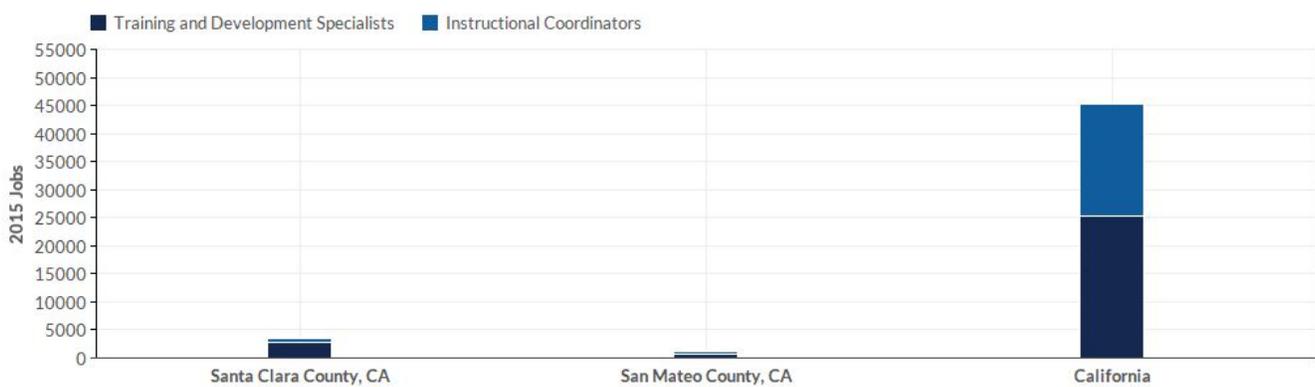


	Region	2015 Jobs	2020 Jobs	Change	% Change	Median Hourly Earnings
●	Santa Clara County, CA	3,533	3,895	362	10%	\$40.50
●	Alameda County, CA	2,246	2,456	210	9%	\$37.61
●	Contra Costa County, CA	1,004	1,077	73	7%	\$36.76
●	San Mateo County, CA	1,140	1,283	143	13%	\$35.47
●	San Francisco County, CA	2,447	2,799	352	14%	\$35.16

●	Marin County, CA	402	439	37	9%	\$33.04
●	Solano County, CA	360	383	23	6%	\$32.27
●	Napa County, CA	162	184	22	14%	\$31.69
●	Sonoma County, CA	460	485	25	5%	\$31.63
●	California	45,261	49,397	4,136	9%	\$33.43

The data and accompanying tables below show the number of jobs between 2015 and 2020, disaggregated by Santa Clara and San Mateo Counties.

Industrial Design and Technology Occupation Breakdown - 2015 Jobs



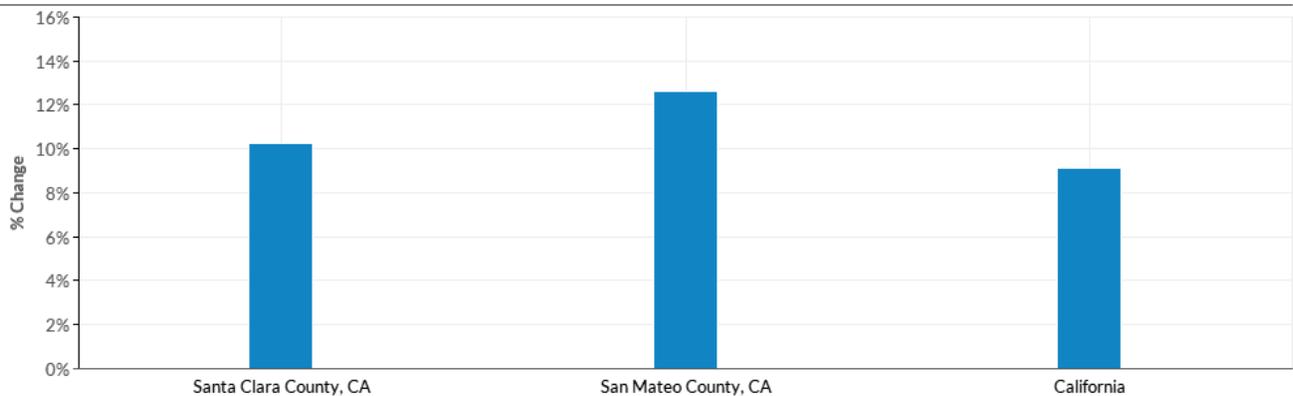
Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	2,703	778	25,267
25-9031	Instructional Coordinators	830	362	19,994
	Total	3,533	1,140	45,261

Industrial Design and Technology Occupation Breakdown - 2020 Jobs



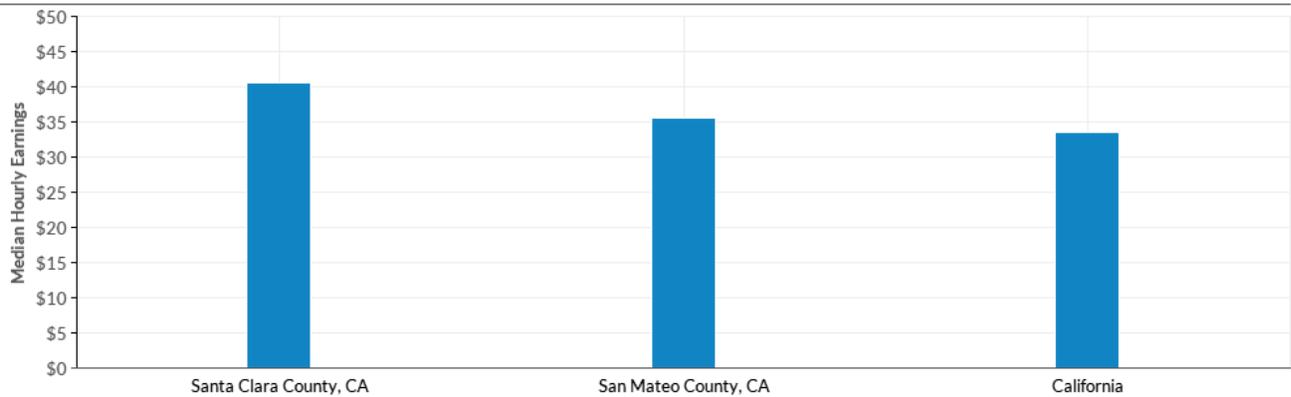
Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	2,962	882	27,881
25-9031	Instructional Coordinators	933	402	21,515
	Total	3,895	1,283	49,397

Occupation Breakdown - % Change



Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
25-9031	Instructional Coordinators	12%	11%	8%
13-1151	Training and Development Specialists	10%	13%	10%
	Total	10%	13%	9%

Occupation Breakdown - Median Hourly Earnings



Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	\$42.60	\$37.05	\$31.71
25-9031	Instructional Coordinators	\$33.86	\$32.20	\$35.54
	Total	\$40.50	\$35.47	\$33.43

Target Occupations Demographics

The demographics among those employed in Industrial Design and Technology occupations in Santa Clara County for 2015 show that a majority are female (64%) and about three-fourths are between the ages of 25-54 (73%) and White (59%).

Occupation Gender Breakdown

Gender	2015 Jobs	2015 Percent
Males	1,279	36.2%
Females	2,253	63.8%

Occupation Age Breakdown

Age	2015 Jobs	2015 Percent	
14-18	9	0.2%	
19-24	140	4.0%	■
25-34	785	22.2%	■
35-44	987	27.9%	■
45-54	837	23.7%	■
55-64	606	17.2%	■
65+	169	4.8%	■

Occupation Race/Ethnicity Breakdown

Race/Ethnicity	2015 Jobs	2015 Percent	
White	2,093	59.2%	■
Asian	606	17.2%	■
Hispanic or Latino	516	14.6%	■
Black or African American	206	5.8%	■
Two or More Races	84	2.4%	■
Native Hawaiian or Other Pacific Islander	14	0.4%	
American Indian or Alaska Native	14	0.4%	

Industries Employing Industrial Design and Technology Occupations

A number of industries in Santa Clara County employ those trained in Industrial Design and Technology occupations. The following table represents a regional industry breakdown of the number of Industrial Design and Technology positions employed, the percentage of Industrial Design and Technology employed by industry and the percentage Industrial Design and Technology jobs represent within all jobs by each industry. While top five industries employed 28% of all regional Industrial Design and Technology positions in 2015, Industrial Design and Technology compose a minority of all jobs in that industry (3%).

Top Industries Employing Industrial Design and Technology Occupations

Industry	Occupation Group Jobs in Industry (2015)	% of Occupation Group in Industry (2015)	% of Total Jobs in Industry (2015)
Custom Computer Programming Services	242	6.9%	0.6%
Elementary and Secondary Schools (Local Government)	214	6.1%	0.7%
Colleges, Universities, and Professional Schools	190	5.4%	0.6%
Internet Publishing and Broadcasting and Web Search Portals	190	5.4%	0.5%
Computer Systems Design Services	178	5.0%	0.6%

* *Inverse Staffing Patterns - Settings*

Data Sources and Calculations

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department

Federal Data Sources

This report uses federal data from the following agencies: Quarterly Census of Employment and Wages (QCEW) from the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA).



Online and Blended Instruction Occupations Labor Market Information Report Foothill College

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
May 2020

Recommendation

Based on all available data, there appears to be an undersupply of Online and Blended Instruction 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 2,330 students in the Bay region and 620 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0860.00 - Educational Technology 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 Online and Blended Instruction Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01), therefore, the data shown in Tables 1 and 2 is for Education Administrators, All Other (at the six digit SOC level) and likely overstates demand for Distance Learning Coordinators. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01).

- **Education Administrators, All Other (SOC 11-9039):** All education administrators not listed separately.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
- **Training and Development Managers (SOC 11-3131):** Plan, direct, or coordinate the training and development activities and staff of an organization.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 26%
- **Training and Development Specialists (SOC 13-1151):** Design and conduct training and development programs to improve individual and organizational performance. May analyze training needs.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 31%

- **Instructional Coordinators (SOC 25-9031):** Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Includes educational consultants and specialists, and instructional material directors.

Entry-Level Educational Requirement: Master's degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

Occupational Demand

Table 1. Employment Outlook for Online and Blended Instruction Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Education Administrators, All Other	2,800	2,990	190	7%	1,320	264	\$25.20	\$35.36
Training and Development Managers	1,787	1,909	122	7%	941	188	\$47.43	\$68.57
Training and Development Specialists	9,676	10,802	1,126	12%	6,600	1,320	\$26.00	\$37.83
Instructional Coordinators	5,042	5,427	385	8%	2,815	563	\$24.52	\$32.84
TOTAL	19,304	21,128	1,823	9%	11,676	2,335	\$27.48	\$39.01

Source: EMSI 2020.1

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

Table 2. Employment Outlook for Online and Blended Instruction Occupations in Silicon Valley Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Education Administrators, All Other	483	533	50	10%	248	50	\$26.78	\$41.57
Training and Development Managers	515	555	40	8%	276	55	\$61.55	\$76.42
Training and Development Specialists	2,848	3,219	372	13%	1,993	399	\$24.80	\$35.92
Instructional Coordinators	961	1,074	113	12%	584	117	\$27.24	\$33.54
TOTAL	4,805	5,381	575	12%	3,101	620	\$29.42	\$40.35

Source: EMSI 2020.1

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 (April 2019 - March 2020)

Occupation	Bay Region	Silicon Valley
Training and Development Specialists	2,485	788
Training and Development Managers	963	251

Instructional Designers and Technologists	781	353
Distance Learning Coordinators	42	8
TOTAL	4,271	1,400

Source: Burning Glass

Table 4a. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Bay Region

Common Title	Bay	Common Title	Bay
Instructional Designer	652	Learning Development Specialist	33
Training Coordinator	343	Sales Training Manager	27
Training Specialist	337	Director, Learning, Development	27
Training Manager	296	Developer	25
Technical Trainer	149	Machine Learning Developer	21
Development Coordinator	110	Operations Specialist	20
Trainer	106	Field Trainer	20
Development Specialist	69	Curriculum Designer	19
Director, Staff Development	63	Machine Learning Specialist	18
Sales Trainer	54	Supervisor, Training	17
Education Specialist	52	Sales Training Specialist	17
Learning Specialist	41	Director of Sales	17
Development Trainer	38	Head, Development	16
Training Developer	34	Behavior Technician, Training	16

Table 4b. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Silicon Valley Sub-Region

Common Title	Silicon Valley	Common Title	Silicon Valley
Instructional Designer	327	Developer	11
Training Coordinator	145	Program Analyst	8
Training Specialist	94	Learning Development Specialist	8
Training Manager	92	Staff Assistant	7
Technical Trainer	65	Machine Learning Specialist	7
Trainer	29	Learning Specialist	7
Development Coordinator	23	Field Training Officer	7
Director, Staff Development	18	Education Specialist	7
Sales Trainer	17	Development Trainer	7
Machine Learning Developer	17	Commercial Learning Trainer	7
Training Developer	15	Product Trainer	6
Development Specialist	14	Management Training Program	6
Sales Training Manager	11	Learning Technology Specialist	6
Principal Epic Trainer, Billing, Healthcare Industry	11	Director, Development	6

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Online and Blended Instruction Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2022)	% Change (2019-24)	% Occupation Group in Industry (2019)
Elementary and Secondary Schools (Local Government) (903611)	1,625	1,686	4%	8%
Corporate, Subsidiary, and Regional Managing Offices (551114)	824	864	5%	4%
Internet Publishing and Broadcasting and Web Search Portals (519130)	800	1,042	30%	4%
Colleges, Universities, and Professional Schools (State Government) (902612)	725	695	-4%	4%
Educational Support Services (611710)	719	842	17%	4%
Custom Computer Programming Services (541511)	715	914	28%	4%
Colleges, Universities, and Professional Schools (611310)	665	731	10%	3%
Local Government, Excluding Education and Hospitals (903999)	622	649	4%	3%
Elementary and Secondary Schools (611110)	520	550	6%	3%
Software Publishers (511210)	514	646	26%	3%
Computer Systems Design Services (541512)	404	495	23%	2%
Sports and Recreation Instruction (611620)	316	356	13%	2%
Administrative Management and General Management Consulting Services (541611)	312	383	23%	2%
Exam Preparation and Tutoring (611691)	306	347	13%	2%
State Government, Excluding Education and Hospitals (902999)	294	312	6%	2%
Colleges, Universities, and Professional Schools (Local Government) (903612)	277	261	-6%	1%
Federal Government, Military (901200)	270	261	-3%	1%

Source: EMSI 2020.1

Table 6. Top Employers Posting Online and Blended Instruction Occupations in Bay Region and Silicon Valley Sub-Region (April 2019 - March 2020)

Employer	Bay	Employer	Bay	Employer	Silicon Valley
UC Berkeley	34	Microsoft Corporation	18	Apple Inc.	27
Facebook	33	Workday, Inc	17	Intuitive Surgical Inc	21
Google Inc.	30	US Army	16	Google Inc.	21
Reynolds & Reynolds	28	Pinterest	16	Stanford University	18
Apple Inc.	27	Agiloft	16	Servicenow, Inc	12
Amazon	26	UC San Francisco	15	Reynolds & Reynolds	10
Anthem Blue Cross	25	Medtronic	14	Core Group Technologies Inc	10
Walmart / Sam's	23	Genentech	14	Microsoft Corporation	9
Stanford University	22	Abbott Laboratories	14	Applied Materials	9
Milestone Technologies Inc	21	Servicenow, Inc	13	Anthem Blue Cross	9
Intuitive Surgical Inc	21	Advance Behavioral Therapies	12	Comerica	8
Envision	21	Lucile Packard Childrens Hospital	11	Servicenow	7
Visa	20	Linkedin Limited	11	Abbott Laboratories	7
Kaiser Permanente	20	Health Services Llc	11	Walmart / Sam's	6
University California	19	Tti Incorporated	10	Palo Alto Networks	6
Core Group Technologies Inc	19	GP Strategies Corporation	10	Linkedin Limited	6

Online and Blended Instruction Occupations in 12 County Bay Region and in Silicon Valley Sub-Region, 2020

Pacific Gas and Electric Co	18	Falcon Cct	10	Intellipro Incorporated	6
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Source: Burning Glass

Educational Supply

There is one (1) community college in the Bay Region issuing 3 awards on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no colleges in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

There is one (1) Other Educational Institution in the Bay Region issuing two (2) Bachelor's Degrees on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no Other Educational Institutions in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

Table 7a. Awards on TOP 0860.00 - Educational Technology in Bay Region

College	Sub-Region	Certificate Low Unit	Total
Merritt	East Bay	3	3
Total Bay Region		3	3
Total Silicon Valley Sub-Region		0	0

Source: Data Mart

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

Table 7b. Other Educational Institutions - Bachelor's Degree Awards on TOP 0860.00 - Educational Technology Bay Region

College	Sub-Region	Bachelor's Degree
Academy of Art University	Mid-Peninsula	2
Total Bay Region		2
Total Silicon Valley Sub-Region		0

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,335 annual openings for the Online and Blended Instruction occupational cluster and 5 annual (3-year average) awards for an annual undersupply of 2,330 students. In the Silicon Valley Sub-Region, there is also a gap with 620 annual openings and no annual (3-year average) awards for an annual undersupply of 620 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0860.00-Educational Technology

2015-16	Bay (All CTE Programs)	Foothill College (All CTE Programs)	State (0860.00)	Bay (0860.00)	Silicon Valley (0860.00)	Foothill College (0860.00)
% Employed Four Quarters After Exit	74%	77%	81%	81%	77%	77%
Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$15,301	\$20,325	\$22,242	\$20,549	\$20,549

Median % Change in Earnings	46%	82%	32%	30%	25%	25%
% of Students Earning a Living Wage	63%	76%	83%	88%	86%	86%

Source: Launchboard Pipeline (version available on 5/6/20)

Skills, Certifications and Education

Table 9. Top Skills for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Training Programs	941	Curriculum Development	264	Multimedia	178
Project Management	903	Needs Assessment	258	Adobe Creative Suite	177
Instructional Design	881	Staff Management	224	Talent Management	174
Training Materials	758	Staff Development	222	Course Development	168
Scheduling	638	Change Management	215	Content Management	167
Teaching	581	Leadership Development	215	Employee Training	166
Customer Service	485	Adobe Acrobat	213	Training Activities	156
Onboarding	455	Organizational Development	209	Technical Writing / Editing	154
Learning Management System	405	Adobe Indesign	196	Software as a Service (SaaS)	153
Technical Training	388	Project Planning and Development Skills	194	Performance Management	152
Budgeting	376	Sales Training	193	Quality Assurance and Control	152
Adobe Captivate	332	Graphic Design	191	New Hire Orientation	151
Sales	308	Stakeholder Management	186	Adobe Illustrator	146
Content Development	296	Technical Support	184	Psychology	136
Adobe Photoshop	286	Salesforce	179	Public Speaking	136

Source: Burning Glass

Table 10. Certifications for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)

Note: 80% 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
Driver's License	314	Basic Life Saving (BLS)	16
Licensed Vocational Nurse (LVN)	75	Microsoft Certified Trainer (MCT)	15

First Aid CPR AED	74	Medical Examiner's License	14
Epic Certification	67	Lean Six Sigma Certification	14
Project Management Certification	59	Six Sigma Yellow Belt	13
Security Clearance	56	Certified Teacher	13
Registered Nurse	39	Adult Learning Certificate	12
Project Management Professional (PMP)	28	Professional in Human Resources	11
Registered Behavior Technician	26	Licensed Practical Nurse (LPN)	10
Hearing Aid Dealers	20	Special Education Certification	9
Board Certified Behavior Analyst (BCBA)	18	ServSafe	9
IT Infrastructure Library (ITIL) Certification	16	Psychologist License	9

Source: Burning Glass

Table 11. Education Requirements for Online and Blended Instruction Occupations in Bay Region

Note: 36% 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	444	17%
Associate Degree	92	4%
Bachelor's Degree or Higher	2,004	79%

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 CCCC 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:

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

Foothill College

Approved Course Outlines

For Faculty and Staff use only

Business and Social Sciences

LINC 82B DEVELOPING INSTRUCTIONAL MATERIALS

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab hours and Out of Class X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active	Grading:	Letter Grade with P/NP option
Degree Status: Applicable	Credit Status:	Credit
Degree or Certificate Requirement: Stand Alone Course		
GE Status: Non-GE		

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37	Load Factor: .067	FOAP Code: 114000151011086000
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Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

Content Review Date: 0000-00-00

Former ID:

1. Description -

This instructional design and development course builds on the coursework of LINC 82A and focuses on refining the skills needed for making digital media for education or business learning contexts. Students interested in the study of instructional design will rapidly design, develop, and evaluate presentations, infographics, posters, digital resources,

multimedia, and web sites for particular learning styles. Special emphasis is given for using collaborative tools to facilitate and manage group projects. This course is part of the Instructional Design & Technology program sequence.

Advisory: It is advised, but not required that students have the background knowledge and skill taught in LINC 82A; basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Apply Instructional Systems Design [ISD] principles to design and development of instructional resources
- B. Analyze examples of effective instructional resources used in classroom and training settings
- C. Ensure project alignment between objectives, instructor activity, learner activity, and assessment
- D. Compare print, online, and computer media projects
- E. Identify online instructional resources
- F. Develop a variety of instructional print resources
- G. Develop a variety of computer media instructional resources
- H. Match learner profile with instructional project features
- I. Develop project to align with objectives, activities, and assessment

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Instructional resource design
 - 1. Revise existing materials or create new materials
 - 2. Method of delivery
 - 3. Best media to match instructional objectives
- B. Effective instructional resources
 - 1. Best practices
 - 2. Examples of print and non-print materials
 - 3. Online resources
- C. Alignment
 - 1. Learning objectives
 - 2. Instructor and learner activities
 - 3. Assessment
- D. Comparison of print, online, and computer media resources
 - 1. Best media type for particular objectives and learning environments
- E. Online instructional resources.
 - 1. Online resources already available
 - 2. Online tools for creation of online resources
- F. Develop print resources.
 - 1. Job aids
 - 2. Handouts
 - 3. Manuals
- G. Develop computer media resources
 - 1. Multimedia (infographics, posters)
 - 2. Video (screen casting)
 - 3. Web sites (interactive, information, survey)
- H. Match learner needs with project features
 - 1. Which collaboration tools to use?
 - 2. Which web sites provide appropriate information?
 - 3. How do you build collaboration among students?
 - 4. Which forms of video are most effective?
 - 5. How might interactive components facilitate learning?
- I. Develop project alignment
 - 1. Learner needs
 - 2. Learning objectives
 - 3. Learning environment

5. Repeatability - Moved to header area.

6. Methods of Evaluation -

- A. Designing and developing an instructional project that includes collaboration
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. Representative Text(s) -

Bean, Cammy, The Accidental Instructional Designer, Alexandria, VA, American Society for Training & Development (ASTD), 2014.

Hagen, Rebecca, and Kim Golombisky, *WSINYE: White Space Is Not Your Enemy: A Beginner's Guide to Communicating Visually through Graphic, Web & Multimedia Design*, New York, NY, Focal, 2013.

Vaughn, Tay, Multimedia: Making It Work, 9th ed. New York, McGraw-Hill, 2014.

8. Disciplines -

Instructional Design & Technology

9. Method of Instruction -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. Lab Content -

Not applicable.

11. Honors Description - No longer used. Integrated into main description section.

12. Examples of Required Reading and Writing and Outside of Class Assignments -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

FOOTHILL COLLEGE Stand-Alone Course Approval Request

If a Foothill credit course is **NOT** part of a State approved associate's degree, certificate of achievement or the Foothill College 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 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.

Stand Alone Course Approval Requests should be completed and forwarded to your Division Curriculum Committee to begin the approval process.

Course #: LINC 82C

Course Title: Creating Interactive Media for Instruction

Credit Status:

- Credit course
 Noncredit course

Catalog Description:

This advanced course in creating interactive media for instruction continues the coursework of LINC 82A and LINC 82B and provides the depth of skills and knowledge needed for making online learning media that includes interactive components, such as instructional video, multimedia, game-based learning, graphical user interface design, interactive tutorials, embedding collaborative elements in web sites or learning management systems. Students interested in the study of instructional design and technology will develop a project for either education or business learning contexts. This course is part of the Instructional Design & Technology program sequence.

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

- The course will be **permanently** Stand Alone; there are no plans to add it to a State approved degree or certificate, nor to the Foothill GE pattern
 The course will be Stand Alone **temporarily**, and it will be incorporated into a new degree or certificate that is not yet State approved. In this case, identify the degree/certificate to which the course will be added:

- 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?)

NOTE: *If you have not submitted your program application to the State by the end of the current academic year, you must reapply for permanent Stand Alone approval.*

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 (select all that apply):

- Transfer
 Workforce/CTE
 Basic Skills

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 attached to this form or provided in the box below.

Given that the primary audience for LINC classes is teachers in elementary, middle, and secondary classrooms, the labor market analysis data focuses on this occupational sector. The Employment Development Department for the state of California shows projected growth change of 20.6% and 22.4% in teacher employment in the San Jose and San Mateo areas by 2026. (Source: <https://www.labormarketinfo.edd.ca.gov/data/employment-projections.html>)

In the 19-20 school year, school districts in Santa Clara county hired 1143 new teachers, while districts in San Mateo county hired 464. These new teachers are joining an existing workforce of 13,048 teachers in Santa Clara County and 5,123 in San Mateo County (Source: <https://www.dq.cde.ca.gov>). New teachers will need the educational technology knowledge and skills the KCI offers through LINC classes and existing teachers will need to refresh or upgrade as technological advances occur regularly.

Please also see attached Labor Market Information documents specific to Instructional Design and Technology occupations and Online and Blended Instruction occupations.

Criteria C. Curriculum Standards (please initial as appropriate)

- The outline of record for this course has been approved the Division Curriculum Committee and meets the requirements of Title 5

Faculty Requestor: Cassandra Pereira **Date:** 5/13/20

Division Curriculum Representative: K. Allison Lenkeit Meezan **Date:** 5/21/2020

Date of Approval by Division Curriculum Committee: 5/21/20

College Curriculum Co-Chairperson: _____ **Date:** _____



Instructional Design & Technology

Occupation Report For Santa Clara County

March 2016

This occupation report focuses on two occupational codes: Training and Development Specialists (SOC code 13-1151) and Instructional Coordinators/Instructional Designers and Technologists (SOC 25-9031). For purposes of this report, these occupational groupings will be combined into one occupation, Instructional Design and Technology. The occupation summary data predicts there will be ongoing job growth in this area through 2020 (10%). In Santa Clara County, there were 3,533 full- and part-time jobs in 2015, most of these occupations are accounted for by Training and Development Specialists (2,703). It is projected that Santa Clara County will add 362 Instructional Design and Technology jobs by 2020 (10% or 3,895).

Occupation Summary for Industrial Design and Technology

3,533 Jobs (2015) 23% above National average	10.2% % Change (2015-2020) Nation: 8.0%	\$40.50/hr Median Hourly Earnings Nation: \$28.83/hr
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Occupation	2015 Jobs	2020 Jobs	Change	% Change
Training and Development Specialists (13-1151)	2,703	2,962	259	10%
Instructional Coordinators (25-9031)	830	933	103	12%

The range in earnings in Santa Clara County among Industrial Design and Technology show that while the median earnings are \$40.50/hr, the top earning quartile earns \$16.63 more an hour while the lowest quartile earns \$10.12 less an hour. These data show that the range of earnings among Training and Development Specialists is higher than Instructional Coordinators/Instructional Designers and Technologists.

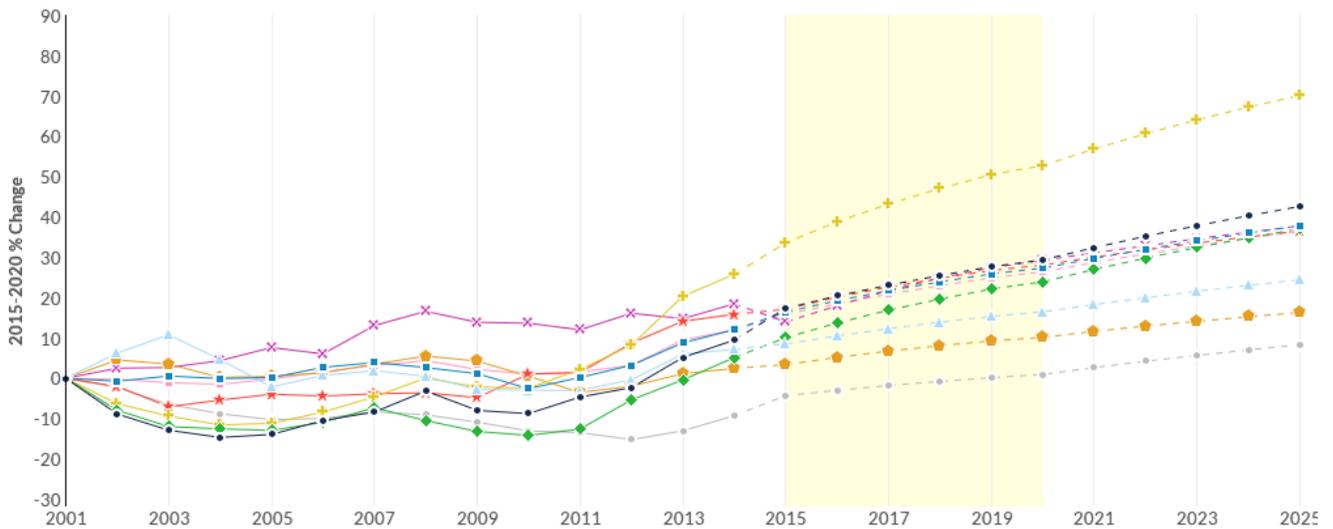
Industrial Design and Technology Percentile Earnings

\$30.38/hr 25th Percentile Earnings	\$40.50/hr Median Earnings	\$57.13/hr 75th Percentile Earnings	
Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings

Training and Development Specialists (13-1151)	\$31.60	\$42.60	\$59.34
Instructional Coordinators (25-9031)	\$26.52	\$33.86	\$50.10

An examination of the projected job growth among the nine counties in the Greater Bay Area region and at the state-level indicates the largest percentage rate change will be the highest In Santa Francisco County (14%), Napa (14%), San Mateo County (13%) and Santa Clara County (10%). Santa Clara County is projected to increase the most number of jobs by 2020 (362), followed by San Francisco (352), Alameda (210) and San Mateo (143) Counties.

Industrial Design and Technology Occupation Change Projections

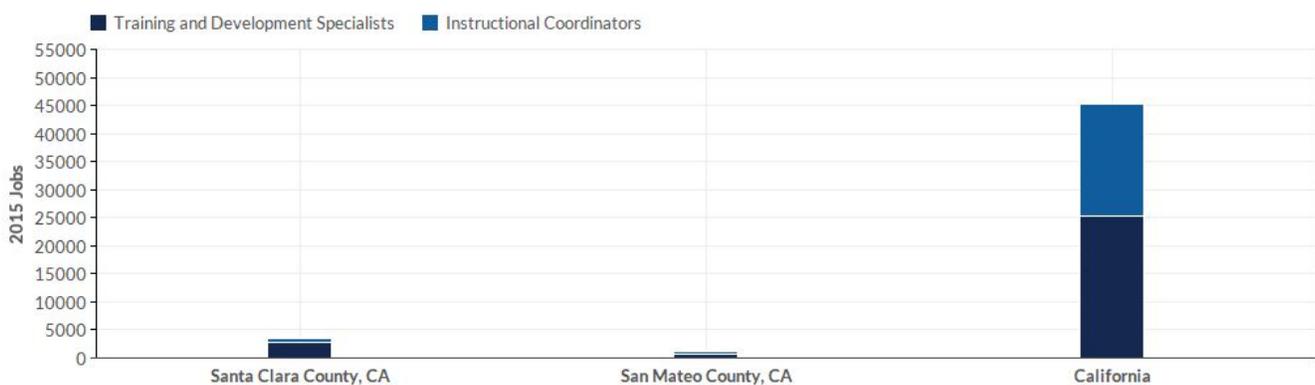


	Region	2015 Jobs	2020 Jobs	Change	% Change	Median Hourly Earnings
●	Santa Clara County, CA	3,533	3,895	362	10%	\$40.50
●	Alameda County, CA	2,246	2,456	210	9%	\$37.61
●	Contra Costa County, CA	1,004	1,077	73	7%	\$36.76
●	San Mateo County, CA	1,140	1,283	143	13%	\$35.47
●	San Francisco County, CA	2,447	2,799	352	14%	\$35.16

●	Marin County, CA	402	439	37	9%	\$33.04
●	Solano County, CA	360	383	23	6%	\$32.27
●	Napa County, CA	162	184	22	14%	\$31.69
●	Sonoma County, CA	460	485	25	5%	\$31.63
●	California	45,261	49,397	4,136	9%	\$33.43

The data and accompanying tables below show the number of jobs between 2015 and 2020, disaggregated by Santa Clara and San Mateo Counties.

Industrial Design and Technology Occupation Breakdown - 2015 Jobs



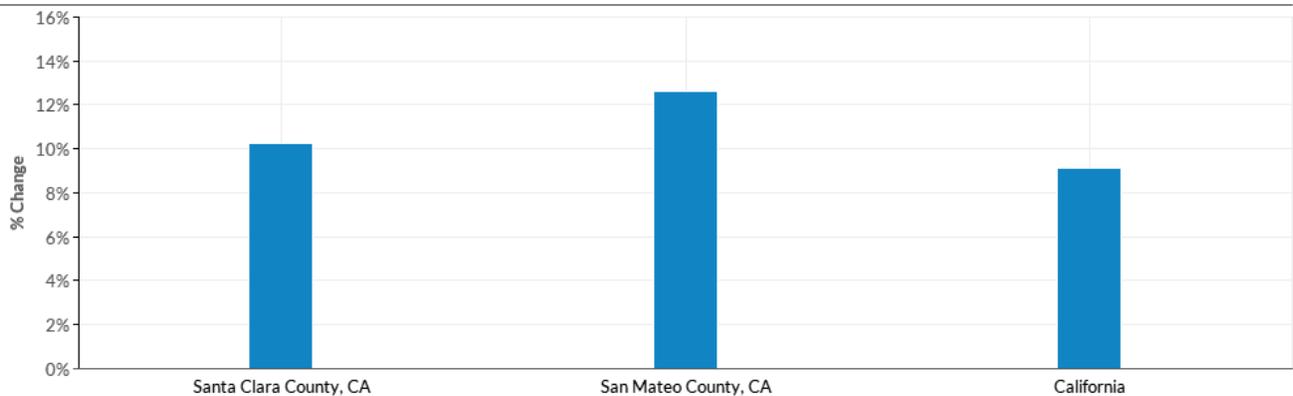
Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	2,703	778	25,267
25-9031	Instructional Coordinators	830	362	19,994
	Total	3,533	1,140	45,261

Industrial Design and Technology Occupation Breakdown - 2020 Jobs



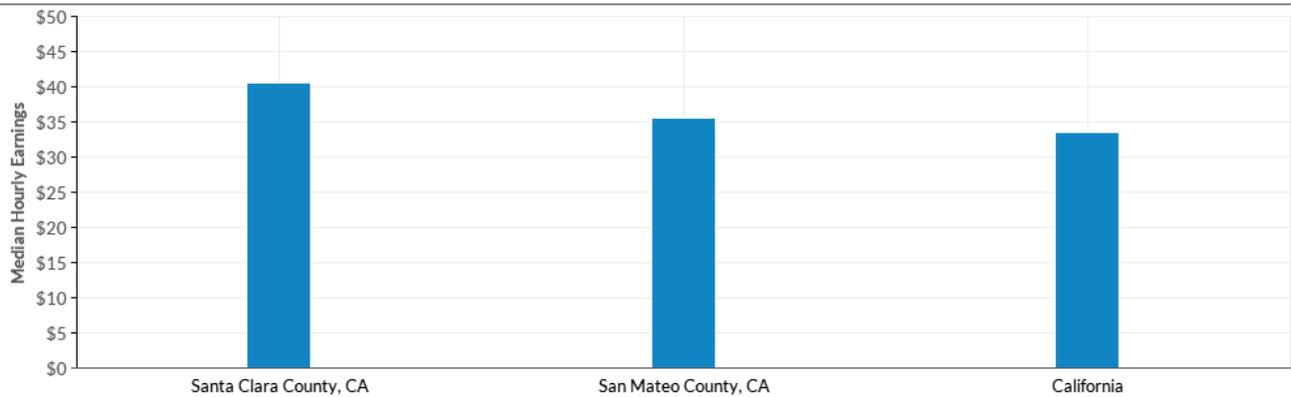
Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	2,962	882	27,881
25-9031	Instructional Coordinators	933	402	21,515
	Total	3,895	1,283	49,397

Occupation Breakdown - % Change



Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
25-9031	Instructional Coordinators	12%	11%	8%
13-1151	Training and Development Specialists	10%	13%	10%
	Total	10%	13%	9%

Occupation Breakdown - Median Hourly Earnings



Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	\$42.60	\$37.05	\$31.71
25-9031	Instructional Coordinators	\$33.86	\$32.20	\$35.54
	Total	\$40.50	\$35.47	\$33.43

Target Occupations Demographics

The demographics among those employed in Industrial Design and Technology occupations in Santa Clara County for 2015 show that a majority are female (64%) and about three-fourths are between the ages of 25-54 (73%) and White (59%).

Occupation Gender Breakdown

Gender	2015 Jobs	2015 Percent
Males	1,279	36.2%
Females	2,253	63.8%

Occupation Age Breakdown

Age	2015 Jobs	2015 Percent	
14-18	9	0.2%	
19-24	140	4.0%	■
25-34	785	22.2%	■
35-44	987	27.9%	■
45-54	837	23.7%	■
55-64	606	17.2%	■
65+	169	4.8%	■

Occupation Race/Ethnicity Breakdown

Race/Ethnicity	2015 Jobs	2015 Percent	
White	2,093	59.2%	■
Asian	606	17.2%	■
Hispanic or Latino	516	14.6%	■
Black or African American	206	5.8%	■
Two or More Races	84	2.4%	■
Native Hawaiian or Other Pacific Islander	14	0.4%	
American Indian or Alaska Native	14	0.4%	

Industries Employing Industrial Design and Technology Occupations

A number of industries in Santa Clara County employ those trained in Industrial Design and Technology occupations. The following table represents a regional industry breakdown of the number of Industrial Design and Technology positions employed, the percentage of Industrial Design and Technology employed by industry and the percentage Industrial Design and Technology jobs represent within all jobs by each industry. While top five industries employed 28% of all regional Industrial Design and Technology positions in 2015, Industrial Design and Technology compose a minority of all jobs in that industry (3%).

Top Industries Employing Industrial Design and Technology Occupations

Industry	Occupation Group Jobs in Industry (2015)	% of Occupation Group in Industry (2015)	% of Total Jobs in Industry (2015)
Custom Computer Programming Services	242	6.9%	0.6%
Elementary and Secondary Schools (Local Government)	214	6.1%	0.7%
Colleges, Universities, and Professional Schools	190	5.4%	0.6%
Internet Publishing and Broadcasting and Web Search Portals	190	5.4%	0.5%
Computer Systems Design Services	178	5.0%	0.6%

* *Inverse Staffing Patterns - Settings*

Data Sources and Calculations

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department

Federal Data Sources

This report uses federal data from the following agencies: Quarterly Census of Employment and Wages (QCEW) from the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA).



Online and Blended Instruction Occupations Labor Market Information Report Foothill College

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
May 2020

Recommendation

Based on all available data, there appears to be an undersupply of Online and Blended Instruction 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 2,330 students in the Bay region and 620 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0860.00 - Educational Technology 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 Online and Blended Instruction Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01), therefore, the data shown in Tables 1 and 2 is for Education Administrators, All Other (at the six digit SOC level) and likely overstates demand for Distance Learning Coordinators. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01).

- **Education Administrators, All Other (SOC 11-9039):** All education administrators not listed separately.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
- **Training and Development Managers (SOC 11-3131):** Plan, direct, or coordinate the training and development activities and staff of an organization.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 26%
- **Training and Development Specialists (SOC 13-1151):** Design and conduct training and development programs to improve individual and organizational performance. May analyze training needs.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 31%

- **Instructional Coordinators (SOC 25-9031):** Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Includes educational consultants and specialists, and instructional material directors.

Entry-Level Educational Requirement: Master's degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

Occupational Demand

Table 1. Employment Outlook for Online and Blended Instruction Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Education Administrators, All Other	2,800	2,990	190	7%	1,320	264	\$25.20	\$35.36
Training and Development Managers	1,787	1,909	122	7%	941	188	\$47.43	\$68.57
Training and Development Specialists	9,676	10,802	1,126	12%	6,600	1,320	\$26.00	\$37.83
Instructional Coordinators	5,042	5,427	385	8%	2,815	563	\$24.52	\$32.84
TOTAL	19,304	21,128	1,823	9%	11,676	2,335	\$27.48	\$39.01

Source: EMSI 2020.1

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

Table 2. Employment Outlook for Online and Blended Instruction Occupations in Silicon Valley Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Education Administrators, All Other	483	533	50	10%	248	50	\$26.78	\$41.57
Training and Development Managers	515	555	40	8%	276	55	\$61.55	\$76.42
Training and Development Specialists	2,848	3,219	372	13%	1,993	399	\$24.80	\$35.92
Instructional Coordinators	961	1,074	113	12%	584	117	\$27.24	\$33.54
TOTAL	4,805	5,381	575	12%	3,101	620	\$29.42	\$40.35

Source: EMSI 2020.1

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 (April 2019 - March 2020)

Occupation	Bay Region	Silicon Valley
Training and Development Specialists	2,485	788
Training and Development Managers	963	251

Instructional Designers and Technologists	781	353
Distance Learning Coordinators	42	8
TOTAL	4,271	1,400

Source: Burning Glass

Table 4a. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Bay Region

Common Title	Bay	Common Title	Bay
Instructional Designer	652	Learning Development Specialist	33
Training Coordinator	343	Sales Training Manager	27
Training Specialist	337	Director, Learning, Development	27
Training Manager	296	Developer	25
Technical Trainer	149	Machine Learning Developer	21
Development Coordinator	110	Operations Specialist	20
Trainer	106	Field Trainer	20
Development Specialist	69	Curriculum Designer	19
Director, Staff Development	63	Machine Learning Specialist	18
Sales Trainer	54	Supervisor, Training	17
Education Specialist	52	Sales Training Specialist	17
Learning Specialist	41	Director of Sales	17
Development Trainer	38	Head, Development	16
Training Developer	34	Behavior Technician, Training	16

Table 4b. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Silicon Valley Sub-Region

Common Title	Silicon Valley	Common Title	Silicon Valley
Instructional Designer	327	Developer	11
Training Coordinator	145	Program Analyst	8
Training Specialist	94	Learning Development Specialist	8
Training Manager	92	Staff Assistant	7
Technical Trainer	65	Machine Learning Specialist	7
Trainer	29	Learning Specialist	7
Development Coordinator	23	Field Training Officer	7
Director, Staff Development	18	Education Specialist	7
Sales Trainer	17	Development Trainer	7
Machine Learning Developer	17	Commercial Learning Trainer	7
Training Developer	15	Product Trainer	6
Development Specialist	14	Management Training Program	6
Sales Training Manager	11	Learning Technology Specialist	6
Principal Epic Trainer, Billing, Healthcare Industry	11	Director, Development	6

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Online and Blended Instruction Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2022)	% Change (2019-24)	% Occupation Group in Industry (2019)
Elementary and Secondary Schools (Local Government) (903611)	1,625	1,686	4%	8%
Corporate, Subsidiary, and Regional Managing Offices (551114)	824	864	5%	4%
Internet Publishing and Broadcasting and Web Search Portals (519130)	800	1,042	30%	4%
Colleges, Universities, and Professional Schools (State Government) (902612)	725	695	-4%	4%
Educational Support Services (611710)	719	842	17%	4%
Custom Computer Programming Services (541511)	715	914	28%	4%
Colleges, Universities, and Professional Schools (611310)	665	731	10%	3%
Local Government, Excluding Education and Hospitals (903999)	622	649	4%	3%
Elementary and Secondary Schools (611110)	520	550	6%	3%
Software Publishers (511210)	514	646	26%	3%
Computer Systems Design Services (541512)	404	495	23%	2%
Sports and Recreation Instruction (611620)	316	356	13%	2%
Administrative Management and General Management Consulting Services (541611)	312	383	23%	2%
Exam Preparation and Tutoring (611691)	306	347	13%	2%
State Government, Excluding Education and Hospitals (902999)	294	312	6%	2%
Colleges, Universities, and Professional Schools (Local Government) (903612)	277	261	-6%	1%
Federal Government, Military (901200)	270	261	-3%	1%

Source: EMSI 2020.1

Table 6. Top Employers Posting Online and Blended Instruction Occupations in Bay Region and Silicon Valley Sub-Region (April 2019 - March 2020)

Employer	Bay	Employer	Bay	Employer	Silicon Valley
UC Berkeley	34	Microsoft Corporation	18	Apple Inc.	27
Facebook	33	Workday, Inc	17	Intuitive Surgical Inc	21
Google Inc.	30	US Army	16	Google Inc.	21
Reynolds & Reynolds	28	Pinterest	16	Stanford University	18
Apple Inc.	27	Agiloft	16	Servicenow, Inc	12
Amazon	26	UC San Francisco	15	Reynolds & Reynolds	10
Anthem Blue Cross	25	Medtronic	14	Core Group Technologies Inc	10
Walmart / Sam's	23	Genentech	14	Microsoft Corporation	9
Stanford University	22	Abbott Laboratories	14	Applied Materials	9
Milestone Technologies Inc	21	Servicenow, Inc	13	Anthem Blue Cross	9
Intuitive Surgical Inc	21	Advance Behavioral Therapies	12	Comerica	8
Envision	21	Lucile Packard Childrens Hospital	11	Servicenow	7
Visa	20	Linkedin Limited	11	Abbott Laboratories	7
Kaiser Permanente	20	Health Services Llc	11	Walmart / Sam's	6
University California	19	Tti Incorporated	10	Palo Alto Networks	6
Core Group Technologies Inc	19	GP Strategies Corporation	10	Linkedin Limited	6

Pacific Gas and Electric Co	18	Falcon Cct	10	Intellipro Incorporated	6
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Source: Burning Glass

Educational Supply

There is one (1) community college in the Bay Region issuing 3 awards on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no colleges in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

There is one (1) Other Educational Institution in the Bay Region issuing two (2) Bachelor's Degrees on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no Other Educational Institutions in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

Table 7a. Awards on TOP 0860.00 - Educational Technology in Bay Region

College	Sub-Region	Certificate Low Unit	Total
Merritt	East Bay	3	3
Total Bay Region		3	3
Total Silicon Valley Sub-Region		0	0

Source: Data Mart

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

Table 7b. Other Educational Institutions - Bachelor's Degree Awards on TOP 0860.00 - Educational Technology Bay Region

College	Sub-Region	Bachelor's Degree
Academy of Art University	Mid-Peninsula	2
Total Bay Region		2
Total Silicon Valley Sub-Region		0

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,335 annual openings for the Online and Blended Instruction occupational cluster and 5 annual (3-year average) awards for an annual undersupply of 2,330 students. In the Silicon Valley Sub-Region, there is also a gap with 620 annual openings and no annual (3-year average) awards for an annual undersupply of 620 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0860.00-Educational Technology

2015-16	Bay (All CTE Programs)	Foothill College (All CTE Programs)	State (0860.00)	Bay (0860.00)	Silicon Valley (0860.00)	Foothill College (0860.00)
% Employed Four Quarters After Exit	74%	77%	81%	81%	77%	77%
Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$15,301	\$20,325	\$22,242	\$20,549	\$20,549

Median % Change in Earnings	46%	82%	32%	30%	25%	25%
% of Students Earning a Living Wage	63%	76%	83%	88%	86%	86%

Source: Launchboard Pipeline (version available on 5/6/20)

Skills, Certifications and Education

Table 9. Top Skills for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Training Programs	941	Curriculum Development	264	Multimedia	178
Project Management	903	Needs Assessment	258	Adobe Creative Suite	177
Instructional Design	881	Staff Management	224	Talent Management	174
Training Materials	758	Staff Development	222	Course Development	168
Scheduling	638	Change Management	215	Content Management	167
Teaching	581	Leadership Development	215	Employee Training	166
Customer Service	485	Adobe Acrobat	213	Training Activities	156
Onboarding	455	Organizational Development	209	Technical Writing / Editing	154
Learning Management System	405	Adobe Indesign	196	Software as a Service (SaaS)	153
Technical Training	388	Project Planning and Development Skills	194	Performance Management	152
Budgeting	376	Sales Training	193	Quality Assurance and Control	152
Adobe Captivate	332	Graphic Design	191	New Hire Orientation	151
Sales	308	Stakeholder Management	186	Adobe Illustrator	146
Content Development	296	Technical Support	184	Psychology	136
Adobe Photoshop	286	Salesforce	179	Public Speaking	136

Source: Burning Glass

Table 10. Certifications for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)

Note: 80% 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
Driver's License	314	Basic Life Saving (BLS)	16
Licensed Vocational Nurse (LVN)	75	Microsoft Certified Trainer (MCT)	15

First Aid CPR AED	74	Medical Examiner's License	14
Epic Certification	67	Lean Six Sigma Certification	14
Project Management Certification	59	Six Sigma Yellow Belt	13
Security Clearance	56	Certified Teacher	13
Registered Nurse	39	Adult Learning Certificate	12
Project Management Professional (PMP)	28	Professional in Human Resources	11
Registered Behavior Technician	26	Licensed Practical Nurse (LPN)	10
Hearing Aid Dealers	20	Special Education Certification	9
Board Certified Behavior Analyst (BCBA)	18	ServSafe	9
IT Infrastructure Library (ITIL) Certification	16	Psychologist License	9

Source: Burning Glass

Table 11. Education Requirements for Online and Blended Instruction Occupations in Bay Region

Note: 36% 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	444	17%
Associate Degree	92	4%
Bachelor's Degree or Higher	2,004	79%

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 CCCC 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:

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

Foothill College

Approved Course Outlines

For Faculty and Staff use only

Business and Social Sciences

LINC 82C CREATING INTERACTIVE MEDIA FOR INSTRUCTION

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab hours and Out of Class X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active	Grading:	Letter Grade with P/NP option
Degree Status: Applicable	Credit Status:	Credit
Degree or Certificate Requirement: Stand Alone Course		
GE Status: Non-GE		

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37	Load Factor: .067	FOAP Code: 114000151011086000
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Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

Content Review Date: 1/12/16; review for 2021-22

Former ID:

1. Description -

This advanced course in creating interactive media for instruction continues the coursework of LINC 82A and LINC 82B and provides the depth of skills and knowledge needed for making online learning media that includes interactive components, such as instructional video, multimedia, game-based learning, graphical user interface design, interactive tutorials, embedding collaborative elements in web sites or learning management systems. Students interested in the

study of instructional design and technology will develop a project for either education or business learning contexts. This course is part of the Instructional Design & Technology program sequence.

Prerequisite: LINC 82A or 82B.

Advisory: Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The students will be able to:

- A. Define levels of instructional interaction
- B. Create online interactive games and activities for learners
- C. Create online interactive assessments for learners
- D. Utilize instructional design principles to create an instructional video
- E. Apply the concept of flipped learning
- F. Create a plan for flipped learning environment in the classroom
- G. Embed interactive media in a website and collaborative online documents
- H. Embed interactive media for use by learners in a learning management system
 - I. Explore the pedagogy behind game-based learning
 - J. Explore several tools for game-based learning

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Levels of instructional interaction
 1. Level 1 Passive-no interaction
 2. Level 2 Limited interaction
 3. Level 3 Moderate interaction
 4. Level 4 Simulation and game-based learning
- B. Online interactive games and activities
 1. Learner objectives
 2. Format
 3. Content
 4. Online tools - Flash, HTML5, other
 5. Hosting platform
- C. Online interactive assessments
 1. Learner objectives
 2. Reliability and validity
 3. Format
 4. Content
 5. Online tool
 6. Hosting platform
- D. Instructional video
 1. Learner objectives
 2. Instructional sequence of content
 3. Format
 4. Screencasting
 5. Screen shots and images
 6. Video
 7. Hosting platform and embedding
- E. Understand flipped learning
 1. Individualized/personalized learning
 2. Interactive learning environment
- F. Plan for flipped learning
 1. Flexible environment
 2. Instructor and student roles
 3. Use of time
 4. Technology
 5. Instructional content
 6. Ongoing assessment

- G. Embed interactive media - website and documents
 - 1. Enhanced instruction
 - 2. Personalized learning
 - 3. Technical aspects
- H. Embed interactive media - learning management system
 - 1. Enhanced instruction
 - 2. Personalized learning
 - 3. Technical aspects
- I. Game-based learning - pedagogy
 - 1. Collaborative problem-solving
 - 2. Divergent thinking
 - 3. Creativity
- J. Game-based learning - tools
 - 1. Print-based
 - 2. Electronic
 - 3. Online

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

- A. Designing and developing an interactive online instructional project
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. Representative Text(s) -

Bean, Cammy, [The Accidental Instructional Designer](#), Alexandria, VA, American Society for Training & Development (ASTD), 2014.
 Hagen, Rebecca, and Kim Golombisky, [WSINYE: White Space Is Not Your Enemy: A Beginner's Guide to Communicating Visually through Graphic, Web & Multimedia Design](#), New York, NY, Focal, 2013.
 Vaughn, Tay, [Multimedia: Making It Work](#), 9th ed. New York, McGraw-Hill, 2014.

8. Disciplines -

Instructional Design & Technology

9. Method of Instruction -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. Lab Content -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Examples of Required Reading and Writing and Outside of Class Assignments -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators

in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

FOOTHILL COLLEGE Stand-Alone Course Approval Request

If a Foothill credit course is **NOT** part of a State approved associate's degree, certificate of achievement or the Foothill College 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 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.

Stand Alone Course Approval Requests should be completed and forwarded to your Division Curriculum Committee to begin the approval process.

Course #: LINC 87

Course Title: Seminar in Teaching with Educational Technology

Credit Status:

- Credit course
 Noncredit course

Catalog Description:

This seminar is for educators at all levels to develop student-centered learning projects and teaching practices; apply practical educational technology tools and resources; and participate in a collaborative professional development experience. Participants learn to use innovative technologies in their own curriculum content area and best practices for teaching and learning that positively impacts student achievement. Topics include 21st Century skills for teaching and learning, visual literacy, media literacy, free online tools and resources for education, educational software training, open education resources, professional learning networks, integrating technology into the curriculum, integrating science and mathematics into any curriculum, assessment strategies for complex learning outcomes, and student-centered learning.

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

- The course will be **permanently** Stand Alone; there are no plans to add it to a State approved degree or certificate, nor to the Foothill GE pattern
 The course will be Stand Alone **temporarily**, and it will be incorporated into a new degree or certificate that is not yet State approved. In this case, identify the degree/certificate to which the course will be added:

- 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?)

***NOTE:** If you have not submitted your program application to the State by the end of the current academic year, you must reapply for permanent Stand Alone approval.*

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 (select all that apply):

- Transfer
 Workforce/CTE
 Basic Skills

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 attached to this form or provided in the box below.

Given that the primary audience for LINC classes is teachers in elementary, middle, and secondary classrooms, the labor market analysis data focuses on this occupational sector. The Employment Development Department for the state of California shows projected growth change of 20.6% and 22.4% in teacher employment in the San Jose and San Mateo areas by 2026. (Source: <https://www.labormarketinfo.edd.ca.gov/data/employment-projections.html>)

In the 19-20 school year, school districts in Santa Clara county hired 1143 new teachers, while districts in San Mateo county hired 464. These new teachers are joining an existing workforce of 13,048 teachers in Santa Clara County and 5,123 in San Mateo County (Source: <https://www.dq.cde.ca.gov>). New teachers will need the educational technology knowledge and skills the KCI offers through LINC classes and existing teachers will need to refresh or upgrade as technological advances occur regularly.

Please also see attached Labor Market Information documents specific to Instructional Design and Technology occupations and Online and Blended Instruction occupations.

Criteria C. Curriculum Standards (please initial as appropriate)

The outline of record for this course has been approved the Division Curriculum Committee and meets the requirements of Title 5

Faculty Requestor: Cassandra Pereira **Date:** 5/13/20

Division Curriculum Representative: K. Allison Lenkeit Meezan **Date:** 5/21/2020

Date of Approval by Division Curriculum Committee: 5/21/20

College Curriculum Co-Chairperson: _____ **Date:** _____



Instructional Design & Technology

Occupation Report For Santa Clara County

March 2016

This occupation report focuses on two occupational codes: Training and Development Specialists (SOC code 13-1151) and Instructional Coordinators/Instructional Designers and Technologists (SOC 25-9031). For purposes of this report, these occupational groupings will be combined into one occupation, Instructional Design and Technology. The occupation summary data predicts there will be ongoing job growth in this area through 2020 (10%). In Santa Clara County, there were 3,533 full- and part-time jobs in 2015, most of these occupations are accounted for by Training and Development Specialists (2,703). It is projected that Santa Clara County will add 362 Instructional Design and Technology jobs by 2020 (10% or 3,895).

Occupation Summary for Industrial Design and Technology

3,533 Jobs (2015) 23% above National average	10.2% % Change (2015-2020) Nation: 8.0%	\$40.50/hr Median Hourly Earnings Nation: \$28.83/hr
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Occupation	2015 Jobs	2020 Jobs	Change	% Change
Training and Development Specialists (13-1151)	2,703	2,962	259	10%
Instructional Coordinators (25-9031)	830	933	103	12%

The range in earnings in Santa Clara County among Industrial Design and Technology show that while the median earnings are \$40.50/hr, the top earning quartile earns \$16.63 more an hour while the lowest quartile earns \$10.12 less an hour. These data show that the range of earnings among Training and Development Specialists is higher than Instructional Coordinators/Instructional Designers and Technologists.

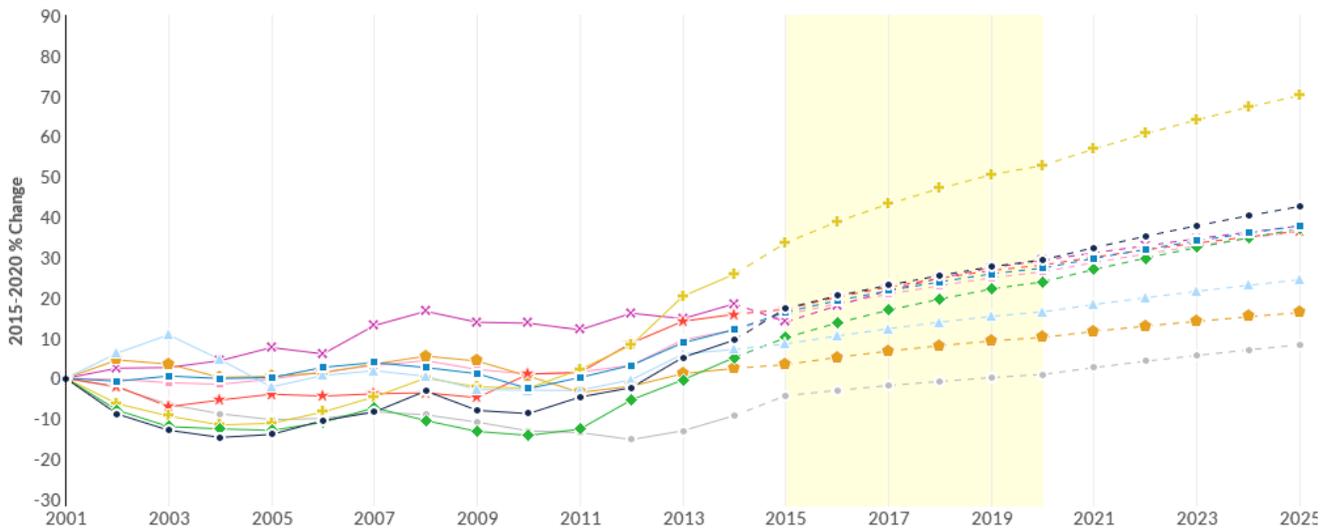
Industrial Design and Technology Percentile Earnings

\$30.38/hr 25th Percentile Earnings	\$40.50/hr Median Earnings	\$57.13/hr 75th Percentile Earnings	
Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings

Training and Development Specialists (13-1151)	\$31.60	\$42.60	\$59.34
Instructional Coordinators (25-9031)	\$26.52	\$33.86	\$50.10

An examination of the projected job growth among the nine counties in the Greater Bay Area region and at the state-level indicates the largest percentage rate change will be the highest In Santa Francisco County (14%), Napa (14%), San Mateo County (13%) and Santa Clara County (10%). Santa Clara County is projected to increase the most number of jobs by 2020 (362), followed by San Francisco (352), Alameda (210) and San Mateo (143) Counties.

Industrial Design and Technology Occupation Change Projections



	Region	2015 Jobs	2020 Jobs	Change	% Change	Median Hourly Earnings
●	Santa Clara County, CA	3,533	3,895	362	10%	\$40.50
●	Alameda County, CA	2,246	2,456	210	9%	\$37.61
●	Contra Costa County, CA	1,004	1,077	73	7%	\$36.76
●	San Mateo County, CA	1,140	1,283	143	13%	\$35.47
●	San Francisco County, CA	2,447	2,799	352	14%	\$35.16

●	Marin County, CA	402	439	37	9%	\$33.04
●	Solano County, CA	360	383	23	6%	\$32.27
●	Napa County, CA	162	184	22	14%	\$31.69
●	Sonoma County, CA	460	485	25	5%	\$31.63
●	California	45,261	49,397	4,136	9%	\$33.43

The data and accompanying tables below show the number of jobs between 2015 and 2020, disaggregated by Santa Clara and San Mateo Counties.

Industrial Design and Technology Occupation Breakdown - 2015 Jobs



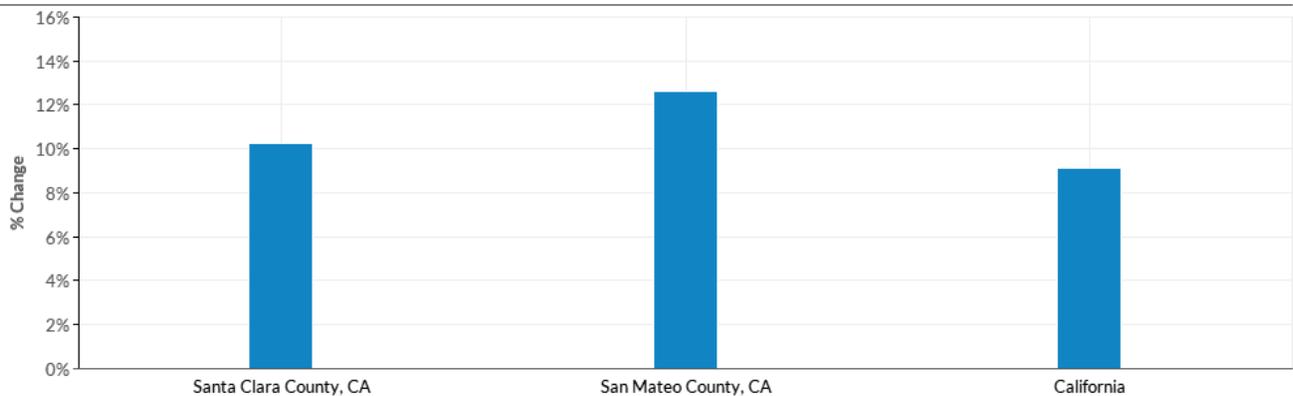
Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	2,703	778	25,267
25-9031	Instructional Coordinators	830	362	19,994
	Total	3,533	1,140	45,261

Industrial Design and Technology Occupation Breakdown - 2020 Jobs



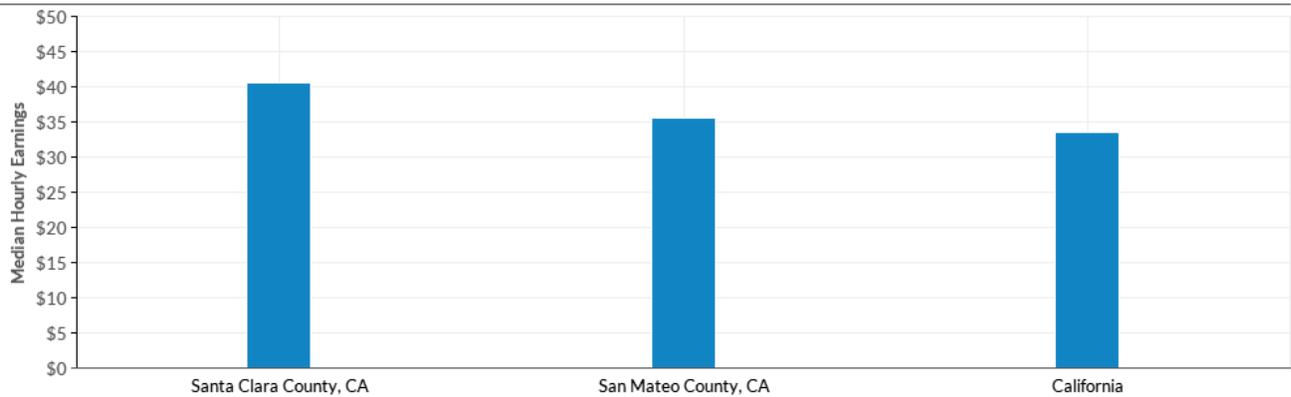
Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	2,962	882	27,881
25-9031	Instructional Coordinators	933	402	21,515
	Total	3,895	1,283	49,397

Occupation Breakdown - % Change



Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
25-9031	Instructional Coordinators	12%	11%	8%
13-1151	Training and Development Specialists	10%	13%	10%
	Total	10%	13%	9%

Occupation Breakdown - Median Hourly Earnings



Occupation	Description	Santa Clara County, CA	San Mateo County, CA	California
13-1151	Training and Development Specialists	\$42.60	\$37.05	\$31.71
25-9031	Instructional Coordinators	\$33.86	\$32.20	\$35.54
	Total	\$40.50	\$35.47	\$33.43

Target Occupations Demographics

The demographics among those employed in Industrial Design and Technology occupations in Santa Clara County for 2015 show that a majority are female (64%) and about three-fourths are between the ages of 25-54 (73%) and White (59%).

Occupation Gender Breakdown

Gender	2015 Jobs	2015 Percent
Males	1,279	36.2%
Females	2,253	63.8%

Occupation Age Breakdown

Age	2015 Jobs	2015 Percent	
14-18	9	0.2%	
19-24	140	4.0%	■
25-34	785	22.2%	■
35-44	987	27.9%	■
45-54	837	23.7%	■
55-64	606	17.2%	■
65+	169	4.8%	■

Occupation Race/Ethnicity Breakdown

Race/Ethnicity	2015 Jobs	2015 Percent	
White	2,093	59.2%	■
Asian	606	17.2%	■
Hispanic or Latino	516	14.6%	■
Black or African American	206	5.8%	■
Two or More Races	84	2.4%	■
Native Hawaiian or Other Pacific Islander	14	0.4%	
American Indian or Alaska Native	14	0.4%	

Industries Employing Industrial Design and Technology Occupations

A number of industries in Santa Clara County employ those trained in Industrial Design and Technology occupations. The following table represents a regional industry breakdown of the number of Industrial Design and Technology positions employed, the percentage of Industrial Design and Technology employed by industry and the percentage Industrial Design and Technology jobs represent within all jobs by each industry. While top five industries employed 28% of all regional Industrial Design and Technology positions in 2015, Industrial Design and Technology compose a minority of all jobs in that industry (3%).

Top Industries Employing Industrial Design and Technology Occupations

Industry	Occupation Group Jobs in Industry (2015)	% of Occupation Group in Industry (2015)	% of Total Jobs in Industry (2015)
Custom Computer Programming Services	242	6.9%	0.6%
Elementary and Secondary Schools (Local Government)	214	6.1%	0.7%
Colleges, Universities, and Professional Schools	190	5.4%	0.6%
Internet Publishing and Broadcasting and Web Search Portals	190	5.4%	0.5%
Computer Systems Design Services	178	5.0%	0.6%

* *Inverse Staffing Patterns - Settings*

Data Sources and Calculations

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department

Federal Data Sources

This report uses federal data from the following agencies: Quarterly Census of Employment and Wages (QCEW) from the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA).



Online and Blended Instruction Occupations Labor Market Information Report Foothill College

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
May 2020

Recommendation

Based on all available data, there appears to be an undersupply of Online and Blended Instruction 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 2,330 students in the Bay region and 620 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0860.00 - Educational Technology 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 Online and Blended Instruction Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01), therefore, the data shown in Tables 1 and 2 is for Education Administrators, All Other (at the six digit SOC level) and likely overstates demand for Distance Learning Coordinators. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01).

- **Education Administrators, All Other (SOC 11-9039):** All education administrators not listed separately.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
- **Training and Development Managers (SOC 11-3131):** Plan, direct, or coordinate the training and development activities and staff of an organization.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 26%
- **Training and Development Specialists (SOC 13-1151):** Design and conduct training and development programs to improve individual and organizational performance. May analyze training needs.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 31%

- **Instructional Coordinators (SOC 25-9031):** Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Includes educational consultants and specialists, and instructional material directors.

Entry-Level Educational Requirement: Master's degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

Occupational Demand

Table 1. Employment Outlook for Online and Blended Instruction Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Education Administrators, All Other	2,800	2,990	190	7%	1,320	264	\$25.20	\$35.36
Training and Development Managers	1,787	1,909	122	7%	941	188	\$47.43	\$68.57
Training and Development Specialists	9,676	10,802	1,126	12%	6,600	1,320	\$26.00	\$37.83
Instructional Coordinators	5,042	5,427	385	8%	2,815	563	\$24.52	\$32.84
TOTAL	19,304	21,128	1,823	9%	11,676	2,335	\$27.48	\$39.01

Source: EMSI 2020.1

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

Table 2. Employment Outlook for Online and Blended Instruction Occupations in Silicon Valley Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Education Administrators, All Other	483	533	50	10%	248	50	\$26.78	\$41.57
Training and Development Managers	515	555	40	8%	276	55	\$61.55	\$76.42
Training and Development Specialists	2,848	3,219	372	13%	1,993	399	\$24.80	\$35.92
Instructional Coordinators	961	1,074	113	12%	584	117	\$27.24	\$33.54
TOTAL	4,805	5,381	575	12%	3,101	620	\$29.42	\$40.35

Source: EMSI 2020.1

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 (April 2019 - March 2020)

Occupation	Bay Region	Silicon Valley
Training and Development Specialists	2,485	788
Training and Development Managers	963	251

Instructional Designers and Technologists	781	353
Distance Learning Coordinators	42	8
TOTAL	4,271	1,400

Source: Burning Glass

Table 4a. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Bay Region

Common Title	Bay	Common Title	Bay
Instructional Designer	652	Learning Development Specialist	33
Training Coordinator	343	Sales Training Manager	27
Training Specialist	337	Director, Learning, Development	27
Training Manager	296	Developer	25
Technical Trainer	149	Machine Learning Developer	21
Development Coordinator	110	Operations Specialist	20
Trainer	106	Field Trainer	20
Development Specialist	69	Curriculum Designer	19
Director, Staff Development	63	Machine Learning Specialist	18
Sales Trainer	54	Supervisor, Training	17
Education Specialist	52	Sales Training Specialist	17
Learning Specialist	41	Director of Sales	17
Development Trainer	38	Head, Development	16
Training Developer	34	Behavior Technician, Training	16

Table 4b. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Silicon Valley Sub-Region

Common Title	Silicon Valley	Common Title	Silicon Valley
Instructional Designer	327	Developer	11
Training Coordinator	145	Program Analyst	8
Training Specialist	94	Learning Development Specialist	8
Training Manager	92	Staff Assistant	7
Technical Trainer	65	Machine Learning Specialist	7
Trainer	29	Learning Specialist	7
Development Coordinator	23	Field Training Officer	7
Director, Staff Development	18	Education Specialist	7
Sales Trainer	17	Development Trainer	7
Machine Learning Developer	17	Commercial Learning Trainer	7
Training Developer	15	Product Trainer	6
Development Specialist	14	Management Training Program	6
Sales Training Manager	11	Learning Technology Specialist	6
Principal Epic Trainer, Billing, Healthcare Industry	11	Director, Development	6

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Online and Blended Instruction Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2022)	% Change (2019-24)	% Occupation Group in Industry (2019)
Elementary and Secondary Schools (Local Government) (903611)	1,625	1,686	4%	8%
Corporate, Subsidiary, and Regional Managing Offices (551114)	824	864	5%	4%
Internet Publishing and Broadcasting and Web Search Portals (519130)	800	1,042	30%	4%
Colleges, Universities, and Professional Schools (State Government) (902612)	725	695	-4%	4%
Educational Support Services (611710)	719	842	17%	4%
Custom Computer Programming Services (541511)	715	914	28%	4%
Colleges, Universities, and Professional Schools (611310)	665	731	10%	3%
Local Government, Excluding Education and Hospitals (903999)	622	649	4%	3%
Elementary and Secondary Schools (611110)	520	550	6%	3%
Software Publishers (511210)	514	646	26%	3%
Computer Systems Design Services (541512)	404	495	23%	2%
Sports and Recreation Instruction (611620)	316	356	13%	2%
Administrative Management and General Management Consulting Services (541611)	312	383	23%	2%
Exam Preparation and Tutoring (611691)	306	347	13%	2%
State Government, Excluding Education and Hospitals (902999)	294	312	6%	2%
Colleges, Universities, and Professional Schools (Local Government) (903612)	277	261	-6%	1%
Federal Government, Military (901200)	270	261	-3%	1%

Source: EMSI 2020.1

Table 6. Top Employers Posting Online and Blended Instruction Occupations in Bay Region and Silicon Valley Sub-Region (April 2019 - March 2020)

Employer	Bay	Employer	Bay	Employer	Silicon Valley
UC Berkeley	34	Microsoft Corporation	18	Apple Inc.	27
Facebook	33	Workday, Inc	17	Intuitive Surgical Inc	21
Google Inc.	30	US Army	16	Google Inc.	21
Reynolds & Reynolds	28	Pinterest	16	Stanford University	18
Apple Inc.	27	Agiloft	16	Servicenow, Inc	12
Amazon	26	UC San Francisco	15	Reynolds & Reynolds	10
Anthem Blue Cross	25	Medtronic	14	Core Group Technologies Inc	10
Walmart / Sam's	23	Genentech	14	Microsoft Corporation	9
Stanford University	22	Abbott Laboratories	14	Applied Materials	9
Milestone Technologies Inc	21	Servicenow, Inc	13	Anthem Blue Cross	9
Intuitive Surgical Inc	21	Advance Behavioral Therapies	12	Comerica	8
Envision	21	Lucile Packard Childrens Hospital	11	Servicenow	7
Visa	20	Linkedin Limited	11	Abbott Laboratories	7
Kaiser Permanente	20	Health Services Llc	11	Walmart / Sam's	6
University California	19	Tti Incorporated	10	Palo Alto Networks	6
Core Group Technologies Inc	19	GP Strategies Corporation	10	Linkedin Limited	6

Pacific Gas and Electric Co	18	Falcon Cct	10	Intellipro Incorporated	6
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Source: Burning Glass

Educational Supply

There is one (1) community college in the Bay Region issuing 3 awards on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no colleges in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

There is one (1) Other Educational Institution in the Bay Region issuing two (2) Bachelor's Degrees on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no Other Educational Institutions in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

Table 7a. Awards on TOP 0860.00 - Educational Technology in Bay Region

College	Sub-Region	Certificate Low Unit	Total
Merritt	East Bay	3	3
Total Bay Region		3	3
Total Silicon Valley Sub-Region		0	0

Source: Data Mart

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

Table 7b. Other Educational Institutions - Bachelor's Degree Awards on TOP 0860.00 - Educational Technology Bay Region

College	Sub-Region	Bachelor's Degree
Academy of Art University	Mid-Peninsula	2
Total Bay Region		2
Total Silicon Valley Sub-Region		0

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,335 annual openings for the Online and Blended Instruction occupational cluster and 5 annual (3-year average) awards for an annual undersupply of 2,330 students. In the Silicon Valley Sub-Region, there is also a gap with 620 annual openings and no annual (3-year average) awards for an annual undersupply of 620 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0860.00-Educational Technology

2015-16	Bay (All CTE Programs)	Foothill College (All CTE Programs)	State (0860.00)	Bay (0860.00)	Silicon Valley (0860.00)	Foothill College (0860.00)
% Employed Four Quarters After Exit	74%	77%	81%	81%	77%	77%
Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$15,301	\$20,325	\$22,242	\$20,549	\$20,549

Median % Change in Earnings	46%	82%	32%	30%	25%	25%
% of Students Earning a Living Wage	63%	76%	83%	88%	86%	86%

Source: Launchboard Pipeline (version available on 5/6/20)

Skills, Certifications and Education

Table 9. Top Skills for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Training Programs	941	Curriculum Development	264	Multimedia	178
Project Management	903	Needs Assessment	258	Adobe Creative Suite	177
Instructional Design	881	Staff Management	224	Talent Management	174
Training Materials	758	Staff Development	222	Course Development	168
Scheduling	638	Change Management	215	Content Management	167
Teaching	581	Leadership Development	215	Employee Training	166
Customer Service	485	Adobe Acrobat	213	Training Activities	156
Onboarding	455	Organizational Development	209	Technical Writing / Editing	154
Learning Management System	405	Adobe Indesign	196	Software as a Service (SaaS)	153
Technical Training	388	Project Planning and Development Skills	194	Performance Management	152
Budgeting	376	Sales Training	193	Quality Assurance and Control	152
Adobe Captivate	332	Graphic Design	191	New Hire Orientation	151
Sales	308	Stakeholder Management	186	Adobe Illustrator	146
Content Development	296	Technical Support	184	Psychology	136
Adobe Photoshop	286	Salesforce	179	Public Speaking	136

Source: Burning Glass

Table 10. Certifications for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)

Note: 80% 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
Driver's License	314	Basic Life Saving (BLS)	16
Licensed Vocational Nurse (LVN)	75	Microsoft Certified Trainer (MCT)	15

First Aid CPR AED	74	Medical Examiner's License	14
Epic Certification	67	Lean Six Sigma Certification	14
Project Management Certification	59	Six Sigma Yellow Belt	13
Security Clearance	56	Certified Teacher	13
Registered Nurse	39	Adult Learning Certificate	12
Project Management Professional (PMP)	28	Professional in Human Resources	11
Registered Behavior Technician	26	Licensed Practical Nurse (LPN)	10
Hearing Aid Dealers	20	Special Education Certification	9
Board Certified Behavior Analyst (BCBA)	18	ServSafe	9
IT Infrastructure Library (ITIL) Certification	16	Psychologist License	9

Source: Burning Glass

Table 11. Education Requirements for Online and Blended Instruction Occupations in Bay Region

Note: 36% 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	444	17%
Associate Degree	92	4%
Bachelor's Degree or Higher	2,004	79%

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 CCCC 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:

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

Foothill College

Approved Course Outlines

For Faculty and Staff use only

Business and Social Sciences

LINC 87 SEMINAR IN TEACHING WITH EDUCATIONAL TECHNOLOGY

Summer 2018

5 hours lecture.

5 Units

Total Contact Hours: 60 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 180 (Total of All Lecture, Lab hours and Out of Class X 12)

Lecture Hours: 5 **Lab Hours:** **Weekly Out of Class Hours:** 10

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading:

Letter Grade with P/NP option

Degree Status: Applicable

Credit Status:

Credit

Degree or Certificate Requirement: Certificate of Achievement

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 12/6/12; 6/2/17

Division Dean Information -

Seat Count: 35

Load Factor:
.111

FOAP Code:
114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: no

Program Title:

Program TOPs Code:

Program Unique Code:

Content Review Date:

Former ID:

1. Description -

This seminar is for educators at all levels to develop student-centered learning projects and teaching practices; apply practical educational technology tools and resources; and participate in a collaborative professional development experience. Participants learn to use innovative technologies in their own curriculum content area and best practices for teaching and learning that positively impacts student achievement. Topics include 21st Century skills for teaching

and learning, visual literacy, media literacy, free online tools and resources for education, educational software training, open education resources, professional learning networks, integrating technology into the curriculum, integrating science and mathematics into any curriculum, assessment strategies for complex learning outcomes, and student-centered learning.

Advisory: Basic computer skills and knowledge of Macintosh or Windows operating systems; familiarity using web browsers, email, bookmarking, searching and downloading.

2. Course Objectives -

The student will be able to:

- A. Create a 21st Century classroom environment that models: a) critical thinking and problem solving, b) communication, c) collaboration, and d) creativity and innovation for all learners.
- B. Integrate innovative technology tools and processes into the learning environment that enhances student engagement and learning.
- C. Design effective and efficient technology-enriched, student-centered learning projects that improve learning outcomes.
- D. Develop assessment strategies for educational technology projects, teaching practices, and learning outcomes.
- E. Evaluate the efficacy of teaching with innovative technologies.

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with LCD projector, whiteboard, and a demonstration computer connected online. Computer laboratories equipped with online PCs and/or Macintosh computers, network server access, and printers.
- B. When taught via the Internet: Students must have current email accounts and/or ongoing access to computers with email software, web browsing capability, FTP program, and access to the World Wide Web.

4. Course Content (Body of knowledge) -

- A. Analyze 21st Century Teaching and Learning
 1. 21st Century models
 2. Critical thinking and problem solving
 3. Communication
 4. Collaboration
 5. Creativity and innovation
 6. Literacy development: Visual, Information Computing Technologies (ICT)
 7. Developing a peer professional learning network
- B. Integrate Technology into Teaching and Learning
 1. Innovative technology tools and resources online and computer-based
 2. Student engagement
 3. Teaching with technology
 4. Learning with technology
 5. Presenting with technology
 6. Choosing technology for effectiveness and efficiency
 7. Integrating technology into teaching and learning practices
 - a. Mathematics
 - b. Science
 - c. All other disciplines
 8. Integrating mathematics and science into all other disciplines using technology
- C. Create Student-Centered Learning Environments
 1. Classroom environments for student-centered learning
 2. Classroom management and practices for student-centered learning
 3. Collaboration strategies for students
- D. Design Student-Centered Learning Projects
 1. Technology-enriched student project (small, medium, large scale)
 2. Bloom's Taxonomy
 - a. Higher order thinking skills
 3. Planning model for projects
 - a. Analyze
 - b. Design
 - c. Develop
 - d. Implement
 - e. Evaluate
- E. Develop Assessment Strategies
 1. Rubrics for teaching and learning

2. Technology for assessment practices
 3. Quick techniques for assessing students' knowledge or ability
 4. Professional reflection
- F. Evaluate Teaching with Technology
1. Formative assessment strategies for teaching outcomes
 2. Formative assessment strategies for learning outcomes
 3. Analyzing the assessment results
 4. Reporting results

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

The student will demonstrate proficiency by:

- A. Developing three student-centered learning projects.
- B. Presenting one project to peers for formative assessment.
- C. Making constructive contributions to class discussions live and online.
- D. Participation in and actively building a professional learning network.

7. Representative Text(s) -

Spector, J. Michael. Foundations of Educational Technology: Integrative Approaches and Interdisciplinary Perspectives. London: Routledge, 2015.
Instructor-assigned notes and materials.

When course is taught online: Additional information, notes, handouts, syllabus, assignments, tests, and other relevant course material will be delivered by email and on the World Wide Web, and discussion may be handled with internet communication tools.

8. Disciplines -

Instructional Design/Technology

9. Method of Instruction -

During periods of instruction the student will be immersed in a student-centered learning environment, where they are:

- A. Listening actively to lecture presentations delivered in a student-centered learning style.
- B. Participating in facilitated discussions of readings or video presentations.
- C. Engaged in collaborative learning using computer-based tools or social media to record notes or reflections and sharing ideas with peers.
- D. Presenting in small group and whole class meetings.

10. Lab Content -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Examples of Required Reading and Writing and Outside of Class Assignments -

- A. Writing assignments include an instructional project plan or lesson, reflections, peer evaluations, and critical analysis of educational projects, technology tools, systems, or processes.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and participating in online peer collaboration activities.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Assignments will be submitted online as well.

13. Need/Justification -

This course is a restricted support course for the certificate of achievement in Instructional Design & Technology. Additionally, this Workforce Education course provides specialized training for strategic partners in college vocational programs, high schools, economic development initiatives, ROP, and capacity development projects for stakeholders in grades 7-12.

Ensure you're using the current version of this form by downloading a fresh copy from [the CCC webpage!](#)

FOOTHILL COLLEGE Stand-Alone Course Approval Request

If a Foothill credit course is **NOT** part of a State approved associate's degree, certificate of achievement or the Foothill College 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 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.

Stand Alone Course Approval Requests should be completed and forwarded to your Division Curriculum Committee to begin the approval process.

Course #: THTR 7

Course Title: INTRODUCTION TO DIRECTING

Credit Status:

- Credit course
 Noncredit course

Catalog Description:

The qualifications of the director; the choice of plays for production; auditions and methods of casting; preparation of the play script; building the rehearsal schedule; fundamentals of composition, movement, stage business and characterization, as applied to the directing of plays.

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

- The course will be **permanently** Stand Alone; there are no plans to add it to a State approved degree or certificate, nor to the Foothill GE pattern
- The course will be Stand Alone **temporarily**, and it will be incorporated into a new degree or certificate that is not yet State approved. In this case, identify the degree/certificate to which the course will be added:

- 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?)

NOTE: *If you have not submitted your program application to the State by the end of the current academic year, you must reapply for permanent Stand Alone approval.*

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 (select all that apply):

- Transfer
- Workforce/CTE
- Basic Skills

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 attached to this form or provided in the box below.

This course supports the college mission and service area by providing tangible opportunities for student success to develop foundational skills in an applied practice of the subject area, one with employment potential, and is transferable towards degree credit at most institutions.

Criteria C. Curriculum Standards (please initial as appropriate)

The outline of record for this course has been approved the Division Curriculum Committee and meets the requirements of Title 5

Faculty Requestor: TOM GOUGH **Date:** 05/20/20

Division Curriculum Representative: Hilary Gomes **Date:** 5/22/20

Date of Approval by Division Curriculum Committee: 5/22/20

College Curriculum Co-Chairperson: _____ **Date:** _____

Foothill College

Approved Course Outlines

For Faculty and Staff use only

Fine Arts and Communication

THTR 7 INTRODUCTION TO DIRECTING

Summer 2019

3 hours lecture, 3 hours laboratory.

4 Units

Total Contact Hours: 72 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 144 (Total of All Lecture, Lab hours and Out of Class X 12)

Lecture Hours: 3 Lab Hours: 3 Weekly Out of Class Hours: 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading:

Letter Grade with P/NP option

Degree Status: Applicable

Credit Status:

Credit

Degree or Certificate Requirement: AA Degree

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: UC/CSU

Validation: 12/9;12/10;11/12;6/17

Division Dean Information -

Seat Count: 30

Load Factor:
.115

FOAP Code:

114000143101100700

Instruction Office Information -

FSA Code: 1000 - DRAMA/THEATER ARTS

Distance Learning: no

Stand Alone Designation: no

Program Title: THEATRE ARTS

Program TOPs Code: 100700

Program Unique Code: 6047

Content Review Date:

Former ID:

1. Description -

The qualifications of the director; the choice of plays for production; auditions and methods of casting; preparation of the play script; building the rehearsal schedule; fundamentals of composition, movement, stage business and characterization, as applied to the directing of plays.

Advisory: THTR 20A or equivalent beginning-level acting course; not open to students with credit in DRAM 7 or 52.

2. Course Objectives -

The student will be able to:

- A. compare and contrast the role and responsibilities of the director to the other production members, including actors, designers and technicians, offering guidance and insight, and effective stage direction.
- B. survey and identify plays to direct that are appropriate for a given space and a multicultural world.
- C. develop and prepare a script for the direction of a production.
- D. organize an audition and assemble the cast of a play.
- E. demonstrate the direction of a play through recognizing and applying all necessary procedures and requirements from rehearsal to production.

3. Special Facilities and/or Equipment -

- A. Large flat rehearsal area such as the auditorium stage.
- B. Appropriate rehearsal furniture, including chairs and tables.

4. Course Content (Body of knowledge) -

- A. Identify and define the role of a director in a theatrical production.
 1. Study the historical development of the director, analyzing how the role has changed from past to present.
 2. Interpretation and vision.
 3. Responsibilities to the production team in the overall process.
 4. Communication tactics and effective, constructive collaboration.
 5. Individuality of style.
- B. Develop criteria for choosing a play for production.
 1. Analyze elements of technical complications.
 2. Casting demands and community standards.
 3. Emphasis in the importance of selecting scripts that represent a wide range of cultural, social, racial and sexual backgrounds.
- C. Study script analysis and develop the process of script preparation for rehearsal and performance.
 1. Structure, plot, theme interpretation.
 2. Character.
 3. Language and dialogue structure.
 4. Notation and building a prompt book.
- D. Understand efficient audition and casting processes.
 1. Casting of type vs. talent.
 2. Process of auditioning, callbacks and final casting.
 3. Awareness of non-traditional casting (multi-ethnic, cross-age, etc.).
- E. Direct scenes with a focus on the communication of script elements.
 1. Communicate cohesive directorial concept and how it translates into production.
 2. Stage composition.
 3. Stage movement and business.
 4. Unity and style.
 5. Characterization.
 6. Develop and use rehearsal schedules.
 7. Rehearse from a prompt book.
 8. Acquire production experience.

5. Repeatability - Moved to header area.

6. Methods of Evaluation -

- A. Directing projects will be observed and graded.
- B. Auditions, casting, blocking, laboratory rehearsals, performances will be observed and graded.
- C. Lighting, settings, costumes, sound and other technical aspects will be observed and graded.
- D. A midterm and final examination will also be given.

7. Representative Text(s) -

Vaughan, Stuart. The Art and Craft of Directing Plays. New York: Vaughan Press, 2015.
Hodge, Francis, and Michael McClain. Play Directing: Analysis, Communication and Style. 7th ed. Boston: Allyn and Bacon, 2009.

Although one or more of these texts are older than the suggested "5 years or newer" standard, they remain seminal texts in this area of study.

8. Disciplines -

Theater Arts

9. Method of Instruction -

- A. Lecture
- B. Discussion
- C. Cooperative learning exercises
- D. Oral presentations
- E. Laboratory
- F. Demonstration
- G. Field trips

10. Lab Content -

- A. Field research through attending live performance.
- B. Development and rehearsal of student performance presentation projects.

11. Honors Description - No longer used. Integrated into main description section.

12. Examples of Required Reading and Writing and Outside of Class Assignments -

- A. Noted director research oral presentations with supporting written analysis.
- B. Reading quizzes and discussion presentations.
- C. Post performance analysis and summation.
- D. Live performance critique.

13. Need/Justification -

This course is a restricted support course for the AA degree in Theatre Arts.

FOOTHILL COLLEGE
Addendum to the Course Outline of Record
Course Approval Application for Online/Distance Learning Delivery

Course #: _____ Course Title: _____

The above noted course is:

_____ **Currently active, this is a new Distance Learning Application.**

_____ **Currently active, changing the methods of delivery.**

_____ **New course in Submissions.**

_____ Online ONLY

_____ Hybrid ONLY

_____ Both Online and Hybrid

I/We have read the full text of this document (pages 1–3) and have thoughtfully considered the educational value of offering the following course as a distance education course. I/We agree that this course will consistently utilize the following selected method(s) from the list of “Regular, Timely, and Effective Methods of Student/Faculty Contact” as recommended by the Foothill College Academic Senate:

Selected Methods*:

List of Senate Recommended Methods of Regular, Timely, & Effective Student/Faculty Contact (in no particular order)

- Private Messages within the Course Management System
- Personal e-mail outside of the Course Management System
- Telephone Contact
- Weekly Announcements in the Course Management System
- Chat Room within the Course Management System
- Timely feedback and return of student work (tasks, tests, surveys, and discussions) in Course Management System by methods clarified in the syllabus.
- Discussion Forums with appropriate facilitation and/or substantive instructor participationⁱ
- E-Portfolios/Blogs/Wiki for sharing student works in progress; provide feedback from fellow students and faculty in a collaborative manner, and to demonstrate mastery, comprehension, application, and synthesis of a given set of conceptsⁱⁱ
- Group or individual meetings^{iv}
- Orientation and review sessions^{iv}
- Supplemental seminar or study sessions^{iv}
- Library workshops^{iv}
- Field trips^{iv}
- Other (please describe):

**Note: if your method(s) are not already on the list of recommended methods, please also include a description of how the method(s) will be a mechanism of “Regular, Timely and Effective Methods of Student/Faculty Contact”*

Faculty Submitting Application: _____ Date: _____

Division Curr. Comm. Approval: _____ Date: _____

For Office Use Only:

Submitted to Instruction Office: _____

Entered in C3MS: _____

Entered in Banner: _____

Best Practices for Online/Distance Education Courses

In accordance with Title 5, discussions in the Faculty Academic Senate and the College Curriculum Committee, a survey of faculty, online discussions, and a review of the pertinent literature, the Foothill College Academic Senate has formulated the following best practices and guidelines for “Regular, Timely and Effective Student/Faculty Contact” in online/distance education courses:

Best Practices

- 1. Communication:** clear and comprehensive communication regarding online course policies is critical to student success and faculty effectiveness. ⁱⁱⁱ Accordingly, it’s imperative that the following are addressed explicitly in the course syllabus and/or introductory email/announcement.
These communication guidelines are the same for all teachers and are in accordance with J1 Evaluative Material (Section II.A.12) “*Provides students with a written explanation of the evaluation process, expectations and requirements, assignments, course content, relevant dates, and other information.*” and is the same requirement for all teachers. Communication must include but is not limited to:
 - **Relevant Dates, Course Schedule, and Deadlines.**
 - **Faculty Expectations and Requirements** for minimum student participation (quantity and quality) for all sections of the course.
 - **Evaluation Process** including the timeframe for faculty feedback on student works such as discussion posts, and assessments (quizzes, exams, assignments, projects, surveys) so that the student can gauge their progress. Faculty must provide substantive feedback within a reasonable time as outlined in the course syllabus.
 - **Faculty/Student Communication Process** including the timeframe for faculty response to student communications. A response time of 24-48 hours, Monday through Friday is desirable but may vary based on course requirements and extenuating circumstances. It must be clear whether or not the instructor will be available after hours or on weekends and holidays.
 - **Methods of regular, timely, and effective student/faculty contact** that will be employed in the course (as described below)
 - **A Contingency Plan** for when the instructor is unavoidably unavailable for a specific period. Faculty must provide the students with a plan for instances when they may not be available due to personal or technical emergencies. Announcing (in advance if possible) any absence of greater than two working days and providing clear options for students to continue their progress in the class until the instructor returns is essential.
- 2. Effective Student/Faculty Contact:** it has been clearly shown that lack of regular, timely, and effective contact between students and instructors is a major factor in student attrition and poor performance in online courses. Depending on class design and Instructor preference, the faculty shall employ one or more of the following methods of regular, timely, and effective student/faculty contact in all online, hybrid, and web-enhanced courses: (it is recognized that instructors of web-enhanced and Hybrid courses have more in-person contact with their students and would as such rely less on these methods.)
These effective contact guidelines are the same requirements for all teachers and are in accordance with J1.II.A.7: “*Maintains student-faculty relationship conducive to learning,*” as well as the following student evaluation criteria: J2.A. #11 *Motivated student interest and intellectual effort*, #12. *Encouraged students to ask questions and participate in class discussions*, #13. *Encouraged individual thinking and differences of opinion*, and #14. *Used full class time effectively.*”

List of Senate Recommended Methods of Regular, Timely, & Effective Student/Faculty Contact (in no particular order)

- Private Messages within the Course Management System
- Personal e-mail outside of the Course Management System
- Telephone Contact
- Weekly Announcements in the Course Management System
- Chat Room within the Course Management System
- Timely feedback and return of student work (tasks, tests, surveys, and discussions) in Course Management System by methods clarified in the syllabus.
- Discussion Forums with appropriate facilitation and/or substantive instructor participation^{iv}
- E-Portfolios/Blogs/Wiki for sharing student works in progress; provide feedback from fellow students and faculty in a collaborative manner, and to demonstrate mastery, comprehension, application, and synthesis of a given set of concepts.^v
- Group or individual meetings^{iv}
- Orientation and review sessions^{iv}
- Supplemental seminar or study sessions^{iv}
- Field trips^{iv}
- Library workshops^{iv}

If, for whatever reason, a faculty member is unable to comply with the regular, timely, and effective contact guidelines set forth in the Addendum to the Course Outline of Record and the course syllabus, students must be informed via e-mail or high priority announcement as to when they can expect regular, timely, and effective contact to resume.

References:

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- ⁱ Roblyer, M.D. & Leticia Ekhami (2000, Spring), How Interactive are YOUR Distance Courses? A Rubric for Assessing Interaction in Distance Learning, Online Journal of Distance Learning Administration, Volume III, Number II, Retrieved from the World Wide Web April 4, 2001
<http://www.westga.edu/~distance/roblyer32.html>
- ⁱⁱ Slater, Timothy F. "Classroom Assessment Technique Portfolios." CL-1: Field-tested Learning Assessment Guide (FLAG) for science, math, engineering, and technology instructors. 1998.
<http://www.flaguide.org/cat/portfolios/portfolios7.php>
- ^{iv} Title 5 §55204
- ⁱⁱⁱ Waterhouse, S. & Rogers, R. (2004), The Importance of Policies in E-Learning Instruction, EDUCAUSE Quarterly, Vol. 27, No. 3, pp. 28-39.
- ^{iv} Roblyer, M.D. & Leticia Ekhami (2000, Spring), How Interactive are YOUR Distance Courses? A Rubric for Assessing Interaction in Distance Learning, Online Journal of Distance Learning Administration, Volume III, Number II, Retrieved from the World Wide Web April 4, 2001 <http://www.westga.edu/~distance/roblyer32.html>
- ^v Slater, Timothy F. "Classroom Assessment Technique Portfolios." CL-1: Field-tested Learning Assessment Guide (FLAG) for science, math, engineering, and technology instructors. 1998.
<http://www.flaguide.org/cat/portfolios/portfolios7.php>
- ^{iv} Title 5 §55204

DISTANCE EDUCATION APPROVAL FORM

Course #:

Course Title:

Submitted by:

Date:

1. How will this course be offered?

Check those that apply	Format
<input type="checkbox"/>	The discipline faculty agree that this course will only be offered in a PARTIALLY ONLINE/HYBRID format, where students will have a required in-person component and an online component.
<input type="checkbox"/>	The discipline faculty agree that this course may be effectively delivered through a FULLY ONLINE format. Synchronous and asynchronous remote instruction is considered online instruction.
<input type="checkbox"/>	FULLY ONLINE IN STATE OF EMERGENCY ONLY - The discipline faculty agree that this course will ONLY be offered in the online format in the instance of a State of Emergency as declared by the Ohlone College Board of Trustees.

2. Regular and Effective Contact

Any portion of the course that is taught online requires regular substantive contact. This includes the online portion of hybrid/PO coursework.

Regular and effective/substantive interaction includes timely and documented feedback for student work, as well as methods of student engagement such as regular announcements, discussion boards with appropriate instructor feedback, email, live chat, web conferencing, blogs/wikis, etc

Instructor-to-Student Contact

What tools and strategies will all instructors that teach this course use to initiate interaction with all students?

How many times per week will the instructors that teach this course initiate interaction with all students? 1-2 3-4 5 or more

Student-to-Student Contact

Regular and effective/substantive interaction between students may include discussion boards, web conferencing, live chat rooms, email, blogs/wikis, student groups, student collaborations, study forums, etc.

What tools and strategies will all instructors that teach this course use to facilitate student-to-student interaction?

How many times per week will the instructors that teach this course initiate interaction with all students? 1-2 3-4 5 or more

3. Integrity of Student Work

What methods do all instructors that teach this course use to promote academic honesty and prevent cheating and plagiarism? Examples of plagiarism and cheating deterrents include plagiarism check software like TurnItIn, randomizing quiz and test questions, smaller assignments that allow instructors to identify uniqueness of student's voice, etc.

4. How will the Student Learning Outcomes/Objectives be met through an online format?

All course outcomes identified in the Course Outline of Record must be met in the distance learning environment. Identify any unique challenges related to outcomes in this course specific to the distance education environment. (Examples of potential challenges include educational materials, labs, models, presentations, requirements to present in front of a live audience, field trips, requirements to attend a live performance, or other.)

Please list any uniquely challenging SLO and how it will be achieved in the online format.

Student Learning Outcome or Course Objective	What potential challenge exists in the online format?	How will you meet that challenge?

- Beyond maintaining regular and effective contact and adhering to accessibility requirements, this course does not present any unique challenges to meeting all course outcomes (no explanation needed).

5. Accessibility

In accordance with [Title 5](#) and [AP4105](#), instruction provided as distance education is subject to the requirements that may be imposed by the Americans with Disabilities Act (42 U.S.C. §12100 et seq.) and section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794d).

Accessibility is built into the course using which of the following?

- Simple, logical, uncluttered course design (module structure)
- Use of Header and Paragraph styles on longer pages
- Font formatting, rather than color, for emphasis in text.
- Transcripts of audio clips
- Captions for video clips
- Alt tags on graphics
- Descriptive URL links
- Tables accessible to screen readers (tables should only be used for simple data and have row and column headers and tables should not be used for course layout).
- Directions for accessing support services available for students are clearly posted.
- Other, please specify:

6. Course Quality

As formerly stated, all DE courses are the “virtual equivalent” of the in-person sections of the course. Verify by clicking the box that the online section meets the same standard of course quality as the traditional face-to-face class in the following areas:

- Course objectives and content have not changed.
- Outside assignments and assessments meet the same standard of course quality.
- Method of instruction meets the same standard of course quality.
- Serves manageable number of students per section as determine by faculty in the department.
- Required texts meet the same standard of course quality.
- Specific expectations will be posted for students with respect to a minimum amount of time per week for student and homework assignments (1 unit = 3 hours of class and study time).
- Specific expectations will be posted regarding class policies and procedures, including logging in and completing work.
- Materials and images used in the course will reflect the cultural diversity of Ohlone College students.

7. Additional Resources

State if any additional college resources will be needed and/or additional costs will be incurred to implement Distance Education sections.

Distance Education Committee Comments:

Course Approved or Disapproved

Date forwarded to the Curriculum Committee:

Date of approval by the Curriculum Committee:

DRAFT