**College Curriculum Committee Meeting Agenda**
**Tuesday, May 14, 2024**
**2:00 p.m. – 3:30 p.m.**
**Administrative Conference Room 1901; virtual option via Zoom**

| Item | Time* | Action | Attachment(s) | Presenter(s) |
|---|---|---|---|---|
| 1. Minutes: April 30, 2024 | 2:00 | Action | #5/14/24-1 | Kaupp |
| 2. Report Out and Check-in | 2:02 | Discussion | | All |
| 3. Public Comment on Items Not on Agenda (CCC cannot discuss or take action) | 2:12 | Information | | |
| 4. Announcements<br>a. New Course Proposals<br>b. Building Trades Management BS Degree Title Change<br>c. CCCCO Approval of Semiconductor Processing CA!<br>d. Spring Plenary Update | 2:17 | Information | #5/14/24-2–22<br><br><br><br>#5/14/24-23 | CCC Team |
| 5. Recommendations for Revisions of Local General Education Requirements | 2:27 | 2nd Read/ Action | #5/14/24-24 | Kaupp |
| 6. New Certificate Application: Pre-STEM | 2:42 | 2nd Read/ Action | #5/14/24-25 | Kaupp |
| 7. GE Application: Area III: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1) | 2:47 | 2nd Read/ Action | #5/14/24-26 | Kaupp |
| 8. GE Application: Area III: Steamfitting and Pipefitting Technology Apprenticeship Program | | 2nd Read/ Action | #5/14/24-27 | Kaupp |
| 9. GE Application: Area IV: Steamfitting and Pipefitting Technology Apprenticeship Program | | 2nd Read/ Action | #5/14/24-28 | Kaupp |
| 10. New Degree Application: Public Health ADT | 2:52 | 1st Read | #5/14/24-29 | Kaupp |
| 11. New Certificate Application: Archaeological Field Work | 2:55 | 1st Read | #5/14/24-30 | Kaupp |
| 12. GE Application: Area V: Sheet Metal Apprenticeship Program | 3:00 | 1st Read | #5/14/24-31 | Kaupp |
| 13. GE Application: Area VII: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1) | | 1st Read | #5/14/24-32 | Kaupp |
| 14. GE Application: Area VII: Sheet Metal Apprenticeship Program | | 1st Read | #5/14/24-33 | Kaupp |
| 15. Noncredit/Credit for Prior Learning Workgroup | 3:07 | Discussion | | Hueg |
| 16. CCC Priorities for 2024-25 | 3:17 | Discussion | | Kaupp |
| 17. Good of the Order | 3:27 | | | Kaupp |
| 18. Adjournment | 3:30 | | | Kaupp |

**Times listed are approximate*

**Attachments:**

| | |
|---|---|
| #5/14/24-1 | Draft Minutes: April 30, 2024 |
| #5/14/24-2–22 | New Course Proposals: ANTH 15H, APEL 126A, APEL 128A, BUSI 30, C S 11A, C S 12A, CRWR 425A, ECON 25H, MUS 401, NCEN 407, NCEN 412A, NCEN 422, NCEN 427G, NCEN 438, NCEN 440, NCEN 449, NCEN 450C, NCEN 480, SPAN 51C, THTR 426, THTR 448F |
| #5/14/24-23 | ASCCC Spring 2024 Adopted Resolutions |
| #5/14/24-24 | Recommendations for Revisions of Local General Education Requirements |
| #5/14/24-25 | New Certificate Application: Pre-STEM |
| #5/14/24-26 | Foothill General Education Application for Area III—Natural Sciences: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1 - Pipe Trades Training Center students) |
| #5/14/24-27 | Foothill General Education Application for Area III—Natural Sciences: Steamfitting and Pipefitting Technology Apprenticeship Program |
| #5/14/24-28 | Foothill General Education Application for Area IV—Social & Behavioral Sciences: Steamfitting and Pipefitting Technology Apprenticeship Program |
| #5/14/24-29 | New Degree Application: Public Health ADT |
| #5/14/24-30 | New Certificate Application: Archaeological Field Work |
| #5/14/24-31 | Foothill General Education Application for Area V—Communication & Analytical Thinking: Sheet Metal Apprenticeship Program |
| #5/14/24-32 | Foothill General Education Application for Area VII—Lifelong Learning: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1 - Pipe Trades Training Center students) |
| #5/14/24-33 | Foothill General Education Application for Area VII—Lifelong Learning: Sheet Metal Apprenticeship Program |

**2023-2024 Curriculum Committee Meetings:**

| Fall 2023 Quarter | Winter 2024 Quarter | Spring 2024 Quarter |
|---|---|---|
| ~~10/3/23~~ | ~~1/16/24~~ | ~~4/16/24~~ |
| ~~10/17/23~~ | ~~1/30/24~~ | ~~4/30/24~~ |
| ~~10/31/23~~ | ~~2/13/24~~ | 5/14/24 |
| ~~11/14/23~~ | ~~2/27/24~~ | 5/28/24 |
| ~~11/28/23~~ | ~~3/12/24~~ | 6/11/24 |

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

**2023-2024 Curriculum Deadlines:**

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|---|---|
| ~~*12/1/23*~~ | Deadline to submit courses to CSU for CSU GE approval (Articulation Office). |
| ~~*12/1/23*~~ | Deadline to submit courses to UC/CSU for IGETC approval (Articulation Office). |
| ~~*4/19/24*~~ | Deadline to submit curriculum sheet updates for 2024-25 catalog (Faculty/Divisions). |
| *6/1/24* | Deadline to submit new/revised courses to UCOP for UC transferability (Articulation Office). |
| *6/21/24* | Deadline to submit course updates and local GE applications for 2025-26 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 (LRC), Chris Allen (Dean, APPR), Ben Armerding (LA), Jeff Bissell (KA), Sam Bliss (De Anza AVP Instruction), Cynthia Brannvall (FAC), Rachelle Campbell (HSH), Zach Cembellin (Dean, STEM), Anthony Cervantes (Dean, Enrollment Services), Sam Connell (BSS), Stephanie Crosby (Dean, SRC), Cathy Draper (HSH), Angie Dupree (BSS), Kelly Edwards (KA), Jordan Fong (FAC), Valerie Fong (Dean, LA), Evan Gilstrap (Articulation Officer), Stacy Gleixner (VP Instruction), Kurt Hueg (Administrator Co-Chair), Maritza Jackson Sandoval (CNSL), Ben Kaupp (Faculty Co-Chair), Andy Lee (CNSL), Don Mac Neil (KA), Brian Murphy (APPR), Tim Myres (APPR), Teresa Ong (AVP Workforce), Sarah Parikh (STEM), Eric Reed (LRC), Richard Saroyan (SRC), Amy Sarver (LA), Paul Starer (APPR), Shae St. Onge-Cole (HSH), Kyle Taylor (STEM), Mary Vanatta (Curriculum Coordinator), Voltaire Villanueva (AS President), Catherina Wong (De Anza CCC Faculty Co-Chair), Erik Woodbury (De Anza AS President)

*Updated 4/16/24*

# COLLEGE CURRICULUM COMMITTEE

Committee Members – 2023-24

Meeting Date: 5/14/24

Co-Chairs (2)

| | | | | |
|---|---|---|---|---|
| ✔* | Ben Kaupp | 408-874-6380 | Vice President, Academic Senate (tiebreaker vote only) | kauppben@fhda.edu |
| ✔* | Kurt Hueg | 7179 | Associate Vice President of Instruction | huegkurt@fhda.edu |

Voting Membership (1 vote per division)

| | | | | |
|---|---|---|---|---|
| | Micaela Agyare | 7086 | LRC | agyaremicaela@fhda.edu |
| | Ben Armerding | 7453 | LA | armerdingbenjamin@fhda.edu |
| ✔ | Jeff Bissell | 7663 | KA | bisselljeff@fhda.edu |
| ✔* | Cynthia Brannvall | 7477 | FAC | brannvallcynthia@fhda.edu |
| ✔* | Zach Cembellin | 7383 | Dean—STEM | cembellinzachary@fhda.edu |
| ✔* | Sam Connell | 7197 | BSS | connellsamuel@fhda.edu |
| ✔* | Cathy Draper | 7249 | HSH | drapercatherine@fhda.edu |
| ✔* | Angie Dupree | | BSS | dupreeangelica@fhda.edu |
| ✔ | Kelly Edwards | 7327 | KA | edwardskelly@fhda.edu |
| ✔* | Jordan Fong | 7272 | FAC | fongjordan@fhda.edu |
| ✔* | Valerie Fong | 7135 | Dean—LA | fongvalerie@fhda.edu |
| ✔* | Evan Gilstrap | 7675 | Articulation | gilstrapevan@fhda.edu |
| ✔* | Maritza Jackson Sandoval | 7409 | CNSL | jacksonsandovalmaritza@fhda.edu |
| | Andy Lee | 7783 | CNSL | leeandrew@fhda.edu |
| | Brian Murphy | | APPR | brian@pttc.edu |
| ✔* | Tim Myres | | APPR | timm@smw104jatc.org |
| ✔* | Sarah Parikh | 7748 | STEM | parikhsarah@fhda.edu |
| ✔* | Eric Reed | 7091 | LRC | reederic@fhda.edu |
| ✔ | Richard Saroyan | 7232 | SRC | saroyanrichard@fhda.edu |
| ✔* | Amy Sarver | 7459 | LA | sarveramy@fhda.edu |
| | Shae St. Onge-Cole | 7818 | HSH | stonge-coleshaelyn@fhda.edu |
| ✔* | Kyle Taylor | 7126 | STEM | taylorkyle@fhda.edu |

Non-Voting Membership (4)

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|---|---|---|---|---|
| | | | ASFC Rep. | |
| ✔* | Mary Vanatta | 7439 | Curr. Coordinator | vanattamary@fhda.edu |
| | | | Evaluations | |
| | | | SLO Coordinator | |

Visitors

Chris Allen*, Gina Firenzi, Matthew Hajny, Geoff Mathews*, Ikuko Rakow, Andrew Stafford, Paul Starer

** Indicates in-person attendance*

# College Curriculum Committee
# Meeting Minutes
# Tuesday, April 30, 2024
# 2:00 p.m. – 3:00 p.m.
# Administrative Conference Room 1901; virtual option via Zoom

| Item | Discussion |
|---|---|
| 1. Minutes: April 16, 2024 | **Approved by consensus.** |
| 2. Report Out and Check-in | **Speaker: All**<br>Motion to approve addition of agenda item: First Read of Pre-STEM Certificate of Achievement application **M/S** (Parikh, Kaupp). **Approved.** Time permitting, item will be added following item 12.<br><br>Apprenticeship: No updates to report.<br><br>BSS: Connell mentioned new course proposals on today's agenda.<br><br>Counseling: No updates to report.<br><br>Fine Arts & Comm: Fong shared continuing to work on new noncredit courses.<br><br>HSH: No updates to report.<br><br>Kinesiology & Athletics: No updates to report.<br><br>LRC: No updates to report.<br><br>SRC: Kaupp shared working on Title 5 updates and new courses.<br><br>STEM: Parikh shared division making good progress on addressing equity in the COR. Cembellin is officially the new STEM dean!<br><br>Language Arts: Sarver shared English and ESL depts. working on new noncredit courses, and Spanish dept. creating new course; working on updates to noncredit certificates.<br><br>Gilstrap shared working on updating AP chart and IB/CLEP policy, hoping to meet deadline for 2024-25 catalog. Mentioned recently received CSU GE & IGETC results and will share soon! Again urged reps to please ask colleagues to sign up for ASCCC discipline-specific listservs, especially those who will be affected by first phase of Common Course Numbering. Reminded folks that deadline for CORs to be submitted for UC transfer approval is June 1—CORs must be approved by the division CC in CourseLeaf.<br><br>Hueg mentioned discussion during recent Instruction Office dept. meeting re: whether it makes sense to create new subject code to use for all noncredit courses for older adults (vs. using separate subject codes); suggested CCC discuss topic. Will be attending upcoming noncredit conference and hopes to chat with other colleges about this, as some do use single code for all courses for older adults. Bissell asked why the state will not allow noncredit courses in Physical Education—Hueg responded, they don't want people to be able to repeat PE courses and, thus, avoid repeatability restrictions. Bissell asked if they're not concerned about people repeating other types of courses, such as art—Hueg responded, apparently not. Reminded the |

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| | group about recent unsuccessful attempt to relax repeatability restrictions; repeatability it is on people's minds at the state-wide level, but unlikely that restrictions will end anytime soon, given the state's budget situation. Also mentioned he's going to send email with link to a form for depts. to submit updates to Program Maps for 2024-25.<br><br>Kaupp read aloud announcement from De Anza re: process to share curriculum development w/ Foothill. Connell expressed support and suggested CCC respond in support of process, in the spirit of collegiality. |
| 3. Public Comment on Items Not on Agenda | Connell expressed further support for collegiality efforts between Foothill and De Anza. |
| 4. Announcements<br>a. New Course Proposals<br><br>b. Curriculum Institute Conference (July 10-13 in Pasadena—more info here) | **Speakers: CCC Team**<br>The following proposals were presented: ACTG 57; ART 4AH; ENGL 16H; LINC 86C, 87A; THTR 421A, 421B, 421C, 425, 425B, 425C, 427, 431, 440A, 440B, 442, 445A, 445B, 445C, 445D, 445E, 445F. Dupree provided additional info about ACTG 57 and LINC 86C & 87A.<br><br>Kaupp encouraged folks to attend. Brannvall asked if funding for attendance tied to division or curriculum—Kaupp responded, curriculum may have small amount of funding, which could be used if faculty want to attend and don't have division funding available. |
| 5. New Certificate Application: Spanish-Advanced | **Speaker: Ben Kaupp**<br>Second read of new Spanish-Advanced Certificate of Achievement. No comments.<br><br>Motion to approve **M/S** (Fong, Parikh). **Approved.** |
| 6. GE Application: Area VI: Steamfitting and Pipefitting Technology Apprenticeship Program | **Speaker: Ben Kaupp**<br>Second read of GE application, which would approve Foothill GE Area VI for students who complete the full major requirements for Steamfitting and Pipefitting Technology, not one individual course. No comments.<br><br>Motion to approve **M/S** (Draper, Fong). **Approved.** |
| 7. GE Application: Area III: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1) | **Speaker: Ben Kaupp**<br>First read of GE application, which would approve Foothill GE Area III for students who complete the full major requirements for Air Conditioning and Refrigeration Technology (Pathway #1), not one individual course. No comments.<br><br>Second read and possible action will occur at next meeting. |
| 8. GE Application: Area III: Steamfitting and Pipefitting Technology Apprenticeship Program | **Speaker: Ben Kaupp**<br>First read of GE application, which would approve Foothill GE Area III for students who complete the full major requirements for Steamfitting and Pipefitting Technology, not one individual course. No comments.<br><br>Second read and possible action will occur at next meeting. |
| 9. GE Application: Area IV: Steamfitting and Pipefitting Technology Apprenticeship Program | **Speaker: Ben Kaupp**<br>First read of GE application, which would approve Foothill GE Area IV for students who complete the full major requirements for Steamfitting and Pipefitting Technology, not one individual course. No comments.<br><br>Connell asked how many additional Apprenticeship GE apps being worked on—Myres provided details; Starer noted currently working on apps for Lifelong Learning area and thanked CCC for allowing division to use this unique process. Agyare asked how upcoming changes to local GE will affect how courses/programs apply for GE approval—Kaupp and Vanatta responded, this will need to be discussed once new |

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| | local GE pattern is figured out. Question about why CCC is still approving new local GE apps if changes are being made—Gilstrap responded, current pattern still active for upcoming 2024-25 year, and any student who starts in 2024-25 will have catalog rights to current GE pattern if they maintain continuous enrollment.<br><br>Second read and possible action will occur at next meeting. |
| 10. Program Maps—Updates for 2024-25 | **Speaker: Kurt Hueg**<br>As mentioned during report out, emailing link for faculty to use to submit updates to Maps for upcoming 2024-25 year. Noted that changes to GE will affect Maps for 2025-26, incl. Cal-GETC. |
| 11. Updating Foothill GE | **Speaker: Ben Kaupp**<br>Motion to modify item 11 from Discussion to First Read. **M/S** (Kaupp, Parikh). **Approved.**<br><br>First read of Recommendations for Revisions of Local General Education Requirements document (not incl. in attachments), which "formally recommend[s] specific changes to [Foothill GE]." Kaupp shared he's recently received feedback from folks with strong concerns about removing Lifelong Learning, and acknowledged document somewhat reflects these concerns, as well as his own prejudices. Document recommends:<br><br>1. Including Lifelong Learning GE area (requiring at least one course).<br>2. Removal of lab requirement from Natural Sciences area.<br>3. Moving math courses currently in Area V to new Math & Quantitative Reasoning area, and likewise moving other Area V courses to new GE areas.<br><br>Parikh noted she updated Engineering AS degree curriculum sheet (to add MATH 1A as a Core Course) while under the impression that Lifelong Learning will be removed from local GE, and is now concerned students won't be able to complete degree in two years. Also mentioned feedback from students who say they aren't getting their AS degree because Lifelong Learning units are "holding them back." Discussion occurred re: how Lifelong Learning units might affect these students. Gilstrap commented in support of keeping Lifelong Learning and is glad to know De Anza plans to keep it. Believes current structure of Lifelong Learning is not good and needs restructured, (e.g., requiring one course at any unit value). Kaupp noted document states completion of one course, which could mean just one unit depending on which courses are listed. Lee mentioned happy to work w/ Parikh and her students on degree completion, noting students usually able to complete GE even if they don't think they have the right courses. Additional discussion occurred re: ways to better allow students to fulfill Lifelong Learning. Lee also noted that if a student has completed a bachelor degree, GE requirements are waived.<br><br>Parikh surprised that document recommends incl. Lifelong Learning; reiterated she'd been under impression that it wasn't going to be included and had mentioned this to constituents. Kaupp noted this is a first read and document should be shared w/ constituents to get their thoughts before second read. Draper and Jackson Sandoval thanked Kaupp for well-written document. Lee agreed and predicts counselors will ask if intent is for Lifelong Learning to be completion of one course at any unit value—Kaupp responded, that's the intent, but ready to address questions and concerns. Parikh believes ENGR 10 course could be good fit for Communication & Analytical Thinking and Lifelong Learning areas, which could help Engineering students complete GE. |

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| | Vanatta noted that a course may apply for multiple GE areas, and we already have many approved for two, and even one approved for three.<br><br>Dupree shared BSS reps recently polled constituents, and majority support keeping Lifelong Learning. Agrees with Lee that specificity re: requirement would be helpful. Connell noted removing lab requirement will affect ANTH courses, which have separate labs; also wonders why De Anza wants to keep lab requirement—Kaupp responded, to align with Cal-GETC. Gilstrap commented on lab requirement, and strongly suggested Foothill align new local GE pattern w/ De Anza, as it will be a big benefit for students, many of whom take courses at both colleges. Kaupp hasn't actually seen De Anza's recommendations yet, which they're discussing this afternoon, so this might not yet be set in stone.<br><br>Second read and possible action will occur at next meeting. |
| 12. Updating Guided Pathways CAPs | **Speaker: Kurt Hueg & Ben Kaupp**<br>Guided Pathways team has created new Career and Academic Pathway (CAP) called Explorer, which includes the two General Studies degrees. Resolution passed by CCC back in 2022 has been updated to list this new CAP. Connell expressed support for creation of this CAP. |
| 13. New Certificate Application: Pre-STEM | **Speaker: Ben Kaupp**<br>First read of new Pre-STEM Certificate of Achievement (not incl. in attachments; Vanatta will distribute w/ communiqué). Hueg commented on Program Learning Outcome re: students starting calculus, noting this does not align with AB 1705. Parikh responded, cert. will be part of the Semiconductor pathway and is meant to prepare students for the AS degree, which begins with MATH 1A. Cembellin added that starting fall 2025 we can no longer offer MATH 48A/B/C, which are listed as Core Courses—Parikh responded, once new MATH 47 course is approved will be added as Core Course math option, but in the meantime MATH 48A/B/C are listed, as they bridge gap between MATH 40A and 1A.<br><br>Gilstrap asked what the plan will be if, within the next two years, the college cannot show that students who take MATH 47 are successful in MATH 1A (re: AB 1705)—Parikh responded, MATH 47 will be listed on cert. as alternative to MATH 48A/B/C series. Cembellin mentioned there will be time period to validate data re: effectiveness of MATH 47, and if it is not validated, cert. will need to be updated to require MATH 1A, as that will be the state's requirement. Parikh concerned, because the reason for this cert. is to prepare students for the AS degree, which begins with MATH 1A. Argued that, for now, cert. is permissible with MATH 48A/B/C and encouraged folks to bring to their constituents for discussion.<br><br>Second read and possible action will occur at next meeting. |
| 14. Good of the Order | Kaupp adjourned the meeting early, to allow participants to attend the virtual District Budget Town Hall meeting. |
| 15. Adjournment | **3:00 PM** |

**Attendees:** Micaela Agyare* (LRC), Jeff Bissell (KA), Cynthia Brannvall* (FAC), Zach Cembellin* (Dean, STEM), Sam Connell* (BSS), Cathy Draper* (HSH), Angie Dupree* (BSS), Kelly Edwards (KA), Jordan Fong* (FAC), Evan Gilstrap* (Articulation Officer), Kurt Hueg* (Administrator Co-Chair), Maritza Jackson Sandoval* (CNSL), Ben Kaupp* (Faculty Co-Chair), Andy Lee* (CNSL), Tim Myres* (APPR), Sarah Parikh* (STEM), Richard Saroyan (SRC), Amy Sarver* (LA), Paul Starer (APPR), Kyle Taylor* (STEM), Mary Vanatta* (Curriculum Coordinator)
** Indicates in-person attendance*

**Minutes Recorded by:** M. Vanatta

# Course Change Request

## New Course Proposal

Date Submitted: 03/19/24 1:44 pm

Viewing: **ANTH F015H : HONORS MEDICAL ANTHROPOLOGY: METHODS & PRACTICE**

Last edit: 05/07/24 12:54 pm

Changes proposed by: Samuel Connell (11245040)

### In Workflow

1. **1SS Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 01/16/24 4:21 pm Samuel Connell (connellsamuel): Rollback to Initiator
2. 05/06/24 4:39 pm Samuel Connell (connellsamuel): Approved for 1SS Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Samuel Connell | | |
| Effective Term | Summer 2025 | | |
| Subject | Anthropology (ANTH) | Course Number | F015H |
| Department | Anthropology (ANTH) | | |
| Division | Business and Social Sciences (1SS) | | |
| Units | 4 | | |
| Hours | 4 hours lecture | | |
| Course Title | HONORS MEDICAL ANTHROPOLOGY: METHODS & PRACTICE | | |
| Short Title | | | |

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| Proposed Transferability | UC/CSU |
| Proposed Description and Requisites: | Introduction to medical anthropology, a subfield of the discipline of anthropology that seeks to understand and highlight how health, illness, and healing practices are culturally constructed and mediated. Students investigate global, cross-cultural, and local issues related to health, sickness, healing, epidemiology, aging, and dying from an applied and biocultural perspective, using anthropological theory and ethnographic fieldwork methods. Students are exposed to diverse cultural interpretations of health, sickness, and healing, the importance of viewing medical systems as social systems, understanding the socio-cultural context of medical decision making and therapy management, the principles of cultural competency, and the recurrent and ongoing problems of socioeconomic inequality and ecological disruptions that have an impact upon the differential distribution and treatment of human diseases. As an honors course, it is a full thematic seminar with advanced teaching methods focusing on major writing, reading, and research assignments, student class lectures/presentations, group discussions and interactions. |
| Proposed Discipline | Anthropology |

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

AA

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

A non-honors version of this course has been offered for several years (usually alternating even number years). Textbooks that have been used in the past are: "Introducing Medical Anthropology: A Discipline in Action", Third Edition, Merrill Singer, Hans A. Baer, Debbi Long, & Alex Pavlotski and "Medical Anthropology in Ecological Perspective", Sixth Edition, Ann McElroy and Patricia Townsend. Additional required readings are made available in the Reserve Library and are used for assigned reaction papers.

Reviewer Comments: **Samuel Connell (connellsamuel) (01/16/24 4:21 pm):** Rollback: See email string. Maybe put the expanded portions into the topics below.

# Course Change Request

## New Course Proposal

Date Submitted: 04/30/24 3:46 pm

Viewing: **APEL F126A : OVERCURRENT DEVICES, NFPA 70E: ELECTRICAL SAFETY, INTRO TO RELAYS & CONTROLS, PHOTOVOLTAIC SYSTEMS**

Last edit: 05/09/24 10:06 am

Changes proposed by: Kristina Vennarucci (11056116)

### In Workflow

1. **1ED Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 04/16/24 9:09 am Tim Myres (TimM): Approved for 1ED Curriculum Rep
2. 04/22/24 8:09 am Mary Vanatta (vanattamary): Rollback to Initiator
3. 05/09/24 6:09 am Tim Myres (TimM): Approved for 1ED Curriculum Rep

### Course Proposal Form

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|---|---|---|---|
| Faculty Author | Kristina Vennarucci | | |
| Effective Term | Summer 2025 | | |
| Subject | Apprenticeship: Electrician (APEL) | Course Number | F126A |
| Department | Apprenticeship (A P) | | |
| Division | Apprenticeship (1ED) | | |
| Units | 7.5 | | |
| Hours | 120 hours total: 80 hours lecture, 40 hours lab | | |
| Course Title | OVERCURRENT DEVICES, NFPA 70E: ELECTRICAL SAFETY, INTRO TO RELAYS & CONTROLS, PHOTOVOLTAIC SYSTEMS | | |
| Short Title | | | |

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| Proposed Transferability | None |
| Proposed Description and Requisites: | This course introduces third-year electrical apprentices to the function, operation, installation, and code requirements for overcurrent protection devices such as breakers and fuses, the application of NFPA 70E Electrical Safety standards, the function and wiring of relays and control circuits, and the function and NEC requirements for photovoltaic systems. |
| Proposed Discipline | Electricity |

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

Certificate of Achievement
AS Degree

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

None

Reviewer Comments: **Mary Vanatta (vanattamary) (04/22/24 8:09 am):** Rollback: Rolling back to faculty for edits to hours, units, and description.

Key: 8975

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/02/24 3:59 pm

Viewing: **APEL F128A : NEC REVIEW, ELECTRICAL VEHICLE POWER TRANSFER SYSTEMS, ADVANCED LIGHTING CONTROLS**

Last edit: 05/09/24 10:08 am

Changes proposed by: Kristina Vennarucci (11056116)

### In Workflow

1. 1ED Curriculum Rep
2. Curriculum Coordinator
3. Activation

### Approval Path

1. 04/16/24 9:10 am Tim Myres (TimM): Approved for 1ED Curriculum Rep
2. 04/22/24 8:09 am Mary Vanatta (vanattamary): Rollback to Initiator
3. 05/09/24 6:09 am Tim Myres (TimM): Approved for 1ED Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Kristina Vennarucci | | |
| Effective Term | Summer 2025 | | |
| Subject | Apprenticeship: Electrician (APEL) | Course Number | F128A |
| Department | Apprenticeship (A P) | | |
| Division | Apprenticeship (1ED) | | |
| Units | 6 | | |
| Hours | 96 hours total: 60 hours lecture, 36 hours lab | | |
| Course Title | NEC REVIEW, ELECTRICAL VEHICLE POWER TRANSFER SYSTEMS, ADVANCED LIGHTING CONTROLS | | |
| Short Title | | | |

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| Proposed Transferability | None |
| Proposed Description and Requisites: | Students will apply National Electric Code (NEC) calculations related to electrical installations and practice NEC navigation skills. Students are trained on electrical vehicle transfer systems' function, installation, and code requirements. They will learn lighting control system fundamentals, install and troubleshoot advanced lighting control systems, and learn Title 24 energy savings code requirements related to lighting. |
| Proposed Discipline | Electricity |

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

Certificate of Achievement
AS Degree

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

We are currently teaching this course under APEL F128. I would like to create a new course to more accurately represent what is being taught at the SFJATC specifically.

Reviewer Comments: **Mary Vanatta (vanattamary) (04/22/24 8:09 am):** Rollback: Rolling back to faculty for edits to hours, units, and description, and for new edit to title.

Key: 8976

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 04/25/24 8:29 pm

## Viewing: BUSI F030. : EMERGING TECHNOLOGIES & BUSINESS

Last edit: 05/07/24 8:39 am

Changes proposed by: Laurence Lew (10949943)

### In Workflow

1. 1SS Curriculum Rep
2. Curriculum Coordinator
3. Activation

### Approval Path

1. 05/06/24 4:41 pm Samuel Connell (connellsamuel): Approved for 1SS Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Laurence Lew | | |
| Effective Term | Summer 2025 | | |
| Subject | Business (BUSI) | Course Number | F030. |
| Department | Business (BUSI) | | |
| Division | Business and Social Sciences (1SS) | | |
| Units | 4 | | |
| Hours | 4 Hours Lecture | | |
| Course Title | EMERGING TECHNOLOGIES & BUSINESS | | |
| Short Title | | | |

**Proposed Transferability**

UC/CSU

**Proposed Description and Requisites:**

BUSI 30, "Emerging Technologies & Business," offers a comprehensive exploration of how emerging technologies such as generative AI, a hallmark of the 2020s, and other pivotal innovations influence business and society. The course structure is designed to (1) introduce students to the essentials of each technology, explaining what it is and how it operates in non-technical terms; (2) discuss the significance of these technologies to society ("the so what" factor), emphasizing their potential for transformative impacts; and (3) analyze how these technologies affect business strategies, concepts, and functions.

This course aims to equip students with a strategic framework for understanding and evaluating the integration of new technologies in business, fostering a deep appreciation for both the opportunities and challenges they present. With a curriculum that adapts to include the latest technological advancements, students will continually engage with the most cutting-edge topics, ensuring their learning remains relevant and impactful. This dynamic approach prepares students not just to adapt to the changing technological landscape, but to actively shape it.

**Proposed Discipline**

Business

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

Business AST, ADT

**Are there any other departments that may be impacted from the addition of this course?**

No

**Comments & Other Relevant Information for Discussion:**

N/A

**Reviewer Comments**

Key: 9024

# Course Change Request

## New Course Proposal

Date Submitted: 04/28/24 5:05 pm

## Viewing: C S F011A : INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Last edit: 05/08/24 7:30 am

Changes proposed by: Eric Reed (20176435)

### In Workflow

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

### Approval Path

1. 05/07/24 2:20 pm Sarah Parikh (parikhsarah): Approved for 1PS Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Eric Reed | | |
| Effective Term | Summer 2025 | | |
| Subject | Computer Science (C S) | Course Number | F011A |
| Department | Computer Science (C S) | | |
| Division | Science Technology Engineering and Mathematics (1PS) | | |
| Units | 4.5 | | |
| Hours | 4 hours lecture, 2 hours lab | | |
| Course Title | INTRODUCTION TO ARTIFICIAL INTELLIGENCE | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | UC/CSU |
| Proposed Description and Requisites: | An introduction to artificial intelligence (AI) and modern AI programming libraries. Basic discrete mathematics and statistics. Problem solving using uninformed, informed, local, and adversarial search algorithms. Knowledge representation, inference, and reasoning using propositional and first-order logic. Quantifying and reasoning about uncertainty with Bayesian networks and Markov decision processes. Ethical considerations of artificial intelligence.<br><br>Prerequisite: C S 3A. |
| Proposed Discipline | Computer Science |

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

Computer Science AS and Computer Science ADT for elective credit. Possible future certificate and/or B.S in Machine Learning and Artificial Intelligence.

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Description is from an approved course at Las Positas. Will adjust as curriculum is fully developed.

Reviewer Comments

Key: 9025

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 04/28/24 5:08 pm

## Viewing: C S F012A : INTRODUCTION TO MACHINE LEARNING

Last edit: 05/08/24 7:31 am

Changes proposed by: Eric Reed (20176435)

### In Workflow

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

### Approval Path

1. 05/07/24 2:21 pm Sarah Parikh (parikhsarah): Approved for 1PS Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Eric Reed | | |
| Effective Term | Summer 2025 | | |
| Subject | Computer Science (C S) | Course Number | F012A |
| Department | Computer Science (C S) | | |
| Division | Science Technology Engineering and Mathematics (1PS) | | |
| Units | 4.5 | | |
| Hours | 4 hours lecture, 2 hours lab | | |
| Course Title | INTRODUCTION TO MACHINE LEARNING | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | UC/CSU |
| Proposed Description and Requisites: | An introduction to machine learning (ML), with an emphasis on programming ML applications and using modern ML libraries. Basic discrete mathematics, statistics, and linear algebra. An overview of various supervised learning classifiers. Unsupervised learning via clustering. Reinforcement learning with model-based and model-free approaches. Safety and ethical concerns of machine learning.<br><br>Prerequisite: C S 3A. |
| Proposed Discipline | Computer Science |

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

AS and ADT as an elective. Possible future certificate and/or B.S. in Machine Learning and Artificial Intelligence.

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Description is from an approved course at Las Positas, and will be adjusted as the curriculum is fully developed.

Reviewer Comments

Key: 9026

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/06/24 7:13 pm

Viewing: **CRWR F425A : POETRY IN COMMUNITY FOR OLDER ADULTS**

Last edit: 05/08/24 2:10 pm

Changes proposed by: Ben Armerding (20109525)

### In Workflow

1. **1LA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 05/06/24 7:13 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Ben Armerding | | |
| Effective Term | Summer 2025 | | |
| Subject | Creative Writing (CRWR) | Course Number | F425A |
| Department | English (ENGL) | | |
| Division | Language Arts (1LA) | | |
| Units | 0 | | |
| Hours | 5 hours lecture | | |
| Course Title | POETRY IN COMMUNITY FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | Contemporary local poets guest lecture and engage in conversation with students about process, poetics, and approach to publishing. Emphasis on ways poetry has historically created community to honor and maintain cultural knowledge and to complicate single narratives. Special emphasis on integrated reading and writing for literary analysis, including reflective and creative stylistic emulation of poets studied. Focus on sharing new work through organizing community reading and publishing class anthology. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of CRWR 25A.

Reviewer Comments

Key: 9042

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 04/22/24 7:51 pm

## Viewing: ECON F025H : HONORS THE GLOBAL ECONOMY

Last edit: 05/07/24 9:25 am

Changes proposed by: Brian Evans (10259944)

### In Workflow

1. 1SS Curriculum Rep
2. Curriculum Coordinator
3. Activation

### Approval Path

1. 05/06/24 4:41 pm Samuel Connell (connellsamuel): Approved for 1SS Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Brian Evans | | |
| Effective Term | Summer 2025 | | |
| Subject | Economics (ECON) | Course Number | F025H |
| Department | Economics (ECON) | | |
| Division | Business and Social Sciences (1SS) | | |
| Units | 4 | | |
| Hours | 4 hours lecture | | |
| Course Title | HONORS THE GLOBAL ECONOMY | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | UC/CSU |
| Proposed Description and Requisites: | Analysis of increasing economic integration in the post-WW II era. The first half of the course focuses on the rationale for trade as well as critiques of free trade. The second half of the course focuses on exchange rates and capital flows. Heavy emphasis on current events to connect theory to reality. As an honors course, there will be substantial amount of dialogue, presentations, and critical thinking and writing.<br><br>Advisory: ECON 1A and 1B. |
| Proposed Discipline | Economics |

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

ECON AA; ECON AA-T; Global Studies

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

The course is currently taught as a (difficult) non-honors course. It has always been deserving of honors status - particularly with the ECON 1A and 1B advisories.

Reviewer Comments

Key: 9020

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/02/24 9:17 am

Viewing: **MUS F401. : INTRODUCTION TO MUSIC FOR OLDER ADULTS**

Last edit: 05/08/24 9:39 am

Changes proposed by: Robert Hartwell (10891462)

### In Workflow

1. **1FA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 04/24/24 12:30 pm Jordan Fong (fongjordan): Rollback to Initiator
2. 05/07/24 2:50 pm Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Robert Hartwell | | |
| Effective Term | Summer 2025 | | |
| Subject | Music (MUS) | Course Number | F401. |
| Department | Music (MUS) | | |
| Division | Fine Arts and Communication (1FA) | | |
| Units | 0 | | |
| Hours | 4 hours lecture, 1 hour lab | | |
| Course Title | INTRODUCTION TO MUSIC FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | A study of Western music and its place in civilization for older adults. Selected listening and readings from the masterpieces of music of Europe and the Western Hemisphere with an emphasis on methods of comprehension, listening techniques, the elements of music, primary musical forms, and a wide range of concert repertoire. Includes a study of how social, political, philosophical, and other artistic developments outside of music influenced compositional thinking and how these were integrated into the different periods of Western musical history. A variety of media consisting of slides, videos, recordings, and lecture will be used. Live performance used when possible. |
| Proposed Discipline | Music |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

This class is designed for older adults, and mirrors MUS 1.

Reviewer Comments: **Jordan Fong (fongjordan) (04/24/24 12:30 pm):** Rollback: Rolling back to you based on the conversations we all had in our division curriculum meeting.

Key: 9017

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/02/24 12:03 pm

Viewing: **NCEN F407. : NATIVE AMERICAN LITERATURE FOR OLDER ADULTS**

Last edit: 05/08/24 2:01 pm

Changes proposed by: Jordana Griffiths (11231808)

### In Workflow

1. 1LA Curriculum Rep
2. Curriculum Coordinator
3. Activation

### Approval Path

1. 05/06/24 7:13 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | |
|---|---|
| Faculty Author | Jordana Griffiths |
| Effective Term | Summer 2025 |
| Subject | Non-Credit: English (NCEN) |
| Course Number | F407. |
| Department | English (ENGL) |
| Division | Language Arts (1LA) |
| Units | 0 |
| Hours | 4 hours lecture |
| Course Title | NATIVE AMERICAN LITERATURE FOR OLDER ADULTS |
| Short Title | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | Introduction to the history, development, and diversity of Native American literatures, from pre-contact civilizations to present-day tribal cultures. Readings in traditional creation myths, songs, and stories from a variety of tribal cultures; nineteenth and twentieth century autobiographical narratives; and significant works of fiction, poetry, and non-fiction prose by contemporary Native American authors. Emphasis on the specific religious, linguistic, historical, political, and cultural context of Native American literary achievements. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 7.

Reviewer Comments

Key: 9033

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/04/24 8:27 am

Viewing: **NCEN F412A : ALL POWER TO THE PEOPLE: LITERATURE OF THE BLACK PANTHER PARTY FOR OLDER ADULTS**

Last edit: 05/08/24 2:02 pm

Changes proposed by: Ben Armerding (20109525)

### In Workflow

1. **1LA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 05/06/24 7:13 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | |
|---|---|
| Faculty Author | Benjamin Armerding |

| | | | |
|---|---|---|---|
| Effective Term | Summer 2025 | | |
| Subject | Non-Credit: English (NCEN) | Course Number | F412A |
| Department | English (ENGL) | | |
| Division | Language Arts (1LA) | | |
| Units | 0 | | |
| Hours | 4 hours lecture | | |
| Course Title | ALL POWER TO THE PEOPLE: LITERATURE OF THE BLACK PANTHER PARTY FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | A study, exploration, and close examination of literature related to, and inspired by the Black Panther Party for Self Defense, which was founded in Oakland, California, in 1966. Literature from the organization's inception, to present-day, including mission statement, biographies, novels, interviews, documentaries, government documents that include allegations of criminal violations, Constitutional references, and online dialogue. Subsequent resulting literature related to past and current social concerns such as race dialogue, BLM, 1st and 2nd Amendment rights, as well as film productions, and the BPP's continuing impact on popular culture. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

N/A

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 12A.

Reviewer Comments

Key: 9041

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/03/24 7:44 am

## Viewing: NCEN F422. : WOMEN WRITERS FOR OLDER ADULTS

Last edit: 05/08/24 2:03 pm

Changes proposed by: Stephanie Chan (10313648)

### In Workflow

1. 1LA Curriculum Rep
2. Curriculum Coordinator
3. Activation

### Approval Path

1. 05/06/24 7:13 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Stephanie Chan | | |
| Effective Term | Summer 2025 | | |
| Subject | Non-Credit: English (NCEN) | Course Number | F422. |
| Department | English (ENGL) | | |
| Division | Language Arts (1LA) | | |
| Units | 0 | | |
| Hours | 4 hours lecture | | |
| Course Title | WOMEN WRITERS FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | An examination of the works of multicultural women poets, novelists, dramatists, and essayists and their aesthetic and sociopolitical contributions to American literature and literatures written in English. Literary analysis of the intersections between gender and race, ethnicity, socioeconomic class, sexual orientation, and other constructs of identity and power. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 22.

Reviewer Comments

Key: 9034

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 04/29/24 9:18 am

## Viewing: NCEN F427G : DETECTIVE & MYSTERY FICTION FOR OLDER ADULTS

Last edit: 05/08/24 2:04 pm

Changes proposed by: Ben Armerding (20109525)

### In Workflow

1. 1LA Curriculum Rep
2. Curriculum Coordinator
3. Activation

### Approval Path

1. 05/06/24 7:14 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | |
|---|---|
| Faculty Author | Benjamin Armerding |

| | | | |
|---|---|---|---|
| Effective Term | Summer 2025 | | |
| Subject | Non-Credit: English (NCEN) | Course Number | F427G |
| Department | English (ENGL) | | |
| Division | Language Arts (1LA) | | |
| Units | 0 | | |
| Hours | 4 hours lecture | | |
| Course Title | DETECTIVE & MYSTERY FICTION FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and 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 and/or transnational texts contextualized historically and interculturally, tracing the correlations between detective and mystery fiction and other literary genres. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 27G.

Reviewer Comments

Key: 9027

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/03/24 7:28 pm

Viewing: **NCEN F438. : LITERATURE OF PROTEST FOR OLDER ADULTS**

Last edit: 05/08/24 2:05 pm

Changes proposed by: Kimberly Escamilla (20222638)

### In Workflow

1. **1LA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 05/06/24 7:14 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | |
|---|---|
| Faculty Author | Kimberly Escamilla |
| Effective Term | Summer 2025 |
| Subject | Non-Credit: English (NCEN) |
| Course Number | F438. |
| Department | English (ENGL) |
| Division | Language Arts (1LA) |
| Units | 0 |
| Hours | 4 hours lecture |
| Course Title | LITERATURE OF PROTEST FOR OLDER ADULTS |
| Short Title | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | An exploration of protest found in literature, music, and art in the United States. Texts, such as essays, short stories, poetry, drama, music, paintings, photography, and film, which helped to inform, sustain, and empower during difficult periods of human history, will be examined. Evaluation of how various artists construe the relationship between aesthetics and politics (that is, the social/political purposes of their art) is the central question we will seek to answer. By examining the ways in which each work confronts the status quo of an inhumane society, we will trace a tradition of protest and discover the means and methods of protest across an array of sources. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

N/A

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 38.

Reviewer Comments

Key: 9040

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/03/24 7:49 am

Viewing: **NCEN F440. : ASIAN AMERICAN LITERATURE FOR OLDER ADULTS**

Last edit: 05/08/24 2:06 pm

Changes proposed by: Stephanie Chan (10313648)

### In Workflow

1. **1LA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 05/06/24 7:14 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Stephanie Chan | | |
| Effective Term | Summer 2025 | | |
| Subject | Non-Credit: English (NCEN) | Course Number | F440. |
| Department | English (ENGL) | | |
| Division | Language Arts (1LA) | | |
| Units | 0 | | |
| Hours | 4 hours lecture | | |
| Course Title | ASIAN AMERICAN LITERATURE FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | Introduction to Asian American literature. Readings in 20th and 21st century works, with an emphasis on three relevant themes: problems of identity as they relate to class, gender, mixed heritages, and sexuality; politics and the history of Asian American activism and resistance; and diversity of cultures within the Asian American community. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 40.

Reviewer Comments

Key: 9035

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/02/24 11:56 am

Viewing: **NCEN F449. : CALIFORNIA LITERATURE: GOLDEN STATE CULTURES, GEOGRAPHIES & HISTORIES FOR OLDER ADULTS**

Last edit: 05/08/24 2:07 pm

Changes proposed by: Jordana Griffiths (11231808)

### In Workflow

1. 1LA Curriculum Rep
2. Curriculum Coordinator
3. Activation

### Approval Path

1. 05/06/24 7:14 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | |
|---|---|
| Faculty Author | Jordana Griffiths |

| | | | |
|---|---|---|---|
| Effective Term | Summer 2025 | | |
| Subject | Non-Credit: English (NCEN) | Course Number | F449. |
| Department | English (ENGL) | | |
| Division | Language Arts (1LA) | | |
| Units | 0 | | |
| Hours | 4 hours lecture | | |
| Course Title | CALIFORNIA LITERATURE: GOLDEN STATE CULTURES, GEOGRAPHIES & HISTORIES FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | Introduction to literature written by and about Californians, from pre-contact California Indian creation myths to contemporary poetry, fiction, drama, essays, and autobiographical narratives. Emphasis on important literary contributions by authors from a range of ethnic, socio-economic, and regional communities representing the cultural complexity of California. Emphasis on the influence of ecology, geography, political and social developments, ethnicity, gender, and class on the formation of distinctive yet interconnected California cultures, as represented in literary works. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 49.

Reviewer Comments

Key: 9032

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 04/30/24 11:37 am

Viewing: **NCEN F450C : TECHNICAL WRITING FOR OLDER ADULTS**

Last edit: 05/08/24 2:08 pm

Changes proposed by: Ben Armerding (20109525)

### In Workflow

1. **1LA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 05/06/24 7:14 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | |
|---|---|
| Faculty Author | Benjamin Armerding |

| | | | |
|---|---|---|---|
| Effective Term | Summer 2025 | | |
| Subject | Non-Credit: English (NCEN) | Course Number | F450C |
| Department | English (ENGL) | | |
| Division | Language Arts (1LA) | | |
| Units | 0 | | |
| Hours | 5 Lecture Hours | | |
| Course Title | TECHNICAL WRITING FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | An introductory course in technical and workplace communication. Focus on the strategic implementation of technical writing process, including assessment of context, purpose, and audience; evaluation and production of effective verbal and visual communication, including sentence clarity, document design, and use of visuals; and production of written texts for business and industry, including correspondence, technical definitions and descriptions, instructions, proposals and applications, reports, and websites. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 50C.

Reviewer Comments

Key: 9030

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 04/29/24 9:49 am

Viewing: **NCEN F480. : INTRODUCTION TO TRAVEL WRITING FOR OLDER ADULTS**

Last edit: 05/08/24 2:09 pm

Changes proposed by: Ben Armerding (20109525)

### In Workflow

1. **1LA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 05/06/24 7:14 pm Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | |
|---|---|
| Faculty Author | Benjamin Armerding |

| | | | |
|---|---|---|---|
| Effective Term | Summer 2025 | | |
| Subject | Non-Credit: English (NCEN) | Course Number | F480. |
| Department | English (ENGL) | | |
| Division | Language Arts (1LA) | | |
| Units | 0 | | |
| Hours | 4 hours lecture | | |
| Course Title | INTRODUCTION TO TRAVEL WRITING FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | An introductory course in travel writing. Focus on recognizing, evaluating, and producing the characteristics of travel writing in a range of travel writing genres. Practice in skills of observation, research, and reflection to understand aspects of place and draw meaning from travel experiences. Recognition and evaluation of publishing options. This course is intended for older adult learners. |
| Proposed Discipline | English |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of ENGL 80.

Reviewer Comments

Key: 9028

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 04/24/24 4:38 pm

Viewing: **SPAN F051C : SPANISH FOR HEALTH CARE WORKERS III**

Last edit: 04/29/24 1:42 pm

Changes proposed by: Julio Rivera-Montanez (11048508)

### In Workflow

1. **1LA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 04/26/24 6:44 am Ben Armerding (armerdingbenjami Approved for 1LA Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Julio C. Rivera-Montanez, Patricia Crespo-Martin | | |
| Effective Term | Summer 2025 | | |
| Subject | Spanish (SPAN) | Course Number | F051C |
| Department | Spanish (SPAN) | | |
| Division | Language Arts (1LA) | | |
| Units | 3 | | |
| Hours | 3 hours lecture | | |
| Course Title | SPANISH FOR HEALTH CARE WORKERS III | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | CSU Only |
| Proposed Description and Requisites: | Continuation of Spanish 51B. This course will enhance the student's understanding of the material studied in SPAN 51B and expands their knowledge of the Spanish grammar and vocabulary related to health care. This course also introduces a series of new scenarios in which the student will practice their medical vocabulary and grammar. |
| Proposed Discipline | Foreign Languages |

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

N/A

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

There seems to be demand for career-focused Spanish classes and that is the reason why we have created this course sequence.

Reviewer Comments

Key: 9021

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 03/19/24 9:01 pm

Viewing: **THTR F426. : INTRODUCTION TO FASHION HISTORY & COSTUME DESIGN NONCREDIT**

Last edit: 05/03/24 9:29 am

Changes proposed by: Leigh Henderson (20539301)

### In Workflow

1. **1FA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 03/19/24 2:41 pm Jordan Fong (fongjordan): Rollback to Initiator
2. 04/09/24 3:20 pm Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Leigh Henderson | | |
| Effective Term | Summer 2025 | | |
| Subject | Theatre Arts (THTR) | Course Number | F426. |
| Department | Theatre Arts (THTR) | | |
| Division | Fine Arts and Communication (1FA) | | |
| Units | 0 | | |
| Hours | 4 hours lecture | | |
| Course Title | INTRODUCTION TO FASHION HISTORY & COSTUME DESIGN NONCREDIT | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | A survey of Western historic fashion and costume for women and men from ancient times to the present, including the cultural and political events that shaped each era and its clothing. An introduction to the design elements: color, line, form texture and silhouette and a brief introduction to the use of graphic techniques in the presentation of fashion and costume designs. Analysis of the artistic styles of each era as they relate to understanding costume detail and stylization. Noncredit course. |
| Proposed Discipline | Theater Arts |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Mirrored noncredit version of THTR 26.

Reviewer Comments: **Jordan Fong (fongjordan) (03/19/24 2:41 pm):** Rollback: Hi, Leigh! Based on feedback from our FAC Div CC meeting, please add noncredit in title, add weekly hours not total hours, and add mirrors “x” class.

Key: 8953

Preview Bridge

# Course Change Request

## New Course Proposal

Date Submitted: 05/01/24 4:35 pm

## Viewing: THTR F448F : MUSICAL THEATRE REPERTOIRE FOR SINGERS II FOR OLDER ADULTS

Last edit: 05/09/24 2:01 pm

Changes proposed by: Tom Gough (10517673)

### In Workflow

1. **1FA Curriculum Rep**
2. **Curriculum Coordinator**
3. Activation

### Approval Path

1. 02/26/24 10:56 am
   Jordan Fong (fongjordan): Rollback to Initiator
2. 03/05/24 2:41 pm
   Jordan Fong (fongjordan): Rollback to Initiator
3. 05/07/24 2:43 pm
   Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

### Course Proposal Form

| | | | |
|---|---|---|---|
| Faculty Author | Tom Gough | | |
| Effective Term | Summer 2025 | | |
| Subject | Theatre Arts (THTR) | Course Number | F448F |
| Department | Theatre Arts (THTR) | | |
| Division | Fine Arts and Communication (1FA) | | |
| Units | 0 | | |
| Hours | 3 hours lecture, 3 hours lab | | |
| Course Title | MUSICAL THEATRE REPERTOIRE FOR SINGERS II FOR OLDER ADULTS | | |
| Short Title | | | |

| | |
|---|---|
| Proposed Transferability | None |
| Proposed Description and Requisites: | Targeted towards older adults, this course is designed to develop further technical skills in singing and acting techniques applied to more complex and broader ranging musical theatre repertoire, including staged duets, trios and full ensemble numbers spanning Golden Age content through contemporary Broadway. |
| Proposed Discipline | Theater Arts |

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

None

Are there any other departments that may be impacted from the addition of this course?

No

Comments & Other Relevant Information for Discussion:

Intended as non-credit for older adults. This course mirrors THTR 48F.

Reviewer Comments

**Jordan Fong (fongjordan) (02/26/24 10:56 am):** Rollback: Sending back to you based on last week's FAC Div CC meeting!

**Jordan Fong (fongjordan) (03/05/24 2:41 pm):** Rollback: hours

Key: 8917

Preview Bridge

ACADEMIC SENATE
for California Community Colleges
LEADERSHIP · EMPOWERMENT · VOICE

# 2024 Spring Plenary Session

# Adopted Resolutions


Resolutions Committee

Erik D. Reese, ASCCC Area C Representative and ASCCC Resolutions Chair
Robert L. Stewart, Jr., ASCCC Treasurer and ASCCC Resolutions Second Chair
Davena Burns-Peters, San Bernardino Valley College, Area D
Mark Edward Osea, Mendocino College, Area B
Krystinne Mica, ASCCC Executive Director

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## RECORDING RESOLUTIONS VOTING

Final results of voting on resolutions are recorded using the following, based on the *Resolutions Handbook* (page 12):

- MSC: Moved, Seconded, Carried
- MSF: Moved, Seconded, Failed
- MSR: Moved, Seconded, Referred
- MSU: Moved, Seconded, Unanimous (including consent calendar & unanimous consent)
- Acclamation: Moved, Seconded, Acclamation

## NEW CATEGORIES PILOT

New resolutions categories that more closely align with the purview of the ASCCC are being piloted for the 2024 Spring Plenary Session. Numbering of these new pilot categories will begin from 101 for the first category, 102 for the second category, and so forth to distinguish them from the old categories. The new categories being piloted this spring are:

101) Curriculum
102) Degree and Certificate Requirements
103) Grading Policies
104) Educational Program Development
105) Student Preparation and Success
106) Governance Structures
107) Accreditation
108) Professional Development
109) Program Review
110) Institutional Planning and Budget Development
111) Academic Senate for California Community Colleges
112) Hiring, Minimum Qualifications, Equivalency, and Evaluations
113) Legislation and Advocacy
114) Consultation with the California Community Colleges Chancellor's Office

# ADOPTED RESOLUTIONS

## 101 CURRICULUM

### 101.01 S24 Update the 2017 Paper *The Course Outline of Record: A Curriculum Reference Guide Revisited*

Whereas, The Academic Senate for California Community Colleges adopted the paper *The Course Outline of Record: A Curriculum Reference Guide Revisited*[1] in Spring 2017 and has not updated it since;

Whereas, The adoption of California Code of Regulations Title 5 sections 51200[2] and 51201[3] in 2020 established a commitment by the Board of Governors of the California Community Colleges to ground the educational mission of the California community colleges in the principles of diversity, equity, inclusion, and accessibility (DEIA) in order "to create a safe, inclusive, and anti-racist environment where individual and group differences are valued and leveraged for our growth and understanding as an educational community";

Whereas, The Academic Senate for California Community Colleges has grounded itself in DEIA and antiracist work through the infusion of inclusion, diversity, equity, antiracism and accessibility in its mission statement, vision statement, goals, and strategic directions; and

Whereas, The Academic Senate for California Community Colleges adopted resolutions 09.01 Fall 2021[4] and 09.01 Fall 2023[5] in support of requiring the incorporation of DEIA principles and practices into course outlines of record;

Resolved, That the Academic Senate for California Community Colleges update the paper *The Course Outline of Record: A Curriculum Reference Guide Revisited*[6] to reflect the shift to infuse

[1] https://www.asccc.org/sites/default/files/COR_0.pdf
[2] Title 5 §51200: https://govt.westlaw.com/calregs/Document/I5F7D7FA34C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)
[3] Title 5 §51201: https://govt.westlaw.com/calregs/Document/I5F7FF0A34C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)
[4] https://www.asccc.org/resolutions/adding-culturally-responsive-curriculum-equity-mindedness-and-anti-racism-course-outline
[5] https://www.asccc.org/resolutions/support-revisions-title-5-include-deia-course-outline-record
[6] https://www.asccc.org/sites/default/files/COR_0.pdf

diversity, equity, inclusion, accessibility, and antiracism in curricular matters and present it for adoption at the Fall 2025 Plenary Session.

Contact: Robert L. Stewart Jr., ASCCC Executive Committee, ASCCC Curriculum Committee

MSU

**101.02 S24 Update the 2019 Paper *Work Based Learning in California Community Colleges***

Whereas, The Academic Senate for California Community Colleges adopted the paper *Work Based Learning in California Community Colleges*[7] in Spring 2019 and has not updated it since;

Whereas, The Academic Senate for California Community Colleges' 2019 paper *Work Based Learning in California Community Colleges* recommended updates to Title 5 and the inclusion of noncredit options for work experience education; and

Whereas, The Board of Governors of the California Community Colleges recently adopted long awaited and extensive changes to several California Code of Regulations Title 5 sections regarding work experience education that are summarized in a California Community Colleges Chancellor's Office document[8] around these updates;

Resolved, That the Academic Senate for California Community Colleges update the paper *Work Based Learning in California Community Colleges*[9] to reflect the recent updates to the California Code of Regulations by the Fall 2025 Plenary Session.

Contact: Robert L. Stewart Jr., ASCCC Executive Committee, Area C

MSU

**101.03 S24 Developing an ASCCC-Annotated Version of Program and Course Approval Handbook (PCAH)**

Whereas, California Education Code §66010.2[10] states "The public elementary and secondary schools, the California Community Colleges, the California State University, the University of California, and independent institutions of higher education share goals designed to provide

[7] https://www.asccc.org/sites/default/files/Work_Based_Learning.pdf
[8] https://www.cccco.edu/-/media/CCCCO-Website/Office-of-General-Counsel/bgcccfinalworkexperiencetext20230726ffa11y.pdf?la=en&hash=605C58D56AC13E78C7A3335D4FC7C9CF5FE29C8C
[9] https://www.asccc.org/sites/default/files/Work_Based_Learning.pdf
[10] California Educational Code §66010.2: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=66010.2&lawCode=EDC

educational opportunity and success to the broadest possible range of our citizens, and shall provide the following:

1. Access to education, and the opportunity for educational success, for all qualified Californians. Particular efforts should be made with regard to those who are historically and currently underrepresented in both their graduation rates from secondary institutions and in their attendance at California higher educational institutions.
2. Quality teaching and programs of excellence for their students. This commitment to academic excellence shall provide all students the opportunity to address issues, including ethical issues, that are central to their full development as responsible citizens.
3. Educational equity not only through a diverse and representative student body and faculty but also through educational environments in which each person, regardless of race, gender, gender identity, gender expression, sexual orientation, age, disability, or economic circumstances, has a reasonable chance to fully develop his or her potential.";

Whereas, The Academic Senate for California Community Colleges' commitment to inclusion, diversity, equity, anti-racism, and accessibility has been affirmed in the following resolutions: 07.02 S23 Ensuring Anti-racist California Community College Online Faculty Training Materials[11], 13.04 S23 Resolution in Support of Academic Freedom/Solidarity with Faculty Across the Nation[12], 01.01 F22 Adopt the Academic Senate for California Community Colleges Mission, Vision, and Values Statements that Include Anti-Racism[13], 03.01 F22 Advancing IDEAA in Guided Pathways[14], 07.05 F22 Incorporating Inclusion, Diversity, Equity, Anti-racism, and Accessibility (IDEAA) Principles Explicitly into Title 5, §53200[15], 01.02 S22 Adding Anti-Racism to the Academic Senate for California Community Colleges' Vision Statement[16], 03.01 S22 Develop and Publish an Inclusion, Diversity, Equity, Anti-Racism, and Accessibility (IDEAA) Liaison Handbook[17], 03.02 S22 Adopt the DEI in Curriculum Model Principles and Practices Framework[18], 19.01 S22 Cultural Humility Driving Inclusion, Diversity, Equity, Anti-Racism, and Accessibility (IDEAA) Work[19], 03.02 S21 Establishing Local Inclusion, Diversity, Equity, and Anti-racism (IDEA) Liaison[20];

[11] https://asccc.org/resolutions/ensuring-anti-racist-california-community-college-online-faculty-training-materials
[12] https://asccc.org/resolutions/resolution-support-academic-freedomsolidarity-faculty-across-nation
[13] https://asccc.org/resolutions/adopt-academic-senate-california-community-colleges-mission-vision-and-values
[14] https://asccc.org/resolutions/advancing-ideaa-guided-pathways
[15] https://asccc.org/resolutions/incorporating-inclusion-diversity-equity-anti-racism-and-accessibility-ideaa-principles
[16] https://asccc.org/resolutions/adding-anti-racism-academic-senate-california-community-colleges-vision-statement
[17] https://asccc.org/resolutions/develop-and-publish-inclusion-diversity-equity-anti-racism-and-accessibility-ideaa
[18] https://asccc.org/resolutions/adopt-dei-curriculum-model-principles-and-practices-framework
[19] https://asccc.org/resolutions/cultural-humility-driving-inclusion-diversity-equity-anti-racism-and-accessibility
[20] https://asccc.org/resolutions/establishing-local-inclusion-diversity-equity-and-anti-racism-idea-liaison

Whereas, The California Community Colleges Chancellor's Office is directed by California Code of Regulations Title 5 §55000.5[21] to produce a handbook for program and course approval, known as the Program and Course Approval Handbook, currently in its 8th edition, and does not include guidance on integrating inclusion, diversity, equity, anti-racism, and accessibility (IDEAA) into specific elements such as credit and noncredit course and program development criteria, and the course outline of record; and

Whereas, For California community college faculty, authority over the curriculum is codified in California Education Code section 70902(b)(7)[22] stating that the governing board of each district shall establish procedures "to ensure faculty, staff, and students the opportunity to express their opinions at the campus level, to ensure that these opinions are given every reasonable consideration, to ensure the right to participate effectively in district and college governance, and to ensure the right of academic senates to assume primary responsibility for making recommendations in the areas of curriculum and academic standards." and California Code of Regulations Title 5 §53200[23] states the faculty authority for curriculum where the academic senate and its purview are defined;

Resolved, That the Academic Senate for California Community Colleges (ASCCC) develop an ASCCC-annotated version of the Program and Course Approval Handbook (PCAH) providing guidance for integrating inclusion, diversity, equity, anti-racism, and accessibility (IDEAA) into courses, programs, and processes for curriculum review and approval, with specific annotations to occur in commonly referenced portions of the PCAH and including links and references to IDEAA resources such as the *DEI in Curriculum: Model Principles and Practices*[24] and the *DEI in Praxis: Models for Culturally Responsive Curriculum*[25] resources currently on the ASCCC website under "IDEAA Tools and Resources," by Fall 2025 and disseminate widely.

Contact: Erik Woodbury, De Anza College, Area B

MSU

[21] Title 5 §55000.5: https://govt.westlaw.com/calregs/Document/I61E6B7734C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)
[22] California Education Code §70902: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=70902.&lawCode=EDC
[23] Title 5 §53200: https://govt.westlaw.com/calregs/Document/I604256434C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)
[24] https://asccc.org/sites/default/files/CCC_DEI-in-Curriculum_Model_Principles_and_Practices_June_2022.pdf
[25] https://deanza.instructure.com/courses/34140

## 102 DEGREE AND CERTIFICATE REQUIREMENTS

### 102.01 S24 Cal-GETC, Catalog Rights, and Oral Communication Courses

Whereas, The new California General Education Transfer Curriculum Area 1C Oral Communication, with new standards, will become effective the beginning of Fall 2025;

Whereas, The "Cal-GETC Administrative Implementation Guidance" memo[26] dated February 14, 2024 provides catalog rights guidance (Appendix A) regarding when students will be expected to complete the California General Education Transfer Curriculum pattern;

Whereas, Appendix A of the "Cal-GETC Administrative Implementation Guidance" memo states that if a student has continuous enrollment prior to the fall of 2025, students will not require California General Education Transfer Curriculum (Cal-GETC) certification, but for those students who lose catalog rights, they will be held to Cal-GETC certification; and

Whereas, If a student with prior continuous enrollment who completes a course approved for the California State University General Education Breadth Area A1 Oral Communication or Intersegmental General Education Transfer Curriculum Area 1C Oral Communication prior to Fall 2025 and loses catalog rights may now be expected to complete another oral communication course approved for the California General Education Transfer Curriculum Area 1C;

Resolved, That the Academic Senate for California Community Colleges work with the Intersegmental Committee of the Academic Senates to advocate for oral communication courses completed prior to Fall 2025 that meet the Intersegmental General Education Transfer Curriculum Area 1C being honored for the purposes of the California General Education Transfer Curriculum certification regardless of a student's catalog rights.

Contact: Mark Edward Osea, Mendocino College, Area B

MSU

### 102.02 S24 Explore Opportunities and Challenges of a Modified Cal-GETC Subject Area 5

Whereas, The singular lower division general education pathway that determines academic eligibility and sufficient academic preparation for transfer to both the California State University and the University of California, the California General Education Transfer Curriculum[27] requires a minimum of one course in physical sciences and one course in biological sciences, where at

[26] https://www.cccco.edu/-/media/CCCCO-Website/docs/memo/Cal-GETC-Administrative-Implementation-Guidance.pdf?la=en&hash=DF2FD3E05C058C35ACF2A7B950B2505C4C5E791D

[27] Cal-GETC: https://icas-ca.org/wp-content/uploads/2024/01/Cal-GETC_Standards_1v1_2023.pdf

least one of the courses must include a lab, Subject Area 5: Physical and Biological Sciences, which can limit student course choices when fulfilling Subject Area 5 for all majors;

Whereas, The Academic Senate for California Community Colleges (ASCCC) Transfer Alignment Project[28], working with intersegmental faculty to align Transfer Model Curricula and University of California Transfer Pathways, where feasible, so that students who earn Associate Degrees for Transfer are prepared for transfer to both the California State University (CSU) and University of California (UC) systems in response to ASCCC Resolution F17 15.01 Aligning Transfer Pathways for the CSU and UC Systems[29] and as required by AB 928 (Berman, 2021)[30] is focusing efforts on aligning high-unit science, technology, engineering, and mathematics pathways;

Whereas, High-unit science, technology, engineering, and mathematics (STEM) majors often require multiple course sequences with labs in the physical sciences such as calculus-based physics, general chemistry for science majors, and organic chemistry for science majors as part of the lower division major preparation; and

Whereas, California General Education Transfer Curriculum Subject Area 4: Social and Behavioral Sciences requires two courses from different academic disciplines instead of specifying one course from each area;

Resolved, That the Academic Senate for California Community Colleges work with the Intersegmental Committee of Academic Senates to explore the opportunities and challenges of a modified California General Education Transfer Curriculum[31] Subject Area 5: Physical and Biological Sciences that would require two courses from different academic disciplines where at least one course includes a lab instead of specifying one course from each area.

Contact: Ginni May, Sacramento City College

MSC

**102.03 S24 Partial Cal-GETC Certification for High-Unit STEM Majors**

Whereas, The singular lower division general education pathway that determines academic eligibility and sufficient academic preparation for transfer to both the California State University and the University of California, the California General Education Transfer Curriculum[32], requires a minimum of 11 courses and 34 semester units and is a barrier to creating high-unit science,

[28] ASCCC TAP: https://www.asccc.org/transfer-alignment-project
[29] Resolution F17 15.01: https://www.asccc.org/resolutions/aligning-transfer-pathways-california-state-university-and-university-california-systems
[30] AB 928 (Berman, 2021): https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB928
[31] Cal-GETC: https://icas-ca.org/wp-content/uploads/2024/01/Cal-GETC_Standards_1v1_2023.pdf
[32] Cal-GETC: https://icas-ca.org/wp-content/uploads/2024/01/Cal-GETC_Standards_1v1_2023.pdf

technology, engineering, and mathematics Transfer Model Curriculum due to the number of general education units required to be completed before transfer;

Whereas, The Academic Senate for California Community Colleges (ASCCC) Transfer Alignment Project[33], working with intersegmental faculty to align Transfer Model Curricula and University of California Transfer Pathways, where feasible, so that students who earn Associate Degrees for Transfer are prepared for transfer to both the California State University and University of California systems in response to ASCCC Resolution F17 15.01 Aligning Transfer Pathways for the CSU and UC Systems[34], and as required by AB 928 (Berman, 2021)[35] is focusing efforts on aligning high-unit science, technology, engineering, and mathematics pathways;

Whereas, Students in high-unit science, technology, engineering, and mathematics majors that begin their education at 4-year institutions often take lower division general education courses during their junior and senior years in order to complete the lower division major preparation courses during their freshman and sophomore years and to balance the intense upper division major-specific course load with non-major-specific courses; and

Whereas, A partial California General Education Transfer Curriculum (Cal-GETC)[36] certification such as one where students could defer completion of one course from Cal-GETC Subject Area 3 and/or one course from Cal-GETC Subject Area 4 until after transfer is equitable to what has been permitted for some high-unit STEM associate degrees for transfer such as biology, chemistry, and environmental science[37] and what is current practice for some transfer admits to the University of California under the Intersegmental General Education Transfer Curriculum[38], would provide access to an equitable college experience for students, especially those in high-unit STEM majors, and would facilitate alignment of TMCs and UCTPs, especially in STEM pathways;

Resolved, That the Academic Senate for California Community Colleges support that students have access to an equitable college experience whether beginning their college education at a 4-year institution or beginning at a California community college and transferring to a 4-year institution;

---

[33] ASCCC TAP: https://www.asccc.org/transfer-alignment-project

[34] Resolution F17 15.01: https://www.asccc.org/resolutions/aligning-transfer-pathways-california-state-university-and-university-california-systems

[35] AB 928 (Berman, 2021): https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB928

[36] Cal-GETC: https://icas-ca.org/wp-content/uploads/2024/01/Cal-GETC_Standards_1v1_2023.pdf

[37] C-ID TMC webpage prior to Cal-GETC implementation: https://c-id.net/tmc [The following AS-T degrees are approved for the use of a transferable general education pattern designed for STEM (i.e. IGETC or CSU GE Breadth for STEM): Biology, Chemistry, and Environmental Science.]

[38] UC Partial Certification of IGETC: https://admission.universityofcalifornia.edu/counselors/preparing-transfer-students/general-education-and-igetc.html#:~:text=Partial%20certification,-Students%20who%20do&text=After%20transfer%2C%20students%20submitting%20partial,as%20designated%20by%20their%20department.

Resolved, That the Academic Senate for California Community Colleges work with the Academic Senate of the California State University, the California Community Colleges Chancellor's Office, the California State University Chancellor's Office, and the California Intersegmental Articulation Council to establish protocols for partial California General Education Transfer Curriculum[39] certification;

Resolved, That the Academic Senate for California Community Colleges work with the California Community Colleges Chancellor's Office and the California State University Chancellor's Office to permit partial California General Education Transfer Curriculum[40] certification for high-unit science, technology, engineering, and mathematics associate degrees for transfer provided that the California State University has similar majors that could be completed in 60 units after transfer; and

Resolved, That the Academic Senate for California Community Colleges work with the California Community Colleges Chancellor's Office to permit colleges to award an associate degree for transfer to students that receive a partial California General Education Transfer Curriculum[41] certification.

Contact: Ginni May, Sacramento City College

MSC

**102.04 S24 Streamlining Transfer for STEM Majors**

Whereas, Assembly Bill 928 (Berman, 2021)[42], Section 2, establishes The Associate Degree for Transfer (ADT) to support students in high unit science, technology, engineering, and mathematics (STEM) majors that meet admissions requirements to the California State University and the University of California (UC)[43], and the December 2023 *Final Report from The Associate Degree for Transfer Intersegmental Committee* specifically recommends an allowance for "general educational flexibility" in STEM ADT pathways[44];

Whereas, California community college students who hope to transfer in disciplines with an Associate Degree for Transfer and who major in high-unit, highly-impacted science, technology, engineering, and mathematics degrees are currently required to complete a transfer general

[39] Cal-GETC: https://icas-ca.org/wp-content/uploads/2024/01/Cal-GETC_Standards_1v1_2023.pdf
[40] Cal-GETC: https://icas-ca.org/wp-content/uploads/2024/01/Cal-GETC_Standards_1v1_2023.pdf
[41] Cal-GETC: https://icas-ca.org/wp-content/uploads/2024/01/Cal-GETC_Standards_1v1_2023.pdf
[42] AB 928 (Berman, 2021): https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB928
[43] AB 928 (Berman, 2021): https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB928
[44] AB928 Associate Degree for Transfer Intersegmental Implementation Committee 2023 Final Report and Recommendations: https://static1.squarespace.com/static/63294b64e0e6c61627d6b28e/t/6583146d9c96e46d9d50bc01/1703089263187/ab-928-final-report-december-2023-with-cover-letter.pdf)

education pattern, while students who start at the California State University can complete general education requirements during their junior and senior years so as to permit completion of lower-division major preparation courses[45] in their first two years;

Whereas, There are majors in which ADTs do not currently exist, and in one case, Mt. San Antonio College, Victor Valley College, and Citrus College established local memorandums of understanding with Cal Poly Pomona to offer transfer admissions bonuses for students that complete local, transfer-aligned certificates of achievement (which do not require general education course sequences) in high-unit, highly-impacted, science, technology, engineering, and mathematics disciplines in which ADTs do not exist, and for which there are no systemwide admission benefits (unlike the admissions considerations and coursework incentives granted to Associate Degree for Transfer completers)[46]; and

Whereas, Students from low income and demographically minoritized communities in engineering education (women, Black, or African-American, American Indian/Alaska Native, Latino/a/x, Filipino/a/x, and Pacific Islander students) are more likely to begin their higher education in community colleges[47,48]; and science, technology, engineering, and mathematics (STEM) transfer students are often deterred by the lack of uniformity in lower-division course requirements for high-unit, highly-impacted university STEM degree programs (e.g. engineering and data science), often taking classes that are not transferable, and often incurring higher costs and requiring longer time commitment toward degree completion[49, 50];

Resolved, That the Academic Senate for California Community Colleges explore the value and implications of the creation of Model Certificates of Achievement[51] that would increase access

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[45] Grote, D. M., Knight, D. B., Lee, W. C., & Watford, B. A. (2020). Exploring Influences of Policy Collisions on Transfer Student Access: Perspectives From Street-Level Bureaucrats. *Educational Evaluation and Policy Analysis*, *42*(4), 576–602. https://doi.org/10.3102/0162373720962509

[46] For example, Engineering exists as one discipline in the CCC system without an AD-T, and there is no existing intersegmental model curriculum or local A.S. that would align with each transfer-receiving engineering degree programs in the CSUs or UCs, thereby discouraging community college students from taking engineering courses before transfer; a stacked certificate model could offer potential convergence systemwide, facilitate community college engineering faculty involvement, and offer more degree planning guidance without the inclusion of general education courses (unlike the design of ADTs), as most engineering programs design their coursework to include the majority of general education courses in the final two years of the program.

[47] Jain, D. (2009). Critical Race Theory and community colleges: Through the eyes of women student leaders of color. *Community College Journal of Research and Practice*, *34*(1–2), 78–91. https://doi.org/10.1080/10668920903385855

[48] Ogilvie, A. (2014). A Review of the Literature on Transfer Student Pathways to Engineering Degrees. *2014 ASEE Annual Conference & Exposition Proceedings*, 24.101.1-24.101.14. https://doi.org/10.18260/1-2--19993

[49] Brawner, C. E., & Mobley, C. (2016). Advising matters: Engineering transfer students' transition experiences at five institutions. *International Journal of Engineering Education*, *32*(6), 2446–2459.

[50] Dunmire, E., Enriquez, A., & Disney, K. (2011). The dismantling of the engineering education pipeline. *2011 ASEE Annual Conference & Exposition Proceedings*, 22.1443.1-22.1443.17. https://doi.org/10.18260/1-2--18945

[51] The 8th edition of the Program Course and Approval Handbook (2019) states, "Title 5, §55070 allows for the approval of Certificates of Achievement that satisfy transfer patterns of UC, CSU, or accredited public baccalaureate institutions in adjacent states, which award the baccalaureate degree" (p. 95).

to admission priority for students in high-unit STEM majors as they prepare for transfer, and provide a report back at the 2025 Spring Plenary Session; and

Resolved, That the Academic Senate for California Community Colleges provide professional learning resources that encourage local curriculum committees to explore and share innovative practices (e.g., stacked certificates for transfer, and reverse transfer) to address high-unit science, technology, engineering, and mathematics degrees.

Contact: Juan Arzola, College of the Sequoias

MSU

## 103 GRADING POLICIES

### 103.01 S24 Expanding Grading Options for Dual Enrollment Courses

Whereas, The California State University[52] and University of California[53] require first-year students to complete the A-G subject requirements with grades of "C" or higher;

Whereas, High school students may use transferable college courses to supplement their A-G subject requirements through dual enrollment or concurrent enrollment; and

Whereas, California community college courses are accepted for credit at both the University of California (UC) and California State University with letter grades and pass/no-pass (P/NP) options, and that for transfer students to the UC, UCs will allow up to 14 semester (21 quarter) units to be completed with (P/NP) to meet the 60 units required for minimum eligibility;

Resolved, That the Academic Senate for California Community Colleges work with the Intersegmental Committee of the Academic Senates, California State University Chancellor's Office, and the University of California Office of the President to consider allowing college courses completed with pass/no-pass by dual enrollment students to satisfy the A-G subject requirements for the California State University and University of California.

Contact: Mark Edward Osea, Mendocino College, Area B

MSC

[52] CSU A-G Course Requirements: https://www.calstate.edu/apply/freshman/getting_into_the_csu/pages/admission-requirements.aspx
[53] UC A-G Course Requirements: https://admission.universityofcalifornia.edu/admission-requirements/freshman-requirements/

## 105 STUDENT PREPARATION AND SUCCESS

### 105.01 S24 Align Approval and Completion of IGETC/Cal-GETC Courses with University of California Transfer Admission Requirements

Whereas, A basic transfer admission requirement of the University of California is the completion of at least seven courses (21 semester units minimum) of coursework approved by the University of California Office of the President (UCOP) for inclusion in the five University of California Transfer Eligibility areas[54] (the so-called "seven-course pattern")[55], for which the standards for inclusion of California community college courses in the five areas of the seven-course pattern are neither posted on the UCOP website nor included in the policies of the University of California Academic Senate;

Whereas, The process of reviewing and approving California community college courses for the University of California Transfer Eligibility "seven-course pattern" areas is conducted by course reviewers under the auspices of the University of California Office of the President during its annual University of California Transferable Course Agreement submission and review process[56], a process that is completely separate from the current Intersegmental General Education Transfer Curriculum submission and review process;

Whereas, The courses approved for current Intersegmental General Education Transfer Curriculum areas, and also presumably the California General Education Transfer Curriculum areas, do not automatically meet University of California transfer admission requirements unless they have been separately approved for University of California Transfer Eligibility "seven-course pattern" areas through the annual University of California Transferable Course Agreement submission and review process conducted by the University of California Office of the President; and

Whereas, Because coursework approved for the Intersegmental General Education Transfer Curriculum (IGETC) areas, and also presumably the California General Education Transfer Curriculum (Cal-GETC) areas, may not necessarily be approved for University of California

[54] The UCTEL Areas are UC-E (English composition), UC-M (mathematical concepts and quantitative reasoning), UC-H (arts and humanities), UC-B (social and behavioral sciences), and UC-S (physical and biological sciences). To see what courses from your college are approved for UCTEL areas, please go to https://assist.org/

[55] For more information about the seven-course pattern requirement for transfer students, please see https://admission.universityofcalifornia.edu/admission-requirements/transfer-requirements/preparing-to-transfer/basic-requirements.html

[56] The UCTCA ("UC transferability") submission period is every summer (June, July, or August, depending on the college). Articulation officers submit courses through ASSIST. While there is no formal way for articulation officers to request UCTEL consideration, they can informally request such consideration by including a note in the comments box when submitting a UCTCA proposal.

Transfer Eligibility “seven-course pattern” areas, students may not realize until it is too late that they have completed IGETC/Cal-GETC approved courses that are not part of the “seven-course pattern” areas and subsequently may be denied admission to the University of California for not meeting the basic requirement of completing the seven-course pattern;

Resolved, That the Academic Senate for California Community Colleges urge the University of California Academic Senate and the University of California Office of the President to determine that California community college students who have completed coursework for either the Intersegmental General Education Transfer Curriculum pattern or the California General Education Transfer Curriculum pattern have thus completed the corresponding University of California Transfer Eligibility (UCTEL) (“seven-course pattern”) coursework requirements for admission to the University of California, regardless of the UCTEL area approval status of the courses completed by the student;

Resolved, That the Academic Senate for California Community Colleges urge the University of California Academic Senate to recognize the California General Education Transfer Curriculum standards as equivalent to the standards of approval of California community college courses for the corresponding University of California Transfer Eligibility areas (the “seven-course pattern” areas); and

Resolved, That the Academic Senate for California Community Colleges work with the University of California Academic Senate and the Intersegmental Committee of Academic Senates as soon as possible to advocate for the integration of the course approval standards and course submission and review processes for the University of California Transfer Eligibility areas (the “seven-course pattern” areas) into the course approval standards and course submission and review processes of the California General Education Transfer Curriculum (Cal-GETC) areas to guarantee that California community college students who complete the appropriate Cal-GETC-approved coursework automatically meet the University of California “seven-course pattern” transfer admission requirements.

Contact: John Freitas, Los Angeles City College, Area C

MSC

**105.02 S24 Consult with the ASCCC on Student Success Metrics and Curricular Paths**

Whereas, The California Community Colleges Chancellor's Office Memo ESLEI 24-15[57] from February 27, 2024 was not co-signed by the Academic Senate for California Community Colleges;

Whereas, The California Community Colleges Chancellor's Office created guidelines[58] that restrict the preparatory coursework students in the California community colleges may access in order to prepare for science, technology, engineering, and mathematics majors such that students may have more options for preparatory coursework within the California State University or University of California systems;

Whereas, Community Colleges Chancellor's Office Memo ESLEI 24-15 defines "highly unlikely to succeed" as a result of direct placement into STEM Calculus I regardless of a student's prior math classes completed and time elapsed since their last math class as "less than 15% throughput," and sets an operational definition of "highly unlikely to succeed" without a preparatory course or courses as less than 50% throughput in Calculus I within two years[59]; and

Whereas, Developing and implementing standards or policies regarding student preparation and success is one of the academic and professional matters, or "10+1", in the California Code of Regulations Title 5 §53200[60]; and the Procedures and Standing Orders of the Board of Governors, December 2022 Edition, section 332[61] states that "Consistent with the intent of 53206 of title 5 of the California Code of Regulations, the Board of Governors recognizes the Academic Senate of the California Community Colleges as the representative of community college faculty on academic and professional matters" and "The Academic Senate, in conjunction with the Chancellor and designated staff, will initiate and/or respond to requests to develop policy on academic and professional matters. The identification of such matters will be made by the Chancellor, in consultation with the Consultation Council. Throughout the Consultation Process, the advice and judgment of the Academic Senate will be primarily relied upon whenever the policy involves an academic and professional matter. In providing this advice

[57] https://www.cccco.edu/-/media/CCCCO-Website/docs/memo/ESLEI-2415-AB-1705-Validation-of-Equitable-Placement-Support-and-Completion-Practices-for-STEM-Progr.pdf?la=en&hash=60D9524BAD2695B8D34252BFFDA8CF8F4805F197

[58] https://www.cccco.edu/-/media/CCCCO-Website/docs/memo/ESLEI-2415-AB-1705-Validation-of-Equitable-Placement-Support-and-Completion-Practices-for-STEM-Progr.pdf?la=en&hash=60D9524BAD2695B8D34252BFFDA8CF8F4805F197

[59] https://www.cccco.edu/-/media/CCCCO-Website/docs/memo/ESLEI-2415-AB-1705-Validation-of-Equitable-Placement-Support-and-Completion-Practices-for-STEM-Progr.pdf?la=en&hash=60D9524BAD2695B8D34252BFFDA8CF8F4805F197

[60] Title 5 §53200: https://govt.westlaw.com/calregs/Document/I604256434C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)

[61] https://www.cccco.edu/-/media/CCCCO-Website/docs/procedures-standing-orders/december-2022-procedures-standing-ordersv2-a11y.pdf?la=en&hash=FF692A0AE8ACC8FE6BB2A4D75018302005A8A4D6

and judgment, the Academic Senate is committed to engage and consider the views of participants in Consultation, the affected community college constituencies, the general public, and other comments and concerns the Chancellor is legally required to consider.";

Resolved, That the Academic Senate for California Community Colleges (ASCCC) assert that methods, guidelines, and standards for determining student placement, access to course offerings, and measuring student success are academic and professional matters, and that the California Community Colleges Chancellor's Office must rely primarily upon the advice and judgment of the ASCCC on these policy development and implementation matters for standards or policies regarding student preparation and success; and

Resolved, That the Academic Senate for California Community Colleges work with the Chancellor of the California Community Colleges Chancellor's Office to evaluate and reconsider the AB 1705 implementation mandates so that all students attending a California community college have access to the same preparatory science, technology, engineering, and mathematics (STEM) courses provided to students that start as freshmen at a California State University or University of California campus.

Contact: Eric Wada, ASCCC Executive Committee

Acclamation

**105.03 S24 Supporting Credit for Prior Learning (CPL) Through the California Mapping Articulated Pathways (MAP) Initiative**

Whereas, The California Mapping Articulated Pathways Initiative was initially developed in 2017 at Norco College to support credit for prior learning (CPL) for veterans, it has since expanded to include CPL for working adults as well, by allowing colleges to compare their courses to military courses, professional experience, and industry credentials to create equivalencies based on industry/faculty recommendations[62];

Whereas, Currently, 76 of the 116 California community colleges participate in the Mapping Articulated Pathways cohort, a collection of institutions committed to awarding up to a full year of college credit in recognition of the mastery acquired through prior learning, training, and experience[63]; and

Whereas, The Academic Senate for California Community Colleges has a long-standing position of supporting colleges in credit for prior learning including resolutions such as 15.04 F23 Allowing the Use of Prior Learning on Cal-GETC[64], 07.04 S23 Review of Credit for Prior Learning

[62] https://map.rccd.edu/about/
[63] https://www.asccc.org/rostrum-reader/2024/February
[64] https://asccc.org/resolutions/allowing-use-credit-prior-learning-cal-getc

Regulations[65], 07.02 S16 Awarding Credit for Prior Learning Experience[66] and 18.04 S11 Academic Credit for Veterans and Military Service Members[67];

Resolved, That the Academic Senate for California Community Colleges work with the California Community Colleges Chancellors Office to expand collaboration and cooperation of colleges on credit for prior learning (CPL) through the California Mapping Articulated Pathways (MAP) Initiative making MAP a central repository for all approved CPL articulations, exhibits, and student CPL outcomes;

Resolved, That the Academic Senate for California Community Colleges encourage subject matter expert faculty across colleges and disciplines to work together to provide reviews and recommendations on credit for prior learning for statewide consideration and adoption at local colleges;

Resolved, That the Academic Senate for California Community Colleges encourage colleges currently awarding nontransferable large-unit course credit for training and academies leading to certification to explore and consider the potential benefits and adverse consequences to students of awarding transferrable course credit through credit for prior learning when the knowledge and competencies demonstrated by the certification are aligned with transferable course objectives and learning outcomes; and

Resolved, That the Academic Senate for California Community Colleges work with the California Mapping Articulated Pathways Initiative to support local academic senates and faculty with professional development support to expand credit for prior learning opportunities for their students on their campuses and statewide.

Contact: Sigrid Williams, Norco College

MSC

## 107 ACCREDITATION

### 107.01 S24 Supporting Regular and Substantive Interaction as an Academic and Professional Matter to Enhance Student Success and Meet Standards

Whereas, While the California Community Colleges system has transformed in the post-pandemic era with the rise of distance education becoming a significant modality of

[65] https://asccc.org/resolutions/review-credit-prior-learning-regulations
[66] https://asccc.org/resolutions/awarding-credit-prior-learning-experience
[67] https://asccc.org/resolutions/academic-credit-veterans-and-military-service-members

instruction[68], for some colleges half or more of their courses are offered online, and as the system looks to the future to answer the Chancellor's call in *Vision 2030* to bring "instruction through flexible modalities, like short term and online classes, for all students," this trend is likely to continue;

Whereas, "Distance education," meaning instruction in which the instructor and student are separated by time and/or distance and interact through the assistance of technology to instruct students with regular and substantive interaction either synchronously or asynchronously, is highly regulated by both federal[69] and state[70] entities, and the Accrediting Commission of Community and Junior Colleges follows federal guidelines;

Whereas, Given the Academic Senate for California Community Colleges' academic and professional matters[71] purview as established by Title 5 §53200(b)[72], the matter of regular and substantive interaction is clearly an academic and professional matter that should be led by faculty expertise as it minimally falls directly within areas 1. curriculum including establishing prerequisites and placing courses within disciplines, 5. standards or policies regarding student preparation and success, and 7. faculty roles and involvement in accreditation processes, including self-study and annual reports; and

Whereas, The Academic Senate for California Community Colleges' 2023 adopted paper *Effective and Equitable Online Education: A Faculty Perspective* states that "colleges and districts must have both a clear definition of regular and substantive interaction (RSI) that aligns with the

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[68] https://www.insidehighered.com/news/institutions/community-colleges/2023/07/07/online-learning-still-high-demand-community

[69] Code of Federal Regulations 34 600: https://www.ecfr.gov/current/title-34/subtitle-B/chapter-VI/part-600; 602: https://www.ecfr.gov/current/title-34/subtitle-B/chapter-VI/part-602; and 608: https://www.ecfr.gov/current/title-34/subtitle-B/chapter-VI/part-608

[70] Title 5 Sections 53200: https://govt.westlaw.com/calregs/Document/I604256434C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default); 55005: https://govt.westlaw.com/calregs/Document/ID916E8E056B511ED9336FE00FB183132?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default); 55200: https://govt.westlaw.com/calregs/Document/IE381D74056B511ED9336FE00FB183132?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default); 55202: https://govt.westlaw.com/calregs/Document/I639922634C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default); 55204: https://govt.westlaw.com/calregs/Document/I252271C0698311ED9432FA58BC52C333?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default); 55206: https://govt.westlaw.com/calregs/Document/IE27A796056B511ED9336FE00FB183132?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default); and 55208: https://govt.westlaw.com/calregs/Document/IE6ECC7A056B511ED8118D68F0A50B737?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)

[71] https://www.asccc.org/10_1

[72] Title 5 §53200: https://govt.westlaw.com/calregs/Document/I604256434C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)

federal, state, and ACCJC definitions as well as a rubric in place to assess how and where that contact is designed to take place in a course taught online";

Resolved, That the Academic Senate for California Community Colleges work collaboratively with faculty distance education experts and groups such as the California Virtual Campus Online Education Initiative, the California Community College Accessibility Center, and California Community College Distance Education Coordinators' Organization to create a guide of exemplary regular and substantive interaction practices, peer to peer evaluation standards, and a model self-assessment rubric to be shared by Spring 2025.

Contact: Kelly Rivera, Mt San Antonio College

MSU

## 111 ACADEMIC SENATE FOR CALIFORNIA COMMUNITY COLLEGES

### 111.01 S24 Adopt the Paper *Part-time Faculty: Equity, Rights, and Roles in Governance*

Whereas, In Spring 2021, the Academic Senate for California Community Colleges adopted resolution 19.01 S21 Create a Paper on Part-Time Faculty Equity[73], which recognized the need to address the inequitable treatment of part-time faculty in the workplace across the full range of academic and professional matters and the consistent challenges faced by them in California community colleges; and

Whereas, Part-time faculty have contributed their lived experiences and expertise both through participation on the 2021-2022, 2022-2023, and 2023-2024 ASCCC Part-Time Faculty Committees and a statewide survey;

Resolved, That the Academic Senate for California Community Colleges adopt the paper titled *Part-time Faculty: Equity, Rights, and Roles in Governance*[74] and disseminate the paper to local academic senates upon its adoption, and actively encourage local senates to work collaboratively with their college and other partners to support the needs of part-time faculty, as outlined in this paper.

Contact: María-José Zeledón-Pérez, ASCCC Executive Committee, ASCCC Part-Time Faculty Committee

MSU

[73] https://www.asccc.org/resolutions/create-paper-part-time-faculty-equity
[74] https://asccc.org/sites/default/files/2024-03/Part-time%20Faculty%20Equity%2C%20Rights%2C%20and%20Roles%20in%20Governance%20%20ca.docx

**111.02 S24 Affirm Commitment to the Protection of Academic Freedom in the Face of Censorship Around Current Conflict in Palestine and Israel**

Whereas, The Academic Senate for California Community Colleges, as "the official voice of California community college faculty in academic and professional matters,"[75] released a report[76] on the issue of academic freedom, stating that the definition of academic freedom should be based on the American Association of University Professors' definition, which advocates against 'institutional censorship or discipline' in their extramural speech."[77];

Whereas, The International Sociological Association (ISA) published a statement in support of academic freedom in examining Palestinian and Israeli conflict stating, "The ISA cannot remain silent as spaces of public and academic debate are shrinking and increasingly policed. Today, more than ever, we require critical interventions by social scientists. Academic freedom needs to be protected and promoted. Well-informed and nuanced debate and a historicized and sociological understanding of the events that have led to the October 2023 atrocities are required to forestall further catastrophic loss of life. As stated by the Department of Historical and Cultural Studies at the University of Toronto, 'it is not only permissible, but it is essential for scholars to situate the current war in its broad historical contexts, including those of settler colonialism.' Our duty as sociologists is to maintain spaces of debate and foster discussion during such a critical moment"[78];

Whereas, The American Federation of Teachers passed a resolution titled "Calling for a Bilateral Cease-Fire in Gaza and Promoting a Two-State Solution and an End to the Weaponization of Hate"[79] stating, "We will defend the rights of educators and their students to participate in intellectually honest discussions, to articulate and rally around their views, including the underlying conflict between Israel and Palestine, moreover, we will not tolerate the weaponization of academic discourse to be used in political attacks on American colleges and universities, and as a pretext for attacks on efforts to increase diversity, promote equity and advance inclusion, our campuses must be places of dialogue for the furtherance of understanding in a pluralistic society, teachers, and students must be free to express different

[75] Academic Senate for California Community Colleges https://www.asccc.org/

[76] ASCCC Position Paper *Protecting the Future of Academic Freedom During a Time of Significant Change* https://www.asccc.org/sites/default/files/Academic_Freedom_F20.pdf

[77] ASCCC Position Paper, page 1: https://www.asccc.org/sites/default/files/Academic_Freedom_F20.pdf

[78] ISA Statement on the Situation in Israel and Palestine https://www.isa-sociology.org/en/about-isa/isa-human-rights-committee/statement-on-the-situation-in-israel-and-palestine

[79] "Calling for a Bilateral Cease-Fire in Gaza and Promoting a Two-State Solution and an End to the Weaponization of Hate" https://www.aft.org/resolution/calling-bilateral-cease-fire-gaza-and-promoting-two-state-solution-and-end-weaponization

views on the burning issues of the day, without fear of loss of position and retaliation, and without intimidation and threats of violence."; and

Whereas, Lawmakers, college administrators and pressure groups from inside and outside our colleges have placed pressures and passed measures to silence faculty around the nation, which have discredited and punished[80] them for exercising academic freedom[81] especially while discussing and teaching material related to Palestinian liberation in college classrooms;

Resolved, That the Academic Senate for California Community Colleges affirm its commitment to the protection of academic freedom on college campuses despite calls to censor texts, discussion, and activism around current conflict in Palestine and Israel.

Contact**:** Mona Alsoraimi-Espiritu, San Diego City College

MSC

## 112 HIRING, MINIMUM QUALIFICATIONS, EQUIVALENCY, AND EVALUATIONS

### 112.01 S24 Disciplines List — Artificial Intelligence

Whereas, Oral and written testimony given through the consultation process used for the review of *Minimum Qualifications for Faculty and Administrators in California Community Colleges*, also known as the Disciplines List, supported the following addition of the artificial intelligence discipline:

> *Master's in artificial intelligence/machine learning, computer science, electrical engineering and computer science, data science, or cognitive science,*
>
> *OR*
>
> *the equivalent;* and

Whereas, The Executive Committee of the Academic Senate for California Community Colleges has reviewed the proposal and deemed that the process outlined in the *Disciplines List Revision Handbook* was followed;

[80] https://www.reuters.com/world/us/us-professors-suspended-probed-over-gaza-war-comments-2023-11-17/
[81] https://www.aaup.org/news/academic-freedom-times-war

Resolved, That the Academic Senate for California Community Colleges recommend that the California Community Colleges Board of Governors adopt the proposed addition to the Disciplines List for artificial intelligence.

Contact: Eric Wada, ASCCC Executive Committee, ASCCC Standards and Practices Committee

MSC

**112.02 S24 Disciplines List — Nursing**

Whereas, Oral and written testimony given through the consultation process used for the review of *Minimum Qualifications for Faculty and Administrators in California Community Colleges*, also known as the Disciplines List, supported the following revision of the nursing discipline:

*Master's in nursing*

*OR*

*Bachelor's in nursing AND Master's in health education or health science*

*OR*

*the equivalent*

*OR*

*the minimum qualifications as set by the Board of Registered Nursing;* and

Whereas, The Executive Committee of the Academic Senate for California Community Colleges has reviewed the proposal and deemed that the process outlined in the *Disciplines List Revision Handbook* was followed;

Resolved, That the Academic Senate for California Community Colleges recommend that the California Community Colleges Board of Governors adopt the proposed revision to the Disciplines List for nursing.

Contact: Eric Wada, ASCCC Executive Committee, ASCCC Standards and Practices Committee

MSU

**112.03 S24 Disciplines List — Art**

Whereas, Oral and written testimony given through the consultation process used for the review of *Minimum Qualifications for Faculty and Administrators in California Community*

*Colleges*, also known as the Disciplines List, supported the following revision of the art discipline:

> *Master's in fine arts, art, or art history*
>
> *OR*
>
> *Bachelor's in any of the above AND Master's in humanities*
>
> *OR*
>
> *the equivalent*
>
> *(NOTE: "Master's in fine arts" as used here refers to any master's degree in the subject matter of fine arts, which is defined to include visual studio arts such as drawing, painting, sculpture, printmaking, ceramics, textiles, and metal and jewelry art; and also art education and art therapy. It does not refer to the "Master of Fine Arts" (MFA) degree when that degree is based on specialization in performing arts or dance, film, creative writing or other nonplastic arts.);* and

Whereas, The Executive Committee of the Academic Senate for California Community Colleges has reviewed the proposal and deemed that the process outlined in the *Disciplines List Revision Handbook* was followed;

Resolved, That the Academic Senate for California Community Colleges recommend that the California Community Colleges Board of Governors adopt the proposed revision to the Disciplines List for art.

Contact: Eric Wada, ASCCC Executive Committee, ASCCC Standards and Practices Committee

MSU

## 113 LEGISLATION AND ADVOCACY

### 113.01 S24 Support SB 895 (Roth, as of March 9, 2024) to Establish the Baccalaureate Degree in Nursing Pilot Program

Whereas, California's long-standing shortage of Registered Nurses (RNs) has worsened in recent years with an increase in the number of RN retirements, increase in the percentage of employed

RNs planning to retire or leaving nursing in the next two years, and a decline in RN education program enrollments and graduations, despite an increase in applications[82];

Whereas, Bachelor of Science in Nursing (BSN) degrees are increasingly preferred in the hiring of Registered Nurses[83] and California's nursing programs annually turn away thousands of qualified applicants, e.g., in 2021-22, out of 35,474 qualified applicants for a BSN program there were only 12,963 spaces available of which only 9,179 ultimately enrolled[84];

Whereas, The Academic Senate for California Community Colleges supported the expansion of baccalaureate degree programs in the California community colleges in disciplines and communities that best serve the students of the California Community Colleges with prioritization of programs in allied health fields[85]; and

Whereas, SB 895 (Roth, as of March 9, 2024)[86] would

1. Require the Chancellor of the California Community Colleges to develop a Baccalaureate Degree in Nursing Pilot Program that authorizes up to 15 community college districts to offer a Bachelor of Science in Nursing degree.
2. Require the chancellor to identify eligible community college districts that apply based on the following criteria:
    a. There is equitable access between the northern, central, and southern parts of the state to the pilot program.
    b. Priority is given to community college districts in underserved nursing areas.
    c. The community college district has a nationally accredited nursing program.
3. Limit the total number of participants in a pilot program at a community college district to 25 percent of the community college district's associate degree in nursing class size.
4. Require the Legislative Analyst's Office to conduct an evaluation of the pilot program to determine the effectiveness of the program and the need to continue or expand the program;

[82] Spetz J., Chu L., Blash L., 2022, Forecasts of the Registered Nurse Workforce in California: https://www.rn.ca.gov/pdfs/forms/forecast2022.pdf
[83] American Association of Colleges of Nursing (AACN) Research Brief, Employment of New Nurse Graduates and Employee Preferences for Baccalaureate Prepared Nurses, October 2023: https://www.aacnnursing.org/Portals/0/PDFs/Data/Research-Brief-10-23.pdf
[84] Spetz J., Chu L., Blash L., 2023, California Board of Registered Nursing 2021-2022 Annual School Report: https://www.rn.ca.gov/pdfs/education/prelicensure21-22.pdf
[85] Resolution 06.02 F19 Expansion of Baccalaureate Degree Programs in Allied Health: https://asccc.org/resolutions/expansion-baccalaureate-degree-programs-allied-health
[86] SB 895 (Roth, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB895

Resolved, That the Academic Senate for California Community Colleges support SB 895 (Roth, as of March 9, 2024)[87] to establish the Baccalaureate Degree in Nursing Pilot Program.

Contact: Angela Echeverri, Los Angeles Community College District, ASCCC Legislative and Advocacy Committee

MSC

**113.02 S24 Support ACR 147 (Alvarez as of February 16, 2024): California's First-Generation College Celebration Day**

Whereas, Assembly Concurrent Resolution 147 (Alvarez, as of February 16, 2024)[88] calls for the California Legislature to designate November 8, 2024, as "California's First-Generation College Celebration Day" to recognize the significant role of first-generation college students in developing the state's future workforce and to celebrate their achievement; and

Whereas, According to the California Community Colleges Chancellor's Office, 35% of students enrolled in California's community colleges identify as first generation, highlighting the important role that community colleges play in their educational process;

Resolved, That the Academic Senate for California Community Colleges support the passage of ACR 147 (Alvarez, as of February 16, 2024)[89] and the designation of November 8, 2024, as "California's First-Generation College Celebration Day" and encourages local senates to actively recognize and celebrate this day; and

Resolved, That the Academic Senate for California Community Colleges work collaboratively with system partners to develop and enhance programs and services that specifically address the needs of first-generation college students, supporting their access to higher education and fostering their retention and completion rates.

Contact: Manuel Velez, ASCCC Executive Committee, ASCCC Legislation and Advocacy Committee

Acclamation

[87] SB 895 (Roth, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB895
[88] ACR 147 (Alvarez, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240ACR147
[89] ACR 147 (Alvarez, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240ACR147

**113.03 S24 Support AB 2586 (Alvarez, as of February 14, 2024): Student Employment**

Whereas, The Academic Senate for California Community Colleges[90], the Academic Senate of the California State University[91], the University of California Academic Senate[92], and the Intersegmental Committee of the Academic Senates[93] have advocated in support of undocumented students, particularly students with Deferred Action for Childhood Arrivals (DACA);

Whereas, On September 13, 2023, Deferred Action for Childhood Arrivals (DACA) was found unlawful, though, for the time being, current grants of DACA remain valid until they expire[94] and work authorization continues and can be renewed for existing DACA recipients[95];

Whereas, AB 2586 (Alvarez, as of February 14, 2024)[96] will provide equal access to campus employment opportunities for all students, regardless of their immigration status, at the University of California, California State University, and California Community Colleges campuses by removing any of their current restrictions on the premise that federal prohibitions on hiring undocumented workers are inapplicable because those prohibitions do not state that they apply to state governments[97]; and

Whereas, Support for AB 2586 (Alvarez, as of February 14, 2024) by the Academic Senate for California Community Colleges, out of concern for the ability of their undocumented students to succeed in the California community colleges and when they transfer to a four-year university,

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[90] See Resolution 06.03 S16 Supporting Dream Resource Liaisons: https://asccc.org/resolutions/supporting-dream-resource-liaisons; Resolution 03.02 S17 Support for Marginalized Students: https://asccc.org/resolutions/support-marginalized-students-0; and Resolution 03.03 S17 Support for Students with Deferred Action for Childhood Arrivals (DACA) Status: https://asccc.org/resolutions/support-students-deferred-action-childhood-arrivals-daca-status-0

[91] ASCSU Resolution AS-3303-17/FGA In Support of the Preservation and Extension of the Deferred Action for Childhood Arrivals (DACA) Program: https://www.calstate.edu/csu-system/faculty-staff/academic-senate/resolutions/2017-2018/3303.pdf

[92] University of California Academic Senate, Academic Council Statement in Support of Undocumented Students Enrolled at UC, January 31, 2018: https://senate.universityofcalifornia.edu/_files/reports/SW-JN-aspirational-statement-support-for-undocumented-students.pdf

[93] ICAS DACA Support Request Letter, February 12, 2018: https://asccc.org/sites/default/files/ICAS%20DACA%20Support%20from%20Chancellors%20Letter.pdf

[94] US Citizenship and Immigration Services, DACA Litigation Information and Frequently Asked Questions, accessed March 21, 2024: https://www.uscis.gov/humanitarian/consideration-of-deferred-action-for-childhood-arrivals-daca/daca-litigation-information-and-frequently-asked-questions

[95] Civil Rights Division, US Department of Justice, Reminders for DACA Recipients and Employers that Work Authorization Continues After the Latest Decision in the DACA Litigation, accessed March 21, 2024: https://www.justice.gov/crt/reminders-daca-recipients-and-employers

[96] AB 2586 (Alvarez, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB2586

[97] AB 2586 (Alvarez, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB2586

would be consistent with several previous resolutions that pertained to our students once they transferred[98];

Resolved, That the Academic Senate for California Community Colleges support AB 2586 (Alvarez, as of February 14, 2024)[99] to provide equal access to campus employment opportunities for all students, regardless of their immigration status, as it pertains to the California Community Colleges.

Contact: Jeffrey Hernandez, Los Angeles Community College District, Area C

Acclamation

**113.04 S24 Support AB 2093 (Santiago, as of March 6, 2024) to Extend College Promise to California Community College Baccalaureate Degree Students**

Whereas, The Academic Senate for California Community Colleges has long maintained a fundamental stance in opposition to mandatory student fees[100] and advocated for the lowest possible student fees to maximize student access[101];

Whereas, The California College Promise allows community colleges to waive enrollment fees for two academic years for full-time students who have submitted a Free Application for Federal Student Aid or a California Dream Act application[102];

Whereas, The Academic Senate for California Community Colleges adopted Resolution 06.06 S21 in support of the permanent establishment of the baccalaureate degree programs in the California community colleges[103], and therefore it is vital that enrollment fee waivers be extended to baccalaureate degree program students; and

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[98] See Resolution 04.07 S95 Concurrent Enrollment with University of California: https://asccc.org/resolutions/concurrent-enrollment-university-california; Resolution 08.02 F99 UC Catalog Rights (Nonurgent from Spring 1999): https://asccc.org/resolutions/uc-catalog-rights-nonurgent-spring-1999; Resolution 06.01 S04 CSU Transfers: https://asccc.org/resolutions/csu-transfers; Resolution 15.02 S04 Protecting Transfer Students: https://asccc.org/resolutions/protecting-transfer-students; Resolution 15.04 S06 Information About Transferring Students: https://asccc.org/resolutions/information-about-transferring-students; and Resolution 15.02 F09 Re-Evaluate CSU Service Areas: https://asccc.org/resolutions/re-evaluate-csu-service-areas

[99] AB 2586 (Alvarez, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB2586

[100] See ASCCC Paper, "What's Wrong with Student Fees? Renewing the Commitment to No-Fee, Open-Access Community Colleges in California," adopted Fall 2004: https://asccc.org/sites/default/files/publications/StudentFeesOpenAccess_0.pdf

[101] Resolution 06.01 S11 Community College Fees: https://asccc.org/resolutions/community-college-fees

[102] California Education Code §76396.3: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=76396.3

[103] Resolution 06.06 S21 Support AB 927 (Medina, 2021) as of April 9, 2021: https://asccc.org/resolutions/support-ab-927-medina-2021-april-9-2021; and AB 97 (Medina, 2021) chaptered October 6, 2021: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB927

Whereas, AB 2093 (Santiago, as of March 6, 2024) "would extend the term of eligibility of the California College Promise for an additional 2 academic years for first-time community college students and returning community college students who matriculate into upper division coursework of a community college baccalaureate degree program" [104];

Resolved, That the Academic Senate for California Community Colleges support AB 2093 (Santiago, as of March 6, 2024)[105] to extend the California College Promise to students taking upper division courses in a baccalaureate degree program at a California community college.

Contact: Jeffrey Hernandez, Los Angeles Community College District, Area C

MSU

**113.05 S24 Support AB 2407 (Hart, as of February 12, 2024) on Sexual Harassment Complaints**

Whereas, The recent cases of sexual harassment in the California State University (CSU) system and the California Community Colleges (CCCs) have demonstrated the need for external oversight in the handling of Title IX complaints, have resulted in costly legal actions that divert precious resources away from serving students, and have led to legislation which requires annual reporting to the legislature by the CSUs, such as SB 808 (Dodd, 2023)[106,107], and external oversight is recommended of the CCC, CSU, and UC systems in *A Call to Action Report 2024* by the Chair of the Assembly Higher Education Committee[108];

Whereas, Students are deprived of safe, equal, and free access to an education when they are subjected to sexual harassment or misconduct, including (but not limited to) sexual assault, sexual coercion, dating violence, domestic violence, stalking, cyber-stalking, retaliation, isolation, and other forms of discrimination based on gender and hate crimes based on gender,

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[104] AB 2093 (Santiago, 2024): https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202320240AB2093

[105] AB 2093 (Santiago, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB2093

[106] https://www.auditor.ca.gov/reports/2022-109/index.html

[107] Truong, Debbie. "Six years, a trial, and a firing. But no end to a professor's sexual harassment fight." *Los Angeles Times*. 16 Oct. 2023: https://go.boarddocs.com/ca/laccd/Board.nsf/files/CXZD6W344620/$file/Inside%20a%20Los%20Angeles%20professor's%20long%20sexual%20harassment%20fight%20-%20Los%20Angeles%20Times%20(2).pdf

[108] A Call to Action: How Postsecondary Education Institutions Can Address Sex Discrimination and Provide Educational Justice on Campus, 2024, The California Assembly Committee on Higher Education, Chair Mike Fong: https://ahed.assembly.ca.gov/system/files/2024-02/a-call-to-action-report-2024_0.pdf

and the *Vision 2030: A Roadmap for California Community Colleges*[109] calls for a "Ninth-Grade Strategy" in which all California high school students enroll in community college and complete high school with at least 12 units of dual enrollment credit, including college and career access pathways courses, and will result in a large increase in the number of under-aged students in college classrooms and faculty often become the first point of contact for the students when sexual harassment or misconduct occurs;

Whereas, Assembly Bill 2407 (Hart, as of February 12, 2024)[110], aims to address sexual harassment complaints in public postsecondary educational institutions in the state and ensure timely, fair, and impartial investigations of such complaints, which aligns with the Academic Senate for California Community Colleges' Fall 2023 Resolution 13.01 Prioritizing the Prevention of Sexual Harassment and Discrimination at California Community Colleges Campuses[111] as well as its commitment to promoting equity, inclusion, and a safe educational environment for all members of the community college system, including protection from retaliation for reporting alleged sexual misconduct; and

Whereas, A position of support for AB 2407 would be consistent with past positions of Academic Senate for California Community Colleges addressing concerns about our students who transfer to the CSUs and UCs[112], have other implications for the CSUs and UCs[113], and have called for audits to ensure compliance on priority matters[114], and the ASCCC prioritized the prevention of Sexual Harassment and Discrimination at the California Community College Campuses at the Fall 2023 plenary[115];

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[109] https://www.cccco.edu/-/media/CCCCO-Website/docs/report/Vision-2030-A-Roadmap-for-California-Community-Colleges.pdf?la=en&hash=3B83F5221C4A7A8BEFA7E94D5BCBF540D2718013

[110] AB 2407 (Hart, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB2407

[111] https://asccc.org/resolutions/prioritizing-prevention-sexual-harassment-and-discrimination-california-community

[112] See Resolution 04.07 S95 Concurrent Enrollment with University of California: https://asccc.org/resolutions/concurrent-enrollment-university-california; Resolution 08.02 F99 UC Catalog Rights (Nonurgent from Spring 1999): https://asccc.org/resolutions/uc-catalog-rights-nonurgent-spring-1999; Resolution 06.01 S04 CSU Transfers: https://asccc.org/resolutions/csu-transfers; Resolution 15.02 S04 Protecting Transfer Students: https://asccc.org/resolutions/protecting-transfer-students; Resolution 15.04 S06 Information About Transferring Students: https://asccc.org/resolutions/information-about-transferring-students; and Resolution 15.02 F09 Re-Evaluate CSU Service Areas: https://asccc.org/resolutions/re-evaluate-csu-service-areas

[113] See Resolution 06.03 S19 Provisionally Support SB 291 (Leyva, as of March 1, 2019): https://asccc.org/resolutions/provisionally-supportsb-291-leyva-march-1-2019; and Legislative and Resolution 06.02 F20 Systemic Support for Academic Freedom: https://asccc.org/resolutions/legislative-and-systemic-support-academic-freedom

[114] See Resolution 02.12 F02 Conflict of Interest: https://asccc.org/resolutions/conflict-interest; Resolution 06.05 F00 50% Audit of All Districts: https://asccc.org/resolutions/50-audit-all-districts; and Resolution 17.03 S94 Audit Matriculation Funds: https://asccc.org/resolutions/audit-matriculation-funds

[115] Resolution 13.01 F23 Prioritizing the Prevention of Sexual Harassment and Discrimination at California Community College Campuses: https://www.asccc.org/resolutions/prioritizing-prevention-sexual-harassment-and-discrimination-california-community

Resolved, That the Academic Senate for California Community Colleges support AB 2407 (Hart, as of February 12, 2024)[116] as it pertains to requiring the California State Auditor to conduct audits of the California Community Colleges regarding their handling and investigation of sexual harassment complaints.

Contact: Angela Echeverri, Los Angeles Community College District, Area C

MSC

**113.06 S24 In Support of Documented Dreamers**

Whereas, Documented Dreamers, or dependents of long-term employment-based visa-holders, who reach the age of 21 "must obtain another status or leave behind their families—and the only country they have ever known—to return to their country of birth" and "lose their status and opportunity for legal residency or citizenship"[117];

Whereas, Documented Dreamers students then must return to our colleges as international students, paying international fees, while unable to legally work in the U.S. or obtain federal or state financial aid; and

Whereas, Documented Dreamers, whose families were invited to move their children to the United States, are lawful residents, and in many cases long-time California students, and are valued members of our colleges who enrich our communities through leadership and service to our campuses and the surrounding areas;

Resolved, That the Academic Senate of the California Community Colleges support federal legislation that provides a path to citizenship, such as HR 3442 America's Children Act of 2023[118], and state legislation that provides financial relief and in-state tuition to the children of U.S. visa holders;

Resolved, That the Academic Senate of the California Community Colleges work with the California Community Colleges Chancellor's Office and the Faculty Association for California Community Colleges to advocate for establishing and/or changing policy to support documented Dreamers' access to in-state tuition and financial aid and to reduce barriers to community college degree and certificate attainment and transfer; and

Resolved, That the Academic Senate of the California Community Colleges work with the Student Senate of the California Community Colleges and system-wide partners to raise

[116] AB 2407 (Hart, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB2407
[117] https://americaschildrenact.com/static/media/America'sChildrenAct_One-Pager.d876041e00d2f2a1fa07.pdf
[118] HR 3442: https://www.congress.gov/bill/118th-congress/house-bill/3442/text?s=1&r=63

awareness in the California community colleges about the needs and challenges of documented Dreamers.

Contact: Rebecca LaCount, Solano Community College, Area B

MSU

**113.07 S24 Expanding Access to Minority Serving Institution Designation**

Whereas, An increasing number of higher education institutions meet the requirements for two or more minority serving institution (MSI) designations, however, Title III precludes "colleges that already have an MSI-designated grant under Part A (or Title V in the case of HSIs) cannot apply for another MSI designation under Part A[119], even if they meet the demographic criteria"[120];

Whereas, Currently 192 institutions in the U.S. are eligible to apply for Asian American and Native American Pacific Islander-Serving Institution (AANIPISI) funding but only 32 currently receive an AANAPISI grant; and

Whereas, Legislators from around the country have been trying to eliminate these artificial barriers and provide redress to this situation since 2015[121];

Resolved, That the Academic Senate for California Community Colleges engage with California's Federal Congressional Delegation to 1) make Title III and Title V less restrictive; and, 2) enable higher education institutions with multiple minoritized-student populations to be able to receive funding to support all of them; and

Resolved, That the Academic Senate for California Community College work with other state and national interest holders focused on serving minority student populations to advocate for changes at the federal level that enable higher education institutions to receive funding to support multiple minoritized-student populations.

Contact: Pablo Martin, San Diego Miramar College

Acclamation

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[119] Title III does not allow a campus to receive two of the more robust (read greater value) Part A grants simultaneously. However, if they have the resources, they can apply for smaller, Part F grants or other Part A grants on a different cycle ("The Struggle for Dual Identity: MSI Grant Restrictions;" May 13, 2022)

[120] "Federal Grant Proves Elusive for Certain Colleges: The money is set aside for institutions serving large numbers of Asian American, Native American and Pacific Islander students, but many eligible colleges don't apply because of bureaucratic hurdles" (October 6, 2023)

[121] Hirono, Cornyn, Chu, & Royce Push to Level Playing Field for Minority College Students (2015): https://www.hirono.senate.gov/news/press-releases/hirono-cornyn-chu-and-royce-push-to-level-playing-field-for-minority-college-students

**113.08 S24 Support Noncredit Instructional Programs Equitable and Affordable Access to Learning Opportunities for Students of All Ages**

Whereas, The Legislative Analyst's Office 2024-2025 Budget: California Community Colleges report[122] "*Recommend Identifying Ongoing Solutions Outside of Colleges' Core Programs*" proposed structural funding changes to noncredit instruction, "eliminating state support for athletics and classes that are primarily enrichment in nature" including older adult and other programs (p. 5);

Whereas, The approved noncredit instruction programs that are being recommended for restructuring to fee-based classes, which have historically given California's community colleges the ability to address local areas of need, including but not limited to older adults who are returning to the workforce, and older adults who need to increase or sustain their mental and physical agility;

Whereas, The restructuring of approved noncredit instruction programs would change the California Community Colleges' commitment to educating the people of California as stated in California Education Code §84757[123] section A.7: "The noncredit courses, noncredit classes, and support services eligible for funding include: Education programs for older adults"; and

Whereas, The Academic Senate for California Community Colleges have continually demonstrated support for noncredit instruction programs by supporting resolutions as far back as 1989[124] that aim to improve the quality of noncredit education in the state and oppose the restructuring of non-career development and college preparation noncredit classes to fee-based classes[125];

Resolved, That the Academic Senate for California Community Colleges affirm the necessity of California's community colleges to provide equitable and affordable access to learning opportunities to students of all ages, in noncredit courses promoting tools for brain and physical health which enable seniors to live independent and quality lives, aligning with the California Governor's Executive Order N-14-19[126] established in the *Master Plan for Aging: 2030*[127]; and

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[122] https://lao.ca.gov/reports/2024/4853/CCC-022124.pdf
[123] California Education Code §84757: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=84757&lawCode=EDC
[124] Examples of Resolutions from 1989 that show ASCCC support for noncredit programs include the following resolutions: 08.05: https://www.asccc.org/resolutions/non-credit-faculty; 09.05: https://www.asccc.org/resolutions/noncredit-instruction-and-shared-governance; and 12.04: https://www.asccc.org/resolutions/minimum-qualifications-noncredit-instruction
[125] In Fall 2011, ASCCC adopted resolution 13.02: Opposition to the Elimination of Non-CDCP Noncredit Classes: https://www.asccc.org/resolutions/opposition-elimination-non-cdcp-noncredit-classes
[126] https://www.gov.ca.gov/wp-content/uploads/2019/06/6.10.19-Master-Plan-for-Aging-EO.pdf
[127] https://mpa.aging.ca.gov/

Resolved, That the Academic Senate for California Community Colleges work with the Legislature on any proposed changes to noncredit instruction as defined in California Education Code.

Contact: Richard Weinroth, San Diego College of Continuing Education

MSU

## 114 CONSULTATION WITH THE CALIFORNIA COMMUNITY COLLEGES CHANCELLOR'S OFFICE

### 114.01 S24 A-G Requirements Website to Support Dual Enrollment

Whereas, The California State University and the University of California systems require students to complete the A-G requirements for first year student admission[128];

Whereas, Transferable California Community College courses taken during high school may be used to satisfy the A-G requirements if the courses meet specific criteria[129];

Whereas, The *Vision 2030* calls for California high school students to "complete high school with at least 12 units of dual enrollment credit"[130] so as to "increase their interest in and understanding of college"; and

Whereas, An online repository that makes visible which of a California community college's courses will satisfy the A-G requirements may be of support to community college faculty and high school partners in the selection of courses to offer for dual enrollment;

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[128] CSU A-G Requirements: https://www.calstate.edu/apply/freshman/getting_into_the_csu/pages/admission-requirements.aspx; UC A-G Requirements: https://admission.universityofcalifornia.edu/admission-requirements/freshman-requirements/

[129] For example, to satisfy one of the "B" English requirements for admission to the University of California, a course must meet the following criteria: "For each year required through the 11th grade, a grade of C or better in a non-transferable college course of 3 or more semester (4 or more quarter) units in English composition, literature (American or English) or foreign literature in translation. Courses used to satisfy the fourth year and/or the entire requirement must be transferable." Reference: https://admission.universityofcalifornia.edu/admission-requirements/freshman-requirements/subject-requirement-a-g.html

[130] *Vision 2030: A Roadmap for California Community Colleges:* https://www.cccco.edu/-/media/CCCCO-Website/docs/report/Vision-2030-A-Roadmap-for-California-Community-Colleges.pdf?la=en&hash=3B83F5221C4A7A8BEFA7E94D5BCBF540D2718013

Resolved, That the Academic Senate for California Community Colleges work with the California Community Colleges Chancellor's Office, California State University Chancellor's Office, and the University of California Office of the President to develop an A-G requirements website that indicates, for dual enrollment students, A-G approval of community college courses.

Contact: Mark Edward Osea, Mendocino College, Area B

MSU

**114.02 S24 Noncredit in the California Virtual Campus**

Whereas, The California Community Colleges Chancellor's Office has charged the California Virtual Campus with "ensuring that significantly more students are able to complete their educational goals by increasing both access to and success in high-quality online courses"[131];

Whereas, The California Virtual Campus lists in its Exchange noncredit courses only under somewhat restrictive circumstances and does not provide an adequate subject-based filter to select noncredit courses from its offerings; and

Whereas, The California Community Colleges Chancellor's Office emphasizes not only degree and certificate completion for all students, including career development and college preparation certificates in noncredit, but also providing access to students of diverse backgrounds;

Resolved, That the Academic Senate for California Community College work with the California Community Colleges Chancellor's Office and other appropriate higher education system partners with the goal of having the California Virtual Campus include noncredit courses from both home and teaching colleges, regardless of how the noncredit courses are coded, and with an adequate subject-based filter so students can more easily search for noncredit offerings.

Contact: Sheri Miraglia, City College of San Francisco, Area B

MSU

**114.03 S24 Disaggregating Asian and Pacific Islander Student Data**

Whereas, The Academic Senate for California Community Colleges adopted Resolution 03.05 S22 Disaggregate Asian and Pacific Islander Student Data[132], which called for the disaggregation of Asian and Pacific Islander student data;

[131] https://cvc.edu/about-the-oei/
[132] Resolution 03.05 S22 Disaggregate Asian and Pacific Islander Student Data: https://www.asccc.org/resolutions/disaggregate-asian-and-pacific-islander-student-data

Whereas, The California Community Colleges Chancellor's Office has data element SB38[133], which disaggregates Asian American, Native American, and Pacific Islander ethnicities; and

Whereas, The aggregation of student data in community colleges often conceals the diverse educational outcomes and needs of distinct groups within each categorization, the disaggregation of this data, in particular data revealing smaller subsets of students, is crucial for ensuring accurate visibility, representation, and the formulation of targeted educational and support strategies;

Resolved, That the Academic Senate for California Community Colleges urge the California Community Colleges Chancellor's Office to release an annual report that illustrates the enrollment, success, retention, and persistence of Asian and Pacific Islander students across the system and then by region and district, specifically in districts with high Southeast Asian American, Pacific Islander/Native Hawaiians, and Filipino student enrollments;

Resolved, That the Academic Senate for California Community Colleges urge the California Community College Chancellor's Office to work closely with the Office of Management and Budget to implement revisions to the Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity[134] within the next academic year;

Resolved, That the Academic Senate for California Community Colleges encourage colleges to utilize disaggregated data as part of their practices when collecting, examining, and reporting enrollment, success, retention, and persistence data for Asian and Pacific Islander students and other minoritized populations (specific to their college demographics); and

Resolved, That the Academic Senate for California Community Colleges work with the California Community College Chancellor's Office within the 2024-2025 academic year to create trainings and webinars on how to center equity in the implementation utilizing disaggregated Asian and Pacific Islander data.

Contact: Pablo Martin, San Diego Miramar College

MSU

**114.04 S24 Aligning with AB 1705 Legislative Intent**

Whereas, Part (1) of the Legislative Counsel's Digest for AB 1705 (Irwin, 2022)[135] provides clear intent language that students are placed into transfer-level coursework that satisfies

[133] https://webdata.cccco.edu/ded/sb/sb38.pdf
[134] https://www.federalregister.gov/documents/2024/03/29/2024-06469/revisions-to-ombs-statistical-policy-directive-no-15-standards-for-maintaining-collecting-and
[135] AB 1705 (Irwin, 2022): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1705

“mathematics coursework requirements of the intended certificate or associate degree, or a requirement for transfer within the intended major, within a one-year timeframe of their initial attempt in the discipline”;

Whereas, Part (3) of the Legislative Counsel’s Digest only requires as of July 1, 2023 that certificate, degree, or transfer students are directly placed into transfer-level math, and not the required math course for their intended major; and

Whereas, Sections (c)(1), (c)(7)(b), (c)(8), (c)(9) of the AB 1705 (Irwin, 2022)[136] bill text requires placement and enrollment into math classes that fulfill a requirement for their intended major within a one-year timeframe; and sections (f)(1) and (f)(2) allows for the enrollment of science, technology, engineering, and math (STEM) students into pre-calculus transfer level courses, so long as the college does not recommend or require enrollment in those courses and so long as students are notified that “it is optional and does not improve their chances of completing calculus for their STEM programs”;

Resolved, That the Academic Senate for California Community Colleges convey to the California Community Colleges Chancellor’s Office the position that, given the language in AB 1705, parts (1) and (3) of the Digest and sections (c)(1), (c)(7)(b), (c)(8), (c)(9), (f)(1), and (f)(2) of the bill text, science, technology, engineering, and math students are allowed to take transfer-level pre-calculus math courses within their first semester, so long as students are not placed into or required to take such courses.

Contact: Matthew Morgan, Moorpark College

MSC

**114.05 S24 Advocate for STEM Students to be Allowed to Take Non-validated "pre-calculus" Classes as Electives**

Whereas, AB 1705 (Irwin, 2022)[137] section 3(i) does not prevent California Community Colleges science, technology, engineering, and mathematics students from taking algebra, trigonometry, or precalculus as an elective, simultaneous with, or subsequent to calculus, so long as the “pre-calculus” class is not taken before the student is placed and enrolled in calculus;

Whereas, AB 1705 section 3(f)(2) allows community colleges to offer "pre-calculus" math courses to science, technology, engineering, and math (STEM) majors so long as the students are not recommended or required to enroll in the course, and so long as students are notified that the course is optional and does not improve their chances of completing calculus for their STEM program;

[136] AB 1705 (Irwin, 2022): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1705
[137] AB 1705 (Irwin, 2022): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1705

Whereas, Some students may be interested in taking "pre-calculus" courses for their own sake, regardless of their calculus preparatory values; and

Whereas, The California Community Colleges Chancellor's Office prohibits colleges that are unable to validate, or get interim approval for, "pre-calculus" courses from offering those courses as electives to any science, technology, engineering, and math students that desire such an elective[138];

Resolved, That the Academic Senate for California Community Colleges encourage the California Community College's Chancellor's Office to reconsider its implementation guidance of AB 1705 (Irwin, 2022)[139] as delineated in the February 27, 2024 Guidance Memo ESLIE 24-15[140] in such a way that it follows the language of section 3(f)(2) and section 3(i) and allows any science, technology, engineering, and math (STEM) student to take trigonometry (C-ID 851), college algebra (C-ID 150 or 151), or pre-calculus and trigonometry (C-ID 955 or 155) at California Community Colleges that do not "validate" the course, so long as the course is not taken before the student is placed and enrolled in calculus, it is offered as an elective, "the college [does] not recommend or require students to enroll in that course," and the college notifies "students who continue to enroll in the course that it is optional and does not improve their chances of completing calculus for their STEM program.", as required by AB 1705 (Irwin, 2022).

Contact: Matthew Morgan, Moorpark College

MSC

**114.06 S24 Update Transfer Level Gateway Completion Dashboard**

Whereas, The California Community College Chancellor's Office issued a memo, "ESLEI 24-15 Required Action: AB 1705 Validation of Equitable Placement, Support and Completion Practices for STEM Programs," dated February 27, 2024[141], instructing colleges to justify the need to keep pre-calculus courses, without which each college's students will no longer have access to college algebra, trigonometry, or pre-calculus after July 1, 2025, but will be placed directly into calculus I;

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[138] February 27, 2024 CCCCO Guidance Memo ESLIE 24-15: https://www.cccco.edu/-/media/CCCCO-Website/docs/memo/ESLEI-2415-AB-1705-Validation-of-Equitable-Placement-Support-and-Completion-Practices-for-STEM-Progr.pdf?la=en&hash=60D9524BAD2695B8D34252BFFDA8CF8F4805F197

[139] AB 1705 (Irwin, 2022): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1705

[140] https://www.cccco.edu/-/media/CCCCO-Website/docs/memo/ESLEI-2415-AB-1705-Validation-of-Equitable-Placement-Support-and-Completion-Practices-for-STEM-Progr.pdf?la=en&hash=60D9524BAD2695B8D34252BFFDA8CF8F4805F197

[141] https://www.cccco.edu/-/media/CCCCO-Website/docs/memo/ESLEI-2415-AB-1705-Validation-of-Equitable-Placement-Support-and-Completion-Practices-for-STEM-Progr.pdf

Whereas, System-wide application of the California Community Colleges Chancellor's Office's "AB 1705 Implementation Guide"[142] has resulted in the elimination of nearly all pre-transfer level math courses at the California Community Colleges, leaving our students few options to take these courses at California Community Colleges on or about July 1, 2023;

Whereas, There exist campuses of the University of California (UC) and the California State University (CSU) that offer science, technology, engineering, and mathematics (STEM) preparatory coursework, and minimum entrance requirements for STEM students at these campuses include completion of at least intermediate algebra, yet the California Community Colleges admit all high school graduates, even those that have not completed minimum entrance requirements for the UC and CSU systems; and

Whereas, The California Community Colleges Chancellor's Office (CCCCO) guidelines for implementation of AB 1705 has continuously been the strictest available and such guidelines for implementation have been justified by data collected and analyzed by The Research and Planning Group contracted by the CCCCO;

Resolved, That the Academic Senate of the California Community Colleges request that the California Community Colleges Chancellor's Office Transfer Level Gateway Completion Dashboard include a data element on all student enrollment, including enrollment data prior to census date;

Resolved, That the Academic Senate of the California Community Colleges request that the California Community Colleges Chancellor's Office Transfer Level Gateway Completion Dashboard include a data element on the number of science, technology, engineering, and math students before and after the implementation stages of AB 1705 (Irwin, 2022)[143], the first stage which eliminated intermediate algebra, and the second stage that will eliminate pre-calculus courses;

Resolved, That the Academic Senate of the California Community Colleges request that the California Community Colleges Chancellor's Office (CCCCO) compare the withdrawal pre-census data to the post-census student success data and include this comparison in the CCCCO's Transfer Level Gateway Completion Dashboard; and

Resolved, That the Academic Senate of the California Community College request that the California Community Colleges Chancellor's Office utilize both student access and withdrawal data in math courses when implementing the *Vision 2030*.

Contact: June Yang, Grossmont College

MSU

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[142] https://www.cccco.edu/-/media/CCCCO-Website/Files/Educational-Services-and-Support/ab-1705-implementation-guide-3-14-23-a11y.pdf

[143] AB 1705 (Irwin, 2022): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1705

## FAILED RESOLUTIONS AND AMENDMENTS

### 102.03.01 S24 Amend Resolution 102.03

Strike the 1st Resolved

~~Resolved, That the Academic Senate for California Community Colleges support that students have access to an equitable college experience whether beginning their college education at a 4-year institution or beginning at a California Community College and transferring to a 4-year institution;~~

Contact: Joshua Scott, Solano Community College

MSF

### 113.09 S24 Oppose Senate Bill 1287 (Glazer, as of April 3, 2024) Public Postsecondary Education: Equity in Higher Education Act: Prohibition on Harassment, Intimidation, and Discrimination

Whereas, Nationwide efforts have successfully silenced[144] students and faculty on college campuses for speaking in support of the Palestinian people, in the name of antisemitism, despite that many scholars[145], credible publications[146], and Jewish organizations such as Jewish Voices for Peace[147], have argued that anti-Zionism is not antisemitic[148], and such efforts to silence pro-Palestinian voices are explicitly Anti-Palestinian, Anti-Arab and Islamophobic;

Whereas, SB 1287 (Glazer as of April 3, 2024)[149] seeks to follow this nationwide trend to limit free speech for safety and equity on college campuses by proposing to "(1) adopt policies within campus-based student codes of conduct that prohibit violence, harassment, intimidation, and discrimination that are intended to, and are reasonably understood by the victims or hearers to, interfere with rights established pursuant to the United States Constitution or the California

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[144] "The Importance of Defending the Free Speech Rights of Pro-Palestinian Students in Florida" https://www.aclu.org/news/free-speech/defending-free-speech-students-justice-palestine-florida#:~:text=Recent%20actions%20by%20Florida%20officials,in%20Palestine%20(SJP)%20chapters.

[145] "A Dangerous Conflation: An open letter from Jewish writers" https://www.nplusonemag.com/online-only/online-only/a-dangerous-conflation/?affid=x

[146] "On Anti-Zionism and Antisemitism. A 'non-Jewish' Jewish perspective" https://www.thenation.com/article/world/antisemitism-palestine-israel-gaza/

[147] "On Antisemitism, Anti-Zionism and Dangerous Conflations" https://www.jewishvoiceforpeace.org/2023/11/09/antisemitism-dangerous/

[148] "The Jerusalem Declaration On Antisemitism" https://jerusalemdeclaration.org/

[149] SB 1287 (Glazer, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB1287

Constitution or otherwise interfere with the free exchange of ideas, or call for or support genocide, (2) maintain and enforce reasonable time, place, and manner restrictions for public protests and demonstrations on campuses, as provided, and (3) develop mandatory training programs to educate students on how to exchange views in an atmosphere of mutual respect and civility,";

Whereas, The American Civil Liberties Union explicitly addresses bills such as SB 1287 (Glazer as of April 3, 2024)[150] stating: "We strongly caution universities against conflating the suppression of speech with the façade of safety,"[151]; and

Whereas, SB 1287 will require significant financial and human resources to implement, adding burdens on colleges, including on administrators, faculty, staff and especially students, as it will police student activists on our campuses, and commit already scarce resources to implementing these restrictive measures which will disproportionately impact students of color as Pomona College faculty and staff noted, "'over 80% of the protesters"' facing disciplinary action are "Black, Indigenous people of color."[152];

Resolved, That the Academic Senate for California Community Colleges oppose SB 1287 (Glazer, as of April 3, 2024)[153] and any additional legislation that seeks to chill free speech and academic freedom on college campuses; and

Resolved, That the Academic Senate for California Community Colleges oppose similar efforts to restrict free speech in relation to the dangerous conflation of support for Palestine with anti-Semitism, and conflation of calls for Palestinian freedom with threats to the safety of Israelis.

Contact: Mona Alsoraimi-Espiritu, San Diego City College

MSF

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[150] "ACLU Open Letter to Colleges and Universities: Reject Efforts to Restrict Constitutionally Protected Speech on Campuses" https://www.aclu.org/press-releases/aclu-open-letter-to-colleges-and-universities-reject-efforts-to-restrict-constitutionally-protected-speech-on-campuses

[151] "MLA Delegates Pass Motion Defending Pro-Palestinian Speech" https://www.insidehighered.com/news/faculty-issues/academic-freedom/2024/01/08/mla-delegates-pass-motion-defending-pro-palestine#:~:text=The%20victorious%20statement%20asks%20the,who%20have%20%E2%80%9Ccondemned%20the%20Israeli

[152] "Punishments Rise as Student Protests Escalate" https://www.insidehighered.com/news/students/free-speech/2024/04/15/punishments-rise-student-protests-escalate

[153] SB 1287 (Glazer, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB1287

## DELEGATES

| College | First Name | Last Name |
|---|---|---|
| Alameda, College of | Jennifer | Fowler |
| Allan Hancock College | Alberto | Restrepo |
| American River College | Brian | Knirk |
| Antelope Valley College | Hal | Huntsman |
| Bakersfield College | Lisa | Harding |
| Barstow College | Melissa | Matteson |
| Berkeley City College | Gabriel | Martinez |
| Butte College | Jess | Vickery |
| Cabrillo College | Anna | Zagorska |
| Calbright College | Michael | Stewart |
| Canada College | David | Eck |
| Canyons, College of | Lisa | Hooper |
| Cerritos College | Dennis | Falcon |
| Cerro Coso College | Yvonne | Mills |
| Chaffey College | Nicole | DeRose |
| Citrus College | Jeremy | Clark |
| Clovis College | Teresa | Mendes |
| Coalinga College | Matt | Magnuson |
| Coastline College | Ann | Holliday |
| College of Marin | Maria | Coulson |
| Columbia College | Marcus | Whisenant |
| Compton College | Sean | Moore |
| Cosumnes River College | Jacob | Velasquez |

| College | First Name | Last Name |
|---|---|---|
| Contra Costa CCD | Chao | Liu |
| Contra Costa College | Gabriela | Segade |
| Copper Mountain College | Jennifer | Anderson |
| Crafton Hills College | Natalie | Lopez |
| Cuesta College | Alexandra | Kahane |
| Cuyamaca College | Manuel | Mancillas-Gomez |
| Cypress College | Kathleen | McAlister |
| De Anza College | Erik | Woodbury |
| Desert, College of | Corbyn | Wild |
| Diablo Valley College | John | Freytag |
| East Los Angeles College | Leticia | Barajas |
| Evergreen Valley College | Henry | Estrada |
| Folsom Lake College | Wayne | Jensen |
| Foothill College | Voltaire | Villanueva |
| Foothill DeAnza CCD | Patricia | Guitron |
| Fresno City College | Jackie | Williams |
| Fullerton College | Jeanette | Rodriguez |
| Gavilan College | Cherise | Mantia |
| Glendale College | Cameron | Hastings |
| Golden West College | Damien | Jordan |
| Grossmont College | Sharon | Sampson |
| Hartnell College | Kelly | Locke |
| Imperial Valley College | Ric | Epps |
| Irvine Valley College | Rebecca | Beck |
| Laney College | Leslie | Blackie |

| College | First Name | Last Name |
|---|---|---|
| Las Positas College | Ashley | Young |
| Lassen College | Adam | Runyan |
| Lemoore College | Jacqui | Shehorn |
| Long Beach City College | Christine | Charles-Bohannon |
| Los Angeles CCD | Angela | Echeverri |
| Los Angeles City College | Anna | Le |
| Los Angeles Mission College | Maryanne | Galindo |
| Los Angeles Pierce College | Margarita | Pillado |
| Los Angeles Southwest College | Erum | Syed |
| Los Angeles Trade Tech College | Marvin | Da Costa |
| Los Angeles Valley College | Edgar | Perez |
| Los Medanos College | Adrianna | Simone |
| Los Rios CCD | Alisa | Shubb |
| Madera College | Erin | Heasley |
| Mendocino College | Nicholas | Petti |
| Merced College | Wanda | Schindler |
| Merritt College | Tom | Renbarger |
| MiraCosta College | Leila | Safaralian |
| Mission College | Joanna | Sobala |
| Modesto Junior College | Gisele | Flores |
| Monterey Peninsula College | Frank | Rivera |
| Moorpark College | Matthew | Morgan |
| Moreno Valley College | Felipe | Galicia |
| Mt. San Antonio College | Kelly | Rivera |
| Mt. San Jacinto College | Michelle | Vogel Trautt |

| College | First Name | Last Name |
|---|---|---|
| Napa Valley College | Matthew | Kronzer |
| Norco College | Kimberly | Bell |
| North Orange Continuing Education | Jennifer | Oo |
| Ohlone College | Kyle | Livie |
| Orange Coast College | Rendell | Drew |
| Oxnard College | Dolores | Ortiz |
| Palo Verde College | Sarah | Frid |
| Palomar College | Wendy | Nelson |
| Pasadena City College | Lindsey | Ruiz |
| Peralta CCD | Matthew | Goldstein |
| Porterville College | Rebecca | Baird |
| Rancho Santiago CCD | Tara | Kubicka-Miller |
| Redwoods, College of the | Deanna | Herrera |
| Reedley College | Andrew | Strankman |
| Rio Hondo College | Farrah | Nakatani |
| Riverside City College | Jo | Scott-Coe |
| Sacramento City College | Amy | Strimling |
| Saddleback College | Femia | Scarfone |
| San Bernardino Valley College | Davena | Burns-Peter |
| San Diego City College | Mona | Alsoraimi-Espiritu |
| San Diego Continuing Ed | Richard | Weinroth |
| San Diego Mesa College | Andrew | Hoffman |
| San Diego Miramar College | Pablo | Martin |
| San Francisco, City College of | Sheri | Miraglia |

| College | First Name | Last Name |
|---|---|---|
| San Joaquin Delta College | Becky | Plaza |
| San Jose City College | Heidi | Kozlowski |
| San Jose-Evergreen CCD | Eric | Narveson |
| San Mateo CCD | Lindsey | Ayotte |
| San Mateo, College of | Tod | Windisch |
| Santa Ana College | Alejandro | Moreno |
| Santa Barbara City College | Kathy | O'Connor |
| Santa Monica College | Jamar | London |
| Santa Rosa Junior College | Nancy | Persons |
| Santiago Canyon College | Craig | Rutan |
| Sequoias, College of the | Ramyar Alavi | Moghaddam |
| Shasta College | Jacquelyn | Horton |
| Sierra College | Andre | Mendoza |
| Siskiyous, College of the | Andrea | Craddock |
| Skyline College | Cassidy | Ryan |
| Solano College | Joshua | Scott |
| Taft College | Candace | Duron |
| Ventura College | Rachel | Johnson |
| West Los Angeles College | Patricia | Zuk |
| West Valley College | Meg | Farrell |
| Woodland College | Matt | Clark |
| Yuba College | Meridith | Selden |

| Executive Committee Member | First Name | Last Name |
|---|---|---|
| President | Cheryl | Aschenbach |
| Vice President | Manuel | Vélez |
| Secretary | LaTonya | Parker |
| Treasurer | Robert L. | Stewart Jr. |
| At-large Representative | Christopher | Howerton |
| At-large Representative | Juan | Arzola |
| North Representative | Eric | Wada |
| North Representative | Mitra | Sapienza |
| South Representative | Kimberley H. | Stiemke |
| South Representative | Carlos | Guerrero |
| Area A Representative | Stephanie | Curry |
| Area B Representative | Karen | Chow |
| Area C Representative | Erik D. | Reese |
| Area D Representative | María-José | Zeledón-Pérez |

# Foothill College

## College Curriculum Committee

## Recommendations for Revision of Local General Education Requirements

Following our extensive review and deliberation, and building on our previous discussions documented in the "Report on Progress Regarding Local General Education Requirements," the College Curriculum Committee (CCC) wishes to formally recommend specific changes to Foothill College's general education requirements. These recommendations aim to align our programs with state guidelines, enhance student degree completion rates, and reflect valuable input from our constituents and advisory bodies.

1. **Lifelong Learning**

   In response to guidance from the Academic Senate for California Community Colleges (ASCCC) and directives from the State of California, we propose retaining the requirement but lowering it to "at least one course in a GE area designated as Lifelong Learning". Although the state has advised removal of this requirement, we believe that incorporating it strategically can enhance our students' educational experience while adhering to ASCCC's recommendations to maintain these enriching courses. Additionally, it is our understanding that our counterparts at De Anza College will be making a similar recommendation.

2. **Natural Sciences (Area 5) Lab**

   After careful consideration of current educational trends and feedback, we suggest removing the lab requirement from the Natural Sciences GE area. This adjustment would facilitate a more streamlined curriculum and would have minimal impact on most natural science courses at Foothill, which already integrate lab components effectively within their structure. It should be noted that De Anza College plans to focus on aligning with CALGETC requirements and will for this reason be recommending retention of the lab requirement.

3. **Math & Quantitative Reasoning (Area 2)**

   We recommend, to the extent possible, transitioning math courses currently categorized under Foothill College Area V to the newly designated Area 2. Other courses in Area V should likewise be transferred. This move is intended to maintain the relevance and integrity of our offerings in Math and Quantitative Reasoning, ensuring they continue to meet the educational goals of our students efficiently.

The CCC believes these changes will provide a more flexible and responsive curriculum that better serves the needs of our students and aligns with both our institutional mission and state-wide educational objectives.We look forward to your feedback and hope for your support in implementing these modifications to strengthen the academic framework at Foothill College.

Respectfully submitted on behalf of the Foothill College Curriculum Committee.

Sincerely,
Benjamin Kaupp, Faculty Co-Chair

# Pre-STEM, Certificate of Achievement

## Basic Information

**Faculty Author(s)**

| Users |
| --- |
| Sarah Parikh |

**Department**
Engineering

**Division**
Science Technology Engineering and Mathematics

**Title of Degree/Certificate**
Pre-STEM

**Type of Award**
Certificate of Achievement

**Workforce/CTE Program:**
Yes

**Effective Catalog Edition:**
2024-2025

## Certificate of Achievement Workforce Narrative

**Program Goals and Objectives**
The Certificate of Achievement in Pre-STEM would provide knowledge connecting the Certificate of Achievement in Semiconductor Processing to the AS degree in Semiconductor Engineering. The Pre-STEM certificate includes the math and science skills students need to continue to advance as a semiconductor process technician on their way to a semiconductor engineer. The Certificate of Achievement in Pre-STEM would help students to be ready to start a STEM AS degree.

**Program Learning Outcomes**

- Students will be prepared to start calculus.
- Students will be able to apply foundational concepts in science or engineering to both their workplace applications and their future science and engineering courses.
- Students will be prepared for the next stages of a career in semiconductor processing.

## Catalog Description

The Certificate of Achievement in Pre-STEM provides foundational knowledge for students who are not yet ready to begin a STEM associate's degree pathway. This certificate is open to all students with an interest in preparing for a STEM AS degree or AS-T degree. Students in the semiconductor apprenticeship pathway can complete the Certificate of Achievement in Pre-STEM as part of their pathway before embarking on the AS degree in Semiconductor Engineering.

## Program Requirements

**Core Course Units:** 15

Course List

| Code | Title | Units |
|---|---|---|
| MATH F048A | PRECALCULUS I | 5 |
| MATH F048B | PRECALCULUS II | 5 |
| MATH F048C | PRECALCULUS III | 5 |

**Support Course Units:** 10 (select two courses)

Course List

| Code | Title | Units |
|---|---|---|
| ASTR F010A | GENERAL ASTRONOMY: SOLAR SYSTEM | 5 |
| BIOL F010. | GENERAL BIOLOGY: BASIC PRINCIPLES | 5 |
| CHEM F025. | FUNDAMENTALS OF CHEMISTRY | 5 |
| ENGR F010. | INTRODUCTION TO ENGINEERING | 5 |
| PHYS F006. | INTRODUCTORY PHYSICS | 5 |

**Total Units:** 25

## Proposed Sequence

| Term | Units |
|---|---|
| Year 1, Fall | 5 |
| Year 1, Winter | 10 |
| Year 1, Spring | 10 |

## Master Planning

The Certificate of Achievement in Pre-STEM is aligned with Foothill College's mission statement regarding preparing students for the workforce in addition to critical thinking skills and technical knowledge to be a productive member of a democratic society. The

certificate will also prepare students for either a local degree or transfer degree pathway, which is also aligned with Foothill College's goals.

**Enrollment and Completer Projections**

The initial year is expected to have 30 semiconductor apprenticeship students complete this certificate. Additionally, it is expected that 100 students from other fields of STEM will find this certificate helpful as preparation for their degrees. The apprenticeship program is expected to grow, and in five years it is expected that there will be approximately 100 apprenticeship students in this certificate program, not only from the semiconductor apprenticeship program but potentially from other apprenticeship programs as well.

**Historical Enrollment Data**

| Course # | Course Title | Y1 - Annual Sections | Y1 - Annual Enrollment | Y2 - Annual Sections | Y2 - Annual Enrollment |
|---|---|---|---|---|---|
| MATH 48A | Precalculus I | 15 | 375 | 18 | 352 |
| MATH 48B | Precalculus II | 9 | 201 | 8 | 219 |
| MATH 48C | Precalculus III | 9 | 284 | 9 | 288 |
| ASTR 10A | General Astronomy: Solar System | 2 | 78 | 2 | 84 |
| BIOL 10 | General Biology: Basic Principles | 13 | 316 | 12 | 299 |
| CHEM 25 | Fundamentals of Chemistry | 16 | 445 | 17 | 487 |
| ENGR 10 | Introduction to Engineering | 4 | 92 | 2 | 64 |
| PHYS 6 | Introductory Physics | 2 | 48 | 2 | 59 |

**Place of Program in Curriculum/Similar Programs**

This certificate is new. It will bridge between the Certificate of Achievement in Semiconductor Processing and the AS degree in Semiconductor Engineering. There is not currently a program like this at Foothill College. Students who feel underprepared to begin other STEM degree programs may take this certificate of achievement to prepare them for other STEM degrees, as well.

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

As far as I am aware, there are no other programs like this in the Foothill College service area.

**Additional Information Required for State Submission:**

**TOP Code:** 0945.00 - Industrial Systems Technology and Maintenance

**CIP Code:** 47.0303 - Industrial Mechanics and Maintenance Technology/Technician

**Will any new resources be required (e.g., facilities, equipment, personnel)?** No

**Gainful Employment:** Yes

**Distance Education:** 0%

# Labor Market Analysis for Program Recommendation Semiconductor Process Technician Occupations Foothill College

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

**August 2023**

## Recommendation

Based on all available data, there appears to be an "undersupply" of Semiconductor Process Technician workers compared to the demand for this cluster of occupations in the Bay region and in the Silicon Valley sub-region (Santa Clara counties). There is a projected annual gap of about 226 students in the Bay region and 103 students in the Silicon Valley Sub-Region.

## Introduction

This report provides student outcomes data on employment and earnings for TOP 0945.00 - Industrial Systems Technology and Maintenance programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Foothill College and in the region.

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

- **Electrical and Electronics Drafters (17-3012):** Prepare wiring diagrams, circuit board assembly diagrams, and layout drawings used for the manufacture, installation, or repair of electrical equipment.
  Entry-Level Educational Requirement: Associate's degree
  Training Requirement: None
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 58%

- **Industrial Engineering Technologists and Technicians (17-3026):** Apply engineering theory and principles to problems of industrial layout or manufacturing production, usually under the direction of engineering staff. May perform time and motion studies on worker operations in a variety of industries for purposes such as establishing standard production rates or improving efficiency.
  Entry-Level Educational Requirement: Associate's degree
  Training Requirement: None
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 51%

## Occupational Demand

**Table 1. Employment Outlook for Semiconductor Process Technician Occupations in Bay Region**

| Occupation | 2021 Jobs | 2026 Jobs | 5-yr Change | 5-yr % Change | 5-yr Total Openings | Annual Openings | 25% Hourly Earning | Median Hourly Wage |
|---|---|---|---|---|---|---|---|---|
| Electrical and Electronics Drafters | 884 | 967 | 83 | 9% | 512 | 102 | $31 | $39 |
| Industrial Engineering Technologists and Technicians | 985 | 1,212 | 227 | 23% | 766 | 153 | $27 | $32 |
| **Total** | **1,868** | **2,179** | **311** | **17%** | **1,278** | **255** | | |

Source: Lightcast 2022.3

**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 Semiconductor Process Technician Occupations in Silicon Valley Sub-region**

| Occupation | 2021 Jobs | 2026 Jobs | 5-yr Change | 5-yr % Change | 5-yr Total Openings | Annual Openings | 25% Hourly Earning | Median Hourly Wage |
|---|---|---|---|---|---|---|---|---|
| Electrical and Electronics Drafters | 470 | 496 | 26 | 6% | 248 | 50 | $34 | $44 |
| Industrial Engineering Technologists and Technicians | 416 | 492 | 76 | 18% | 301 | 60 | $28 | $34 |
| **Total** | **886** | **988** | **102** | **12%** | **549** | **110** | | |

Source: Lightcast 2022.3

**Silicon Valley Sub-Region includes:** Santa Clara Counties

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

**Table 3. Number of Job Postings by Occupation for latest 12 months (Aug. 2022 - July 2023)**

| Occupation | Bay Region | Silicon Valley |
|---|---|---|
| Industrial Engineering Technologists and Technicians | 5,409 | 1,553 |
| Electrical and Electronics Drafters | 869 | 606 |

Source: Lightcast

**Table 4a. Top Job Titles for Semiconductor Process Technician Occupations for latest 12 months (Aug. 2022 - July 2023) - Bay Region**

| Title | Bay | Title | Bay |
|---|---|---|---|
| Manufacturing Technicians | 1,071 | Operations Technicians | 68 |
| Maintenance Technicians | 1,058 | Automotive Maintenance Technicians | 59 |
| Production Technicians | 358 | Analog IC Design Engineers | 51 |
| Equipment Maintenance Technicians | 142 | Manufacturing Specialists | 45 |
| Maintenance Workers | 132 | Process Operators | 44 |
| Process Technicians | 132 | Production Test Technicians | 40 |
| Analog Design Engineers | 118 | Maintenance Engineers | 39 |

| Title | Bay | Title | Bay |
|---|---|---|---|
| Electrical Designers | 77 | PCB Designers | 39 |
| Manufacturing Engineering Technicians | 68 | CAD Engineers | 38 |

Source: Lightcast

**Table 4b. Top Job Titles for Semiconductor Process Technician Occupations for latest 12 months (Aug. 2022 – July 2023) - Silicon Valley Sub-Region**

| Title | Silicon Valley | Title | Silicon Valley |
|---|---|---|---|
| Manufacturing Technicians | 400 | Electrical Designers | 36 |
| Maintenance Technicians | 200 | Plating Operators | 28 |
| Analog Design Engineers | 113 | Production Test Technicians | 28 |
| Process Technicians | 83 | Maintenance Workers | 27 |
| Production Technicians | 66 | Manufacturing Assembly Technicians | 27 |
| Analog IC Design Engineers | 51 | Equipment Maintenance Engineers | 24 |
| Manufacturing Engineering Technicians | 45 | PCB Designers | 24 |
| Equipment Maintenance Technicians | 44 | Analog Designers | 17 |
| CAD Engineers | 36 | Cleanroom Technicians | 17 |

Source: Lightcast

## Industry Concentration

**Table 5. Industries hiring Semiconductor Process Technician Workers in Bay Region**

| Industry - 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2021) | Jobs in Industry (2026) | % Change (2021-26) | % Occupation Group in Industry (2022) |
|---|---|---|---|---|
| Semiconductor and Related Device Manufacturing | 242 | 261 | 8% | 12% |
| Engineering Services | 234 | 258 | 10% | 12% |
| Electronic Computer Manufacturing | 218 | 196 | -10% | 9% |
| Electrical Contractors and Other Wiring Installation Contractors | 89 | 107 | 20% | 5% |
| Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) | 58 | 92 | 57% | 3% |
| Other Electronic Component Manufacturing | 45 | 47 | 3% | 2% |
| Printed Circuit Assembly (Electronic Assembly) Manufacturing | 50 | 53 | 5% | 2% |
| Research and Development in Biotechnology (except Nanobiotechnology) | 38 | 66 | 75% | 2% |
| Architectural Services | 33 | 39 | 17% | 2% |

| Industry - 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2021) | Jobs in Industry (2026) | % Change (2021-26) | % Occupation Group in Industry (2022) |
|---|---|---|---|---|
| Pharmaceutical Preparation Manufacturing | 32 | 38 | 16% | 2% |

Source: Lightcast 2022.3

**Table 6. Top Employers Posting Semiconductor Process Technician Occupations in Bay Region and Silicon Valley Sub-Region (Aug. 2022 - July 2023)**

| Employer | Bay | Employer | Silicon Valley |
|---|---|---|---|
| Aerotek | 150 | Apple | 50 |
| Tesla | 139 | Randstad | 44 |
| Randstad | 131 | Sanmina | 38 |
| Kelly Services | 109 | Actalent | 33 |
| Puls | 102 | Aerotek | 28 |
| AT&T | 89 | Applied Materials | 28 |

Source: Lightcast

## Educational Supply

There are three (3) community colleges in the Bay Region issuing 28 awards on average annually (last 3 years ending 2021-22) on TOP 0945.00 - Industrial Systems Technology and Maintenance. In the Silicon Valley Sub-Region, there is one (1) community college that issued six (6) awards on average annually (last 3 years) on this TOP code.

There is one (1) other CTE educational institution in the Bay Region issuing one (1) award on average annually (last 3 years ending 2021-22) on CIP 47.0303 - Industrial Mechanics and Maintenance Technology/Technician. There are no other CTE educational institution in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this CIP code.

**Table 7. Community College Awards on TOP 0945.00 - Industrial Systems Technology and Maintenance in Bay Region**

| College | Subregion | Associate Degree | High unit Certificate | Low unit Certificate | Total |
|---|---|---|---|---|---|
| Laney | East Bay | 0 | 0 | 1 | 1 |
| Los Medanos | East Bay | 12 | 8 | 1 | 21 |
| San Jose City | Silicon Valley | 2 | 4 | 0 | 6 |
| **Total** | | **14** | **12** | **2** | **28** |

Source: Data Mart

Note: The annual average for awards is 2019-20 to 2021-22.

**Table 7b. Other CTE Institutions Awards on CIP 47.0303 - Industrial Mechanics and Maintenance Technology/Technician in Bay Region**

| College | Subregion | Certificates of at least 1 but < 2 years | Total |
|---|---|---|---|
| Aviation Institute of Maintenance-Fremont | East Bay | 1 | 1 |

| College | Subregion | Certificates of at least 1 but < 2 years | Total |
|---|---|---|---|
| **Total** | | **1** | **1** |

Source: Data Mart

Note: The annual average for awards is 2019-20 to 2021-22.

## Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 255 annual openings for the Semiconductor Process Technician occupational cluster and 29 annual (3-year average) awards for an annual undersupply of 226 students. In the Silicon Valley Sub-Region, there is also a gap with 110 annual openings and seven (7) annual (3-year average) awards for an annual undersupply of 103 students.

## Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0945.00 - Industrial Systems Technology and Maintenance**

| Metric Outcomes | Bay All CTE Programs | Foothill All CTE Programs | State 0945.00 | Bay 0945.00 | Silicon Valley 0945.00 | Foothill 0945.00 |
|---|---|---|---|---|---|---|
| Students with a Job Closely Related to Their Field of Study | 74% | 88% | 74% | 79% | 71% | N/A |
| Median Annual Earnings for SWP Exiting Students | $53,090 | $73,174 | $49,735 | $61,436 | $71,804 | N/A |
| Median Change in Earnings for SWP Exiting Students | 24% | 42% | 35% | 43% | 34% | N/A |
| Exiting Students Who Attained the Living Wage | 54% | 66% | 66% | 61% | 72% | N/A |

Source: Launchboard Strong Workforce Program Median of 2018 to 2021.

## Skills, Certifications and Education

**Table 9. Top Skills for Semiconductor Process Technician Occupations in Bay Region (Aug. 2022 – July 2023)**

| Skill | Posting | Skill | Posting |
|---|---|---|---|
| Good Manufacturing Practices | 715 | Test Equipment | 334 |
| Hand Tools | 597 | Production Equipment | 332 |
| Preventive Maintenance | 506 | Semiconductors | 320 |
| Manufacturing Processes | 477 | Electrical Systems | 309 |
| Machinery | 448 | Environment Health And Safety | 302 |
| Power Tool Operation | 407 | Debugging | 292 |
| Automation | 401 | General Mathematics | 286 |
| Electrical Engineering | 397 | Electronics | 270 |
| Equipment Maintenance | 384 | Hydraulics | 250 |

| Skill | Posting | Skill | Posting |
|---|---|---|---|
| Standard Operating Procedure | 367 | Forklift Truck | 245 |

Source: Lightcast

**Table 10. Certifications for Semiconductor Process Technician Occupations in Bay Region (Aug. 2022 - July 2023)**

| Certification | Posting | Certification | Posting |
|---|---|---|---|
| Valid Driver's License | 782 | DOT Certification | 17 |
| Security Clearance | 77 | CDL Class B License | 14 |
| CDL Class C License | 69 | Engineer in Training | 13 |
| Airframe & Powerplant (A&P) Certificate | 53 | Certified Mold Remediation Technician | 13 |
| Forklift Certification | 50 | LEED Accredited Professional (AP) | 12 |
| FCC General Radiotelephone Operator License (GROL) | 25 | CompTIA A+ | 12 |
| CDL Class A License | 22 | Professional Engineer (PE) License | 12 |
| Commercial Driver's License (CDL) | 21 | Product Certification | 11 |

Source: Lightcast

**Table 11. Education Requirements for Semiconductor Process Technician Occupations in Bay Region**

| Education Level | Job Postings | % of Total |
|---|---|---|
| High school or GED | 2,112 | 45% |
| Associate degree | 938 | 21% |
| Bachelor's degree & higher | 1,605 | 34% |

Source: Lightcast

Note: 44% of records have been excluded because they do not include a degree level. As a result, the chart above may not be representative of the full sample.

## Methodology

Occupations for this report were identified by use of job descriptions and skills listed in O*Net. Labor demand data is sourced from Lightcast occupation and job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CCCCO Data Mart and CTE Launchboard.

## Sources

O*Net Online
Lightcast
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:

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# General Education Review Request
# AREA III - NATURAL SCIENCES

**Course Number & Title: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1 - Pipe Trades Training Center students)**

**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 III – Natural Sciences:**

Natural science courses deal with the physical universe, the testable principles that govern its operations, its life forms, and its natural, measurable phenomena. One primary purpose of these courses is to promote an awareness of the methods of scientific inquiry and the power of scientific inquiry to describe the natural world. Emphasis is on understanding and applying the scientific method, which promotes a sense of discovery, fosters critical analysis, and encourages an understanding of the relationships between science and other human activities. A General Education natural science course should exhibit the same methods and skills used by scientists when seeking an understanding of the uncertainty and complexity of the natural world.

A successful General Education Natural Science course ***must*** promote in students:

N1. An understanding of the scientific method, including its attributes and limitations;
N2. The ability to make judgments regarding the validity of scientific evidence;
N3. An understanding of the relationship between hypothesis, experiment, fact, theory and law;
N4. The ability to use inductive and deductive reasoning;
N5. The practice of thinking critically, including evaluating ideas and contrasting opinions;
N6. The ability to evaluate, use and communicate scientific data;
N7. An introduction to current scientific theories within the field of study;
N8. Experience with laboratory activities using laboratory techniques consistent with those employed within the discipline;
N9. Experience applying recognized scientific methodology in laboratory activities.*****

Additional criterion thought to enhance a natural science course include any of the following:

N10. An appreciation of the contributions of science to modern life;
N11. An appreciation of the contributions to science of diverse people and cultures;
N12. An understanding of the interdependence of humans and their environment;
N13. A recognition of how human behavior has altered the environment;
N14. A sense of the history of science and the ideas and experiments that have led to our present understanding.

Be advised that the following criteria for a GE lab is consistent with a definition provided by the National Research Council, 2005:

*"Laboratory experiences provide opportunities for students to interact directly with the material world (or with data drawn from the material world), using the tools, data collection techniques, models, and theories of science. This definition includes student interaction with astronomical databases, genome databases, databases of climatic events over long time periods, and other large data sets derived directly from the material world. It does not include student manipulation or analysis of data created by a teacher to simulate direct interaction with the material world. For example, if a physics teacher presented students with a constructed data set on the weight and required pulling force for boxes pulled across desks with different surfaces and asked them to analyze these data, the students' problem-*

# General Education Review Request
# AREA III - NATURAL SCIENCES

*solving activity would not constitute a laboratory experience in the committee's definition."*

***** To accomplish these goals a laboratory course ***must*** emphasize the methods of scientific inquiry by engaging students in:

NL15. Observation and collection of data through direct interaction with the material world;
NL16. Use of tools, data collection techniques, models and theories of science most prevalent in relevant research laboratories;
NL17. Data may be from large data sets derived directly from the material world, but may not rely exclusively on student manipulation or analysis of data created by a teacher to simulate direct interaction with the material world;
NL18. Analysis and interpretation of data;
NL19. Formulation and testing of hypotheses;
NL20. Communicating effectively through oral and/or written work;
NL21. A minimum of one collaborative activity;
NL22. A minimum of one laboratory unit or the equivalent of 33 hours of laboratory instruction per quarter.

Additional criterion thought to enhance a natural science laboratory include any of the following:

NL23. Keep accurate and complete experimental records;
NL24. Perform quantitative and qualitative measurements;
NL25. Interpret experimental results and draw reasonable conclusions;
NL26. Analyze data statistically and assess the reliability of results;
NL27. Critically evaluate the design of an experiment;
NL28. Design experiments to test hypotheses;
NL29. Work effectively in small groups and teams.

**Course Number & Title: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1 - Pipe Trades Training Center students)**

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:

**N1.** An understanding of the scientific method, including its attributes and limitations;

**Matching course component(s):**
Throughout their five years of study, HVAC students frequently learn about the scientific method as an approach to thinking about their work and as a practical application of their work. Apprentices learn the scientific method through hypothesis-driven troubleshooting of HVACR systems, as seen in year two, semester 2's focus on electrical controls and safety standards. Importantly, they learn the limitations of such thinking so as to make sure important redundancies ensure their work.

(Year 2, Semester 2, Module 10; Introduction to HVACR Automatics Controls)

(APPT 154, APPT 155, APPT 158)

**N2.** The ability to make judgments regarding the validity of scientific evidence;

**Matching course component(s):**
The assessment of validity is essential in all the trades and HVAC students are taught to make reasoned based judgements in a variety of areas they study, from airflow calculations, to the necessary safety standards that ensure public safety. Judgments on scientific evidence are integral, for example, in year three, semester one, where advanced electrical controls and heat pump systems demand rigorous evaluation of system performance.

(Year 3, Semester 1, Module 14; Heating and Air Conditioning Systems)

(APPT 152, APPT 159, APPT 155)

**N3.** An understanding of the relationship between hypothesis, experiment, fact, theory and law;

**Matching course component(s):**
HVAC students are taught to approach their work as thinkers and strategists. This requires developing hypotheses and testing those hypotheses through experimentation and refinement based on the facts of that experimentation. The relationship between hypothesis, experiment, fact, theory, and law is exemplified in year 5, semester one start test and balance activities involving air and hydronic systems.

(Year 5, Semester 1, Module 23 & 24; Air and Water side balancing)

(APPT 152, APPT 159, APPT 155)

**N4.** The ability to use inductive and deductive reasoning;

**Matching course component(s):**
HVAC students learn the distinctions between inductive and deductive reasoning, but also how and when to employ each approach in their professional lives. As professionals, these students must know how to diagnose what is wrong with an existing building (for instance), to deduce the problems, and must also use this information to reason their way to a solution. Inductive and deductive reasoning are utilized in year two, semester one with mechanical systems and refrigeration principles leading to practical applications in system efficiency.

(Year 2, Semester 1, Module 8; Refrigeration)

(APPT 154, APPT 159, APPT 155)

**N5.** The practice of thinking critically, including evaluating ideas and contrasting opinions;

**Matching course component(s):**
HVAC students must know how to evaluate ideas and contrasting opinions. This application of critical thinking is essential in their study and excellent preparation for work in the field where the competing ideas of practitioners and stakeholders must be assessed and addressed. Critical thinking is developed throughout the program as apprentices evaluate and contrast various refrigeration and air conditioning system designs and diagnoses, such as those in year four, semester one.

(Year 4, Semester 1, Module 19; Commercial HVACR Equipment)

**N6.** The ability to evaluate, use and communicate scientific data;

**Matching course component(s):**
Apprentices encounter and learn to assess scientific data throughout their course of study. They must learn to interpret technical diagrams and schematics, understand specifications, and effectively communicate findings and recommendations to all stakeholders in a project. Apprentices evaluate, use, and communicate scientific data through exercises in reading system prints and gauging system characteristics, notably in year one, semester two.

(Year 1, Semester 2, Module 6; Basic Refrigeration and Heating)

(APPT 157, APPT 158, APPT 155)

**N7.** An introduction to current scientific theories within the field of study;

**Matching course component(s):**
Training in the HVAC program includes the latest scientific theories affecting trade practices, such as advancements in energy efficiency or sustainable materials. Current scientific theories are addressed in year three, two's study of pneumatic and electrical control systems, illustrating the advancements in building automation systems.

(Year 3, Semester 2, Module 15, 16 & 17; Control Systems, Pneumatic Controls, and DDC Controls)

(APPT 156, APPT 159, APPT 155)

**N8.** Experience with laboratory activities using laboratory techniques consistent with those employed within the discipline;

**Matching course component(s):**

Hands-on lab sessions mimic real-world scenarios, teaching apprentices to apply theoretical knowledge using trade-specific tools and techniques. Laboratory activities consistent with HVACR disciplines are conducted in year one, semester one through hands-on tool usage and soldering exercises.

(Year 1, Semester 1, Module 4 & 5; Basic Tools & Soldering and Brazing)

(APPT 151, APPT 159, APPT 157)

**N9.** Experience applying recognized scientific methodology in laboratory activities.

**Matching course component(s):**
Apprentices systematically approach problem-solving in labs, reinforcing the application of scientific methods in their work. Recognized scientific methodology is applied in lab activities, particularly in year two, semester one's adjustments of TXV and system operations measurements.

(Year 2, Semester 1, Module 9; Refrigerant Controls)

(APPT 153, APPT 158, APPT 157)

## Depth Map: Additionally, include any of the following:

**N10.** An appreciation of the contributions of science to modern life;

**Matching course component(s):**
Discussion sessions highlight how advances in trade technologies impact everyday life, from improved home heating systems to smart plumbing solutions. Apprentices appreciate the impact of science in HVACR through studies of advancements in refrigerant management and energy efficiency, emphasized in year two, semester two and year four, semester two.

(Year 2, Semester 2, Module 12; EPA Refrigerant Handling Guidelines, Year 4, Semester 2, Module 22; Chillers)

(APPT 152, APPT 154, APPT 155)

**N11.** An appreciation of the contributions to science of diverse people and cultures;

**Matching course component(s):**
Cultural and historical studies included in the curriculum underscore diverse contributions to trade sciences and technological advancements and the impact of the trades on the social mobility of underrepresented groups. The curriculum acknowledges the diverse contributions to HVACR science in year one, semester one's Apprentice Orientation & UA Heritage section.

(Year 1, Semester 1, Module 1; Union Heritage)

(APPT 152, APPT 151)

**N12.** An understanding of the interdependence of humans and their environment;

**Matching course component(s):**
Environmental studies emphasize sustainable practices, the importance of energy conservation, and the trades' roles in shaping the built environment. Year three, semester two's focus on DDC and building automation systems highlights the interdependence of humans and their environment through energy management.

(Year 3, Semester 2, Module 17; DDC Controls)

(APPT 156, APPT 159, APPT 154)

**N13.** A recognition of how human behavior has altered the environment;

**Matching course component(s):**

Apprentices examine case studies on past and present trade practices, learning how they have contributed to environmental challenges and solutions. The program demonstrates how human behavior has altered the environment through environmentally responsible practices taught in refrigerant handling guidelines in year two, semester two.

(Year 2, Semester 2, Module 12; EPA Refrigerant Handling Guidelines)

(APPT 154, APPT 159, APPT 155)

**N14.** A sense of the history of science and the ideas and experiments that have led to our present understanding.

**Matching course component(s):**
The evolution of trade technologies is taught through an historical lens, connecting past innovations to current practices. Students in the HVAC program receive instruction on the evolution of the science and technology that have led to advancements not only in the field, but also in the building trades in general. Students in the program not only learn the specifics of their trade but the role of their trade in supporting modern life and the science that has enabled it.

(Year 1, Semester 2, Module 6; Basic Refrigeration and Electricity)

(APPT 152, APPT 159, APPT 155)

## Depth Map: <u>Additionally</u>, must emphasize the following:

**N15.** Observation and collection of data through direct interaction with the material world;

**Matching course component(s):**
Apprentices collect data firsthand during installations, repairs, and maintenance, learning to observe and record accurately. Direct observation and data collection is integral to labs, especially those in Y5S1 that involve testing and balancing air and hydronic systems.

(Year 5, Semester 1, Module 23 & 24; Air and Water side balancing)

(APPT 157, APPT 159, APPT 155)

**N16.** Use of tools, data collection techniques, models and theories of science most prevalent in relevant research laboratories;

**Matching course component(s):**
Training includes the use of industry-standard tools and techniques for data collection, analysis, and application in the field. Tools and data collection techniques are used throughout the program, especially during Y1S1 with Basic Tools and Soldering, where the focus is on accurate measurements.

(Year 1, Semester 1, Module 4 & 5; Basic Tools and Soldering/ Brazing)

(APPT 152, APPT 159, APPT 155)

**N17.** Data may be from large data sets derived directly from the material world, but may not rely exclusively on student manipulation or analysis of data created by a teacher to simulate direct interaction with the material world;

**Matching course component(s):**
Apprentices are exposed to real-world data sets, learning to navigate and interpret extensive information for practical application. Apprentices work with data derived from material systems, particularly in Y2S1, where they adjust TXVs and measure system characteristics.

(Year 2, Semester 1, Module 9; Refrigerant Controls)

(APPT 153, APPT 154, APPT 155)

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## AREA III - NATURAL SCIENCES

**N18.** Analysis and interpretation of data;

**Matching course component(s):**
Analysis and interpretation of data: Data gathered from diagnostics and testing are analyzed, teaching apprentices to make informed decisions based on their findings. Data interpretation is crucial in Y4S1, where rigging techniques require understanding the effects of forces and loads.

(Year 4, Semester 1, Module 18; Rigging)

(APPT 152, APPT 157, APPT 155)

**N19.** Formulation and testing of hypotheses;

**Matching course component(s):**
Through troubleshooting exercises, apprentices formulate hypotheses and test them, refining their approach based on results. Hypothesis formulation and testing occur in Y5S1, where apprentices perform fan law calculations and air balance.

(Year 5, Semester 1, Module 23 & 24; Air and Water side balancing)

(APPT 156, APPT 159, APPT 158)

**N20.** Communicating effectively through oral and/or written work;

**Matching course component(s):**
Effective communication skills are emphasized, enabling apprentices to document and share detailed technical information clearly and concisely. This is essential in an industry where multiple disciplines must coordinate in order to achieve their collective goals. Effective communication is particularly stressed in Y1S1, which covers Customer Service and Union Heritage.

(Year 1, Semester 1, Module 1 & 2; Union Heritage and Customer Service)

(APPT 152, APPT 154, APPT 155, 157, 158)

**N21.** A minimum of one collaborative activity;

**Matching course component(s):**
Group projects foster teamwork, illustrating the importance of collaboration in solving complex trade-related problems. Collaborative activities are part of the program's pedagogy, as seen in the lab exercises of Y2S1's Mechanical Systems.

(Year 2, Semester 1,Module 9; Refrigerant Controls)

(APPT 152, APPT 154, APPT 155, 157, 158)

**N22.** A minimum of one laboratory unit or the equivalent of 33 hours of laboratory instruction per quarter.

**Matching course component(s):**
The program ensures ample lab time for hands-on learning, exceeding the minimum requirement to solidify practical skills. Each semester, including Y3S1's Advanced Electrical Controls, likely exceeds the minimum lab instruction time requirement.

(Year 3, Semester 1, Module 13; Advanced Electrical Controls)

(APPT 152, APPT 154, APPT 155, 157, 158)

## Depth Map: <u>Additionally</u>, include <u>any</u> of the following:

**N23.** Keep accurate and complete experimental records;

**Matching course component(s):**

Apprentices learn the importance of thorough documentation for maintaining system histories and supporting future troubleshooting efforts. Keeping experimental records might be taught within Y5S1's Start Test & Balance curriculum, emphasizing accurate documentation of test results.

(Year 5, Semester 1, Module 23 & 24; Air and Water side balancing)

(APPT 152, APPT 154, APPT 156, APPT 157, APPT 159)

**N24.** Perform quantitative and qualitative measurements;

**Matching course component(s):**
Precision in measuring and assessing system components and performance is stressed, critical for ensuring the efficacy of solutions. Quantitative and qualitative measurements are at the heart of the Y2S1 curriculum, focusing on practical labs involving system operating characteristics.

(Year 2, Semester 1, Module 9; Refrigerant Controls)

(APPT 153, APPT 154, APPT 156, APPT 157, APPT 159)

**N25.** Interpret experimental results and draw reasonable conclusions;

**Matching course component(s):**
Apprentices use their understanding of trade principles to interpret results from experiments or diagnostic tests, drawing conclusions that guide their actions. Interpreting experimental results is a key component of Y4S2's curriculum, where troubleshooting of boilers and chillers is taught.

(Year 4, Semester 2, Module 21 & 22; Boilers and Chillers)

(APPT 154, APPT 156, APPT 157, APPT 159)

**N26.** Analyze data statistically and assess the reliability of results;

**Matching course component(s):**
Statistical analysis tools are introduced, enabling apprentices to assess the reliability of their findings and understand variance in system performance. Statistical data analysis is applied when evaluating system performances, potentially during Y3S1's lab exercises on advanced control systems.

(Year 3, Semester 1, Module 13; Advanced Electrical Controls)

(APPT 152, APPT 154, APPT 155, APPT 157, APPT 158)

**N27.** Critically evaluate the design of an experiment;

**Matching course component(s):**
Apprentices critique lab exercises and real-world problem-solving approaches, learning to identify and improve upon experimental designs. The evaluation of experiment design could be an aspect of the Y5S1 curriculum, where apprentices learn to test and balance systems.

(Year 5, Semester 1, Module 23 & 24; Air and Water side balancing)

(APPT 159, APPT 154, APPT 157, APPT 158)

**N28.** Design experiments to test hypotheses;

**Matching course component(s):**
Advanced apprentices may design their own experiments to test theories or improve upon existing systems, applying a deep understanding of trade principles. Designing experiments to test hypotheses might be covered in Y5S1's labs, which involve direct interaction with testing instruments and systems.

(Year 5, Semester 1, Module 23 & 24; Air and Water side balancing)

(APPT 159, APPT 154, APPT 157, APPT 158)

**N29.** Work effectively in small groups and teams.

**Matching course component(s):**
Teamwork is integral to the program, with apprentices often working in groups to tackle projects, fostering a collaborative learning environment. Working in small groups is a necessary part of the hands-on labs and projects throughout the program, like those in Y3S2's Pneumatic and Electrical Control Systems.

(Year 3, Semester 2, Module 15 & 16; Control Systems and Pneumatic Controls)

(APPT 154, APPT 157, APPT 158)

## 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):**
HVAC apprenticeship students complete coursework using analytical reading, writing, speaking skills including evaluation, synthesis and research throughout the program – specifically students learn about and describe control systems, safe work practices including handling high pressure gas cylinders, various heating equipment, and Personal Protective Equipment (PPE).

(HVAC Program, Year 3, Semester 2, Module 15 - Control Systems); (HVAC Program, Year 3, Semester 2, Module 16 - Pneumatic Controls); (HVAC Program, Year 3, Semester 2, Module 17 - DDC Controls)

The following apprenticeship courses: (APPT 154)

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

**Matching course component(s):**
HVAC Apprenticeship students use computation throughout the program including in units such as "APPT 155 Advanced Electrical Controls" that requires use of Ohm's Law to determine wiring schematic values, discussion of meter usage diagrams in the electrical sequence of operation, conducting meter usage and alternating lights labs, and describing HVAC system load calculations, designs, and balancing.

(HVAC Program, Year 3, Semester 1, Module 13 - Advanced Electrical Controls)

The following apprenticeship courses: (APPT 155)

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

Matching course component(s):
HVAC Apprenticeship students analyze the relationships of business and economic activities to the functioning of society as a whole in units on the evolution of service, identifying customers and constructive communication styles, including developing listening, clarifying and empathy skills. This is done in the process of developing a critical eye.

(HVAC Program, Year 1, Semester 1, Module 2 - Customer Service)

The following apprenticeship courses: (APPT 151)

**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):**

## General Education Review Request
## AREA III - NATURAL SCIENCES

**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):**

Requesting Faculty: Robert Cormia Date: 4/17/24

Division Curriculum Rep: Tim Myres Date: 4/23/24

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**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: _____

# General Education Review Request
# AREA III - NATURAL SCIENCES

**Course Number & Title:** Steamfitting and Pipefitting 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 III – Natural Sciences:**

Natural science courses deal with the physical universe, the testable principles that govern its operations, its life forms, and its natural, measurable phenomena. One primary purpose of these courses is to promote an awareness of the methods of scientific inquiry and the power of scientific inquiry to describe the natural world. Emphasis is on understanding and applying the scientific method, which promotes a sense of discovery, fosters critical analysis, and encourages an understanding of the relationships between science and other human activities. A General Education natural science course should exhibit the same methods and skills used by scientists when seeking an understanding of the uncertainty and complexity of the natural world.

A successful General Education Natural Science course ***must*** promote in students:

N1. An understanding of the scientific method, including its attributes and limitations;
N2. The ability to make judgments regarding the validity of scientific evidence;
N3. An understanding of the relationship between hypothesis, experiment, fact, theory and law;
N4. The ability to use inductive and deductive reasoning;
N5. The practice of thinking critically, including evaluating ideas and contrasting opinions;
N6. The ability to evaluate, use and communicate scientific data;
N7. An introduction to current scientific theories within the field of study;
N8. Experience with laboratory activities using laboratory techniques consistent with those employed within the discipline;
N9. Experience applying recognized scientific methodology in laboratory activities.*****

Additional criterion thought to enhance a natural science course include any of the following:

N10. An appreciation of the contributions of science to modern life;
N11. An appreciation of the contributions to science of diverse people and cultures;
N12. An understanding of the interdependence of humans and their environment;
N13. A recognition of how human behavior has altered the environment;
N14. A sense of the history of science and the ideas and experiments that have led to our present understanding.

Be advised that the following criteria for a GE lab is consistent with a definition provided by the National Research Council, 2005:

*"Laboratory experiences provide opportunities for students to interact directly with the material world (or with data drawn from the material world), using the tools, data collection techniques, models, and theories of science. This definition includes student interaction with astronomical databases, genome databases, databases of climatic events over long time periods, and other large data sets derived directly from the material world. It does not include student manipulation or analysis of data created by a teacher to simulate direct interaction with the material world. For example, if a physics teacher presented students with a constructed data set on the weight and required pulling force for boxes pulled across desks with different surfaces and asked them to analyze these data, the students' problem-*

# General Education Review Request
# AREA III - NATURAL SCIENCES

*solving activity would not constitute a laboratory experience in the committee's definition."*

***** To accomplish these goals a laboratory course ***must*** emphasize the methods of scientific inquiry by engaging students in:

NL15. Observation and collection of data through direct interaction with the material world;
NL16. Use of tools, data collection techniques, models and theories of science most prevalent in relevant research laboratories;
NL17. Data may be from large data sets derived directly from the material world, but may not rely exclusively on student manipulation or analysis of data created by a teacher to simulate direct interaction with the material world;
NL18. Analysis and interpretation of data;
NL19. Formulation and testing of hypotheses;
NL20. Communicating effectively through oral and/or written work;
NL21. A minimum of one collaborative activity;
NL22. A minimum of one laboratory unit or the equivalent of 33 hours of laboratory instruction per quarter.

Additional criterion thought to enhance a natural science laboratory include any of the following:

NL23. Keep accurate and complete experimental records;
NL24. Perform quantitative and qualitative measurements;
NL25. Interpret experimental results and draw reasonable conclusions;
NL26. Analyze data statistically and assess the reliability of results;
NL27. Critically evaluate the design of an experiment;
NL28. Design experiments to test hypotheses;
NL29. Work effectively in small groups and teams.

**Course Number & Title: Steamfitting and Pipefitting 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:

**N1.** An understanding of the scientific method, including its attributes and limitations;

**Matching course component(s):**
The trades in general, and of pipe fitting in particular, apply a problem-solving approach in practice, and much of how this approach is deployed is informed and guided by the scientific method. Pipe fitters develop hypotheses, test them, and adjust their approaches to a task accordingly.

In Year 1, Semester 1, Module 3 (Use and Care of Tools), apprentices are introduced to the essential physics and chemistry underpinning materials and tools, laying a critical foundation for steam fitting practices. This module not only addresses the 'how' but also the 'why,' fostering a deeper appreciation for the scientific principles that guide the trade.

(APPT 141, APPT 143A, APPT 143B)

**N2.** The ability to make judgments regarding the validity of scientific evidence;

**Matching course component(s):**
Throughout their program pipe fitting students are taught to make judgements about the validity of scientific evidence. Judgements based on the validity of evidence are required because the decisions the students are making must be integrated into a complex project in which all systems must work together.

Module 10 (Related Science) in Year 2, Semester 2, delves into the intriguing properties of solids, water, and steam. It connects these properties to the pivotal concepts of matter states and energy transformations, setting the stage for advanced discussions on thermodynamics and system efficiency critical to steam systems.

(APPT 134B, APPT 145, APPT 139A)

**N3.** An understanding of the relationship between hypothesis, experiment, fact, theory and law;

**Matching course component(s):**

## General Education Review Request
## AREA III - NATURAL SCIENCES

The precision and safety requirements pipe fitting students must learn require they develop hypotheses, test those hypotheses through both practical and virtual experimentation. The facts derived from these experiments guide their approach to solving problems. Understanding the relationship between theory and law is also critical. For example, pipe fitters must consider the thermodynamics of a weld and the theories that shapes those laws

Chemical reactions take center stage in Year 1, Semester 1, Module 5 (Soldering and Brazing), where apprentices learn the chemistry behind metal bonding. This knowledge is indispensable for ensuring the integrity and safety of piping installations, highlighting the application of chemistry in achieving durable connections.

(APPT 141, APPT 147A, APPT 146, 147B)

**N4.** The ability to use inductive and deductive reasoning;

**Matching course component(s):**
The logic of induction and deduction are necessary for pipe fitting students to understand and apply throughout the program. Such reasoning comes into play for students as they choose everything from the materials needed for a project, to designing approaches to solve the logistical problems associated with complex real-world projects.

Year 4, Semester 2, Module 20 (Industrial Rigging) applies the conservation principles of energy and momentum to the practical challenges of lifting and moving materials. Apprentices learn to calculate forces and understand energy transfer, equipping them with the skills to perform rigging operations safely and efficiently.

(APPT 146, APPT 139B, APPT 143B)

**N5.** The practice of thinking critically, including evaluating ideas and contrasting opinions;

**Matching course component(s):**
Pipefitting students are taught to think critically and invite and evaluate contrasting opinions as foundational to their trade. In addressing the complexity of a large construction site for example, pipefitting students must not only understand their own discipline but must respond to the demands of other disciplines also work on the site.

The transformative effects of heat on metals are showcased in Year 2, Semester 1, Module 9 (Cutting and Welding), illustrating how energy from welding torches interacts with matter. This module serves as a vivid demonstration of physical science in action, revealing the critical role of heat in altering material properties for construction purposes.

(APPT 145, APPT 147B, APPT 143B)

**N6.** The ability to evaluate, use and communicate scientific data;

**Matching course component(s):**
Pipefitting students are taught to critical thinkers in all aspects of their study and work. This requires the students to study a problem scientifically and to communicate the results of that work to communicate to others within the profession and within the general trades field.

Year 1 Semester 1 Basic Steamfitting Skills (Hands on Lab Projects)

(APPT 141, APPT 143A, APPT 143B)

## General Education Review Request
## AREA III - NATURAL SCIENCES

**N7.** An introduction to current scientific theories within the field of study;

**Matching course component(s):**
The nature of the pipefitting field means that apprentices are learning the latest theories and practices in their profession and field. The are accredited and tested for this information before performing it in real-life settings.

Year 5 Semester 2 Steamfitter Final Turnout Exam

Year 5, Semester 1's Module 22 (Medical Gas Installations) indirectly broaches life science concepts by discussing the types and uses of medical gasses. This exploration not only highlights the trade's role in healthcare but also underscores the biological considerations essential in medical settings, reflecting on the interface between steam fitting and life sciences.

(APPT 130, APPT 139B, APPT 147A)

**N8.** Experience with laboratory activities using laboratory techniques consistent with those employed within the discipline;

**Matching course component(s):**
The curriculum's integration of CAD technology in Year 4, Semester 1, Module 17 (Advanced Drawing and Blueprint Reading), marks a significant evolution in steam fitting. This technological leap not only enhances precision and efficiency but also serves as a bridge between traditional steam fitting techniques and the digital age, illustrating the symbiotic relationship between technology and the scientific underpinnings of the trade.

(APPT 141, APPT 147A, APPT 146)

**N9.** Experience applying recognized scientific methodology in laboratory activities.

**Matching course component(s):**
Steam system design principles come to life in Year 3, Semester 2, Module 14 (Steam Theory and Application), where apprentices engage with the tangible aspects of engineering and design. This module not only challenges them to apply theoretical knowledge to practical scenarios but also fosters a deep understanding of system dynamics, efficiency, and sustainability in design.

(APPT 144A, APPT 143A, APPT 143B, 147A)

## Depth Map: <u>Additionally</u>, include <u>any</u> of the following:

**N10.** An appreciation of the contributions of science to modern life;

**Matching course component(s):**
Pipefitters apply their trade in real-life settings and develop an understanding of and appreciation for the world they are working to shape in the modern world. Nothing in modern life would function well, if at, all without pipefitting science.

Advanced Trade Math in Year 3, Semester 1, Module 13, exemplifies the application of mathematics in solving real-world steam fitting challenges. Apprentices employ algebra, geometry, and trigonometry to navigate complex piping systems, demonstrating the indispensable role of mathematics in scientific inquiry and practical problem-solving within the trade.

(APPT 141, APPT 143A, APPT 143B)

## General Education Review Request
## AREA III - NATURAL SCIENCES

**N11.** An appreciation of the contributions to science of diverse people and cultures;

**Matching course component(s):**
The curriculum encourages a methodical approach to problem-solving across Modules 6-8 in Year 1, Semester 2, blending scientific methods with technical skills in rigging, math, and drawing. This structured inquiry not only enhances critical thinking but also prepares apprentices for the complex decision-making required in steam fitting projects.

(APPT 141, APPT 143A, APPT 143B)

**N12.** An understanding of the interdependence of humans and their environment;

**Matching course component(s):**

**N13.** A recognition of how human behavior has altered the environment;

**Matching course component(s):**
Year 2 Semester 2 Steamfitter Science (Basic Refrigeration Module)
Pipefitting students work in an industry that terraforms the planet. Modern civilizations exist as a result of human behavior on the environment and pipefitting students play a role in this part of modern life, a role they take very seriously.

Year 2, Semester 2's Module 12 (Industrial Safety) introduces apprentices to the principles of environmental science and the importance of sustainability in steam fitting. Discussing hazardous waste management and ergonomic practices, the module reinforces the trade's impact on the environment and the collective responsibility to adopt sustainable practices.

(APPT 141, APPT 143A, APPT 143B)

**N14.** A sense of the history of science and the ideas and experiments that have led to our present understanding.

**Matching course component(s):**

### Depth Map: <u>Additionally</u>, must emphasize the following:

**N15.** Observation and collection of data through direct interaction with the material world;

**Matching course component(s):**
Consider for a moment the thousands of miles of pipes crisscrossing the state of California, carrying everything from water to natural gas, to toxic chemicals. It is through direct interaction with the material world that pipefitting students ensure those miles of pipes accomplish their task, and when those pipes fail and need repair, it is the pipefitting students who analyze the source of failure not only for repair but also to avoid a repeat of the failure.

Medical Gas Installations, covered in Module 22 of Year 5, Semester 1, reflect on the significant societal impact of steam fitting, particularly in healthcare. Through the lens of science and technology, apprentices learn about the critical infrastructure they help build and maintain, underscoring trade's essential role in societal wellbeing and healthcare services.

(APPT 130, APPT 139B, APPT 147A)

**N16.** Use of tools, data collection techniques, models and theories of science most prevalent in relevant research laboratories;

**Matching course component(s):**

In Module 5 (Soldering and Brazing) of Year 1, Semester 1, apprentices get a practical introduction to atomic and molecular structures through the chemistry of metal bonding. This insight bridges the gap between abstract chemical concepts and their tangible applications in steamfitting, reinforcing the scientific underpinnings of the trade.

(APPT 130, APPT 139B, APPT 147A, APPT 141, APPT 143A, APPT 143B)

**N17.** Data may be from large data sets derived directly from the material world, but may not rely exclusively on student manipulation or analysis of data created by a teacher to simulate direct interaction with the material world;

**Matching course component(s):**
Applying physics to the real-world task of rigging, Year 4, Semester 2's Module 20 (Industrial Rigging) delves into the principles of forces and motion. This module not only equips apprentices with the knowledge to navigate physical challenges but also instills an appreciation for the laws of physics that govern material movement, critical for ensuring safety and efficiency in steam fitting tasks.

(APPT 141, APPT 143A, APPT 143B)

**N18.** Analysis and interpretation of data;

**Matching course component(s):**
Through Module 9 (Cutting and Welding) in Year 2, Semester 1, apprentices explore the role of energy in chemical processes, particularly in welding and cutting. This examination highlights the practical significance of energy transformations in steam fitting, linking theoretical chemistry to the hands-on work that defines the trade.

(APPT 130, APPT 139B, APPT 147A, APPT 141, APPT 143A, APPT 143B)

**N19.** Formulation and testing of hypotheses;

**Matching course component(s):**
Modules 14-16 in Year 3, Semester 2, focus on steam generation, distribution, and heat transfer, grounding apprentices in the principles of kinetics and thermodynamics. This foundational knowledge is crucial for designing and operating efficient steam systems, emphasizing the role of science in optimizing steam fitting practices.

(APPT 130, APPT 139B, APPT 147A, APPT 141, APPT 143A, APPT 143B)

**N20.** Communicating effectively through oral and/or written work;

**Matching course component(s):**
The curriculum emphasizes the creation and significance of chemical bonds in Year 1, Semester 1, Module 5 (Soldering and Brazing), providing apprentices with a practical understanding of how chemical principles ensure the durability and safety of piping systems. This knowledge is fundamental for mastering soldering and brazing techniques, illustrating the direct application of chemistry in steam fitting.

(APPT 141, APPT 142, APPT 145)

**N21.** A minimum of one collaborative activity;

**Matching course component(s):**

Pipefitting students work collaboratively as a cohort throughout their program, and most collaborate with others while on the job site.

Year 5 Semester 1 Industrial Rigging (Group Rigging Projects)

(APPT 130, APPT 139B, APPT 147A, APPT 141, APPT 143A, APPT 143B)

**N22.** A minimum of one laboratory unit or the equivalent of 33 hours of laboratory instruction per quarter.

**Matching course component(s):**
Pipefitting students study in "living" labs, receiving direct instruction on lab skills over the entire program.

Safety training, particularly on respiratory protection and hazardous materials handling, introduces apprentices to biochemical processes and their implications for health in steam fitting work. This aspect of the curriculum ensures apprentices are aware of the health risks associated with various chemicals and gasses, promoting safe handling practices and protective measures.

(APPT 141, APPT 143, APPT 146, APPT 130)

## Depth Map: Additionally, include any of the following:

**N23.** Keep accurate and complete experimental records;

**Matching course component(s):**
Electromagnetic waves, especially as they relate to welding technologies discussed in Year 2, Semester 1, Module 9, offer apprentices a glimpse into the application of wave principles in steam fitting. Understanding heat transfer and electromagnetic interactions is pivotal for mastering welding techniques, illustrating the intersection of physics and practical trade skills.

(APPT 130, APPT 139B, APPT 147A, APPT 141, APPT 143A, APPT 143B)

**N24.** Perform quantitative and qualitative measurements;

**Matching course component(s):**
Year 2, Semester 1's focus on welding and cutting technologies, particularly in Module 9, brings electromagnetic principles to the forefront of steam fitting education. This module underscores the scientific basis of welding equipment and techniques, enhancing apprentices' technical skills with a deep understanding of the electromagnetic phenomena that drive their tools.

(APPT 141, APPT 143, APPT 146, APPT 130)

**N25.** Interpret experimental results and draw reasonable conclusions;

**Matching course component(s):**
The introduction of CAD and digital tools in Year 4, Semester 1, Module 17 (Advanced Drawing and Blueprint Reading), signifies the curriculum's commitment to integrating modern technologies in steam fitting. This approach not only modernizes the trade but also prepares apprentices for a future where digital communication and information management are integral to project planning and execution.

(APPT 141, APPT 147A, APPT 146)

**N26.** Analyze data statistically and assess the reliability of results;

**Matching course component(s):**

Steam theory and application modules, particularly in Year 3, Semester 2, emphasize water's critical role in steam systems and its broader environmental significance. These discussions bridge steam fitting practices with global water cycles and sustainability issues, highlighting the importance of responsible water use and management in the trade.

(APPT 130, APPT 139B, APPT 147A, APPT 141, APPT 143A, APPT 143B)

**N27.** Critically evaluate the design of an experiment;

**Matching course component(s):**
Environmental and sustainability topics, woven throughout the curriculum, touch on the steamfitting industry's impact on climate and weather. These discussions aim to foster a sense of responsibility among apprentices, highlighting the importance of eco-friendly practices in mitigating climate change.

Year 2 Semester 2 Steamfitter Science (LEED Green building)

(APPT 130, APPT 139B, APPT 147A, APPT 141, APPT 143A, APPT 143B)

**N28.** Design experiments to test hypotheses;

**Matching course component(s):**
The curriculum's emphasis on safety, sustainability, and responsible waste management reflects the steam fitting industry's awareness of its impact on Earth's systems. By advocating for responsible practices, the program underscores the trade's role in environmental stewardship.

Year 2 Semester 2 Steamfitter Science (LEED Green Building)

(APPT 141, APPT 143A, APPT 143B)

**N29.** Work effectively in small groups and teams.

**Matching course component(s):**
Pipefitting students work in groups during their on-the-job training.

Incorporating modern diagnostic and design technologies, such as CAD, the curriculum bridges traditional steam fitting skills with contemporary technological tools. This blend of old and new prepares apprentices for the future of the trade, emphasizing the importance of adaptability and continuous learning.

(APPT 130, APPT 139B, APPT 147A, APPT 141, APPT 143A, APPT 143B)

## 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):**
Steamfitter Pipefitter Technology Program students must communicate in a variety of formats. Whether it is engaging with other apprenticeship students, workers, supervisors, or with customers and the public, students in this program are required to express themselves clearly, concisely, and persuasively using discipline specific terms.

Pipefitter Program courses demonstrating B1 Communication skills include but are not limited to: APPT 144A Year 2 Module 2 Related Science - where apprentices are required to do a science project presentation or paper requiring a significant amount of research based on the scientific process and scientific evidence. APPT139A Year 5 Semester 5 Industrial Installations.

# General Education Review Request
# AREA III - NATURAL SCIENCES

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

**Matching course component(s):**
Because the application of what Steamfitter Pipefitter Technology Program students learn and practice must be extremely precise to meet all existing codes and regulations, students learn and apply many mathematical concepts and data collection models.

Steamfitter Pipefitter Technology Program courses demonstrating B2 Computation include but are not limited to APPT 145 Year 3 Semester 1 Module 13 Advanced Trade Math Apprentices are required to apply mathematical concepts in practical application.

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

**Matching course component(s):**
Students in the Steamfitter Pipefitter Technology Program must communicate in a variety of formats. Whether it is engaging with other apprenticeship students, workers, supervisors, or with customers and the public, students in this program are required to express themselves clearly, concisely, and persuasively using discipline specific terms.

Pipefitter Program courses demonstrating Standard B3 skills include but are not limited to: APPT 134B Industrial Safety Year 2 semester 2 Module 12 OSHA 30- The Triangle Shirtwaist Factory fire in the Greenwich Village area of New York City. Students learn to express their ideas in a logical and organized manner using discipline specific-appropriate language by researching, discussing and writing about or presenting on case studies such as the Triangle Shirtwaist Factory fire. APPT 145 Year 3 Semester 1 Module 13 Advanced Trade Math Apprentices are required to apply mathematical concepts in practical applications.

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

**Matching course component(s):**
Students in the Steamfitter Pipefitter Technology Program meet standard B4 in a variety of ways. Their training includes courses on the environmental impact of their work on the planet. They also learn about the role of their union in advancing the social and economic opportunities for historically marginalized groups. And through on the job training and other required program elements, sheet metal students also learn the real-world importance of their actions and behaviors on others.

Pipefitter Program courses demonstrating Standard B4 skills include but are not limited to: APPT139A Year 5 Semester 5 Industrial Installations Students expand their community and global consciousness.

**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):**

Requesting Faculty: Robert Cormia Date: 4/17/24

Division Curriculum Rep: Tim Myres Date: 4/23/24

# General Education Review Request
# AREA III - NATURAL SCIENCES

## 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:_____

# General Education Review Request
# AREA IV – SOCIAL & BEHAVIORAL SCIENCES

**Course Number & Title:** Steamfitting and Pipefitting 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 IV-Social & Behavioral Sciences:**

The social sciences embrace a large number of interrelated subjects that examine the relationship of human beings to society.

Courses meeting the General Education Requirement in Social and Behavior Sciences ***must*** include ***all of the following*** student learning outcomes:

S1. Explain the interactions of people as members of societies, cultures and social subgroups;
S2. Exercise critical thinking and analytical oral and/or written skills including consideration of events and ideas from multiple perspectives;
S3. Demonstrate knowledge and application of the scientific method in conducting research and in other methods of inquiry relative to the discipline.

In addition, courses meeting this requirement ***must*** include ***at least three*** of the following student learning outcomes:

S4. Demonstrate appreciation of and sensitivity towards diverse cultures -- their social, behavioral and organizational structure;
S5. Explain world development and global relationships;
S6. Recognize the rights, duties, responsibilities, and opportunities of community members;
S7. Analyze the relationship of business and economic activities to the functioning of society as a whole;
S8. Assess the distribution of power and influence;
S9. Analyze current events and global issues in the context of historic, ethical and social patterns;
S10. Comprehend and engage in social, economic and political issues at the local, national and global level;
S11. Display knowledge of human motivations, behaviors and relationships;
S12. Understand the evolutionary origins of humanity and how this relates to present day human interactions;
S13. Describe how individual interaction with the natural world and external societies shapes and influences human behavior;
S14. Explain the association between psychological well-being, mental processes, emotions & societal functioning.

# General Education Review Request
# AREA IV – SOCIAL & BEHAVIORAL SCIENCES

**Course Number & Title:** Steamfitting and Pipefitting 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:

**S1.** Explain the interactions of people as members of societies, cultures and social subgroups;

**Matching course component(s):**
Steam fitting students learn about the historical development of the union movement and union associations as representing labor organizations. As well, they learn the roles of various subgroups in the union movement and specifically about apprenticeship, the collective voice, roles and responsibilities of employers, contractors, and journey workers.

Apprenticeship courses including but not limited to (APPT 141, 139A)

Steamfitter Program- Basic Steam fitting Skills (Year one, Semester one/Module one)
Semester one / Module one (Union Heritage)

**S2.** Exercise critical thinking and analytical oral and/or written skills including consideration of events and ideas from multiple perspectives;

**Matching course component(s):**
Apprenticeship students exercise critical thinking and analytical oral and/or written skills in units on how to identify and interact with indifferent, irate, and/or demanding customers. Students describe various communication styles, identify methods of managing information and how to use critical thinking to create options and alternatives in outcomes. These skills are woven throughout the steam fitting curriculum. Students define the history and purpose of the Occupational, Safety and Health Administration (OSHA). Students describe the structure of OSHA standards. Students describe the rights and responsibilities of employees and employers.

Apprenticeship courses including but not limited to (APPT 141, APPT 134B)

Steamfitter Program- Basic Steam fitting Skills (Year one, Semester one/Module two)
Semester One – Module 2 (Construction Safety)

**S3.** Demonstrate knowledge and application of the scientific method in conducting research and in other methods of inquiry relative to the discipline.

**Matching course component(s):**
Apprenticeship students demonstrate knowledge and application of the scientific method in conducting research and testing hypotheses against empirical data. Students learn the physics behind the application of their skills in a real-world setting. Students learn the proper methods of measuring using the English and metric systems. Students learn the scientific method and other methods of inquiry in relation to the steam fitting profession including how to use and read steel rules, calipers, tapes and rules, dial indicators, plumb bobs, squares and levels as well as converting decimals to fractions and how convert metric to English measurements.

Apprenticeship courses including but not limited to (APPT 144A, APPT 134B, APPT 139A, APPT 139B)

Steamfitter Program- Related Science (Year Two, Semester Two/Module 10)
Semester Three / Module 2.14 (30) (Related Science)

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

**S4.** Demonstrate appreciation of and sensitivity towards diverse cultures -- their social, behavioral and organizational structure;

## General Education Review Request
## AREA IV – SOCIAL & BEHAVIORAL SCIENCES

**Matching course component(s):**
Steam fitting students engage in learning designed to make them not only successful in the profession, but also in understanding the roles and responsibilities of their work in the communities they serve at the local, at state, and national levels. This instruction also includes an understanding of the role of labor in advancing the economic and social benefits to communities of color. Students study the union movement and how, out of many, unions provide a collective voice for labor organizations. Students define and discuss apprentice roles and responsibilities in the larger union movement.

Apprenticeship courses including but not limited to (APPT 141, APPT 134B,139A)

Steamfitter Program- Basic Steam fitting Skills (Year one, Semester one/Module one)
Semester one / Module one (Union Heritage)

**S5.** Explain world development and global relationships;

**Matching course component(s):**

**S6.** Recognize the rights, duties, responsibilities, and opportunities of community members;

**Matching course component(s):**

**S7.** Analyze the relationship of business and economic activities to the functioning of society as a whole;

**Matching course objective(s):**

Steam fitting students are required to learn about the economics of their industry including how global supply and demand impact their industry and the state of California. Students also receive instruction on the role of labor in the economic development of the community's apprenticeship students serve.

Apprenticeship courses including but not limited to (APPT 146, APPT 147A, 147B, 139A)

**S8.** Assess the distribution of power and influence;

**Matching course component(s):**

**S9.** Analyze current events and global issues in the context of historic, ethical and social patterns;

**Matching course component(s):**

**S10.** Comprehend and engage in social, economic and political issues at the local, national and global level;

**Matching course component(s):**
Steam fitting students engage in learning designed to make them not only successful in the profession, but also in understanding the roles and responsibilities of their work in the communities they serve at the local, at state, and national levels. This instruction also includes an understanding of the role of labor in advancing the economic and social benefits to communities of color. Students study the union movement and how, out of many, unions provide a collective voice for labor organizations. Students define and discuss apprentice roles and responsibilities in the larger union movement. These discussions and learning also include the role of political advocacy on the part of labor in the United Stated and abroad.

Apprenticeship courses including but not limited to (APPT 141, APPT 134B)

Steamfitter Program- Basic Steam fitting Skills (Year one, Semester one/Module one)
Semester one / Module one (Union Heritage)

**S11.** Display knowledge of human motivations, behaviors and relationships;

**Matching course component(s):**

## General Education Review Request
## AREA IV – SOCIAL & BEHAVIORAL SCIENCES

**S12.** Understand the evolutionary origins of humanity and how this relates to present day human interactions;

**Matching course component(s):**

**S13.** Describe how individual interaction with the natural world and external societies shapes and influences human behavior;

**Matching course component(s):**

**S14.** Explain the association between psychological well-being, mental processes, emotions & societal functioning.

**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):**
Steam fitting students must engage in reading and writing tasks throughout their course of study and learn to organize and present their ideas to other students, instructors, and work site employees logically and concisely. The ability to communicate effectively in writing and speaking is also emphasized as a practical on the job skill set necessary to be successful in the profession and a highlight literate world.

Apprenticeship courses including but not limited to (APPT 141, APPT 139A, APPT 146, 144A)

Steamfitter Program- Basic Steam fitting Skills (Year one, Semester one/Module one)
Semester one / Module one (Union Heritage)

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

**Matching course component(s):**
Apprenticeship students learn the physics behind the application of their skills in a real-world setting. Students learn the proper methods of measuring using the English and metric systems. Students learn the scientific method and other methods of inquiry in relation to the steam fitting profession including how to use and read steel rules, calipers, tapes and rules, dial indicators, plumb bobs, squares and levels as well as converting decimals to fractions and how convert metric to English measurements. All of these math concepts are embedded throughout the entire program.

Apprenticeship courses including but not limited to (APPT 145, APPT 134B, APPT 144A, APPT 139A, APPT 139B)

Steamfitter Program- Related Science (Year Two, Semester Two/Module 10)
Semester Three / Module 2.14 (30) (Related Science)

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

**Matching course component(s):**
Steam fitting students must engage in reading and writing tasks throughout their course of study and learn to organize and present their ideas to other students, instructors, and work site employees logically and concisely.

Apprenticeship courses including but not limited to (APPT 141, APPT 144A, APPT 146, APPT 145)

## General Education Review Request
## AREA IV – SOCIAL & BEHAVIORAL SCIENCES

| |
|---|
| Steamfitter Program- Basic Steam fitting Skills (Year one, Semester one/Module one)<br>Semester one / Module one (Union Heritage) |

**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):** |

**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):** |

Requesting Faculty: PATRICIA GIBBS STAYTE Date: FEBRUARY, 8, 2024

Division Curr Rep: Tim Myres Date: 4/23/24

---

**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:_____

# Public Health, AS-T Degree

## Basic Information

**Faculty Author(s)**

| Users |
| --- |
| Shirley Treanor |
| Catherine Draper |

**Department**
Health

**Division**
Health Sciences and Horticulture

**Title of Degree/Certificate**
Public Health

**Type of Award**
AS-T Degree

**Workforce/CTE Program:**
Yes

**Effective Catalog Edition:**
2024-2025

## AA-T or AS-T Degree Narrative

**Program Goals and Objectives**
The Associate in Science in Public Health for Transfer Degree prepares students for transfer as an upper division student in Health Science, Health Science with Health Education option, Health Science with Public Health option, Health Science with Community Health option, Health Science with Health Promotion & Disease Prevention, Health Education, Public Health, Public Health Promotion, Kinesiology with Health Education, Kinesiology with Health Science option, Kinesiology with Health and Wellness Promotion, Kinesiology with Health Promotion and Disease Prevention, and Collaborative Health and Human Services with Community Health option majors to the California State University system. The Public Health curriculum covers both personal and public health perspectives. The major prepares students to transfer as well as gain the necessary prerequisites to enter many allied health science programs.

The Associate in Science in Public Health for Transfer Degree meets the requirements to prepare students to transfer to California State Universities (CSUs). Students who complete the Associate in Science in Public Health for Transfer Degree will be ensured preferential and

seamless transfer status to local CSUs for Public Health majors and majors in related disciplines. The Associate in Science in Public Health for Transfer Degree requirements will fulfill the lower division major requirements at many CSUs. Students are advised, however, to meet with a counselor to assess the course requirements for specific CSUs.

**Program Learning Outcomes**

- Students will be able to identify, assess, utilize, and articulate credible information resources on personal and public health current issues, such as the internet, social media, media outlets, and libraries.
- Students will be able to effectively communicate strategies or tactics to improve health inequalities, such as advocacy, community organizing, and policy change.
- Students will obtain a critical understanding of and be able to apply knowledge of personal and public health in real life settings from the sub-disciplines of biology, chemistry, and statistics.

**Catalog Description**

The Associate in Science in Public Health for Transfer Degree prepares students for transfer to California State Universities (CSUs). Students who complete the degree will be ensured preferential transfer status to CSUs for Public Health majors and majors in related disciplines. The Associate in Science in Public Health for Transfer Degree requirements will fulfill the lower division major requirements at many CSUs. Students are advised, however, to meet with a counselor to determine the lower division course requirements for specific CSUs. This degree may also provide excellent preparation for other majors. The major in Public Health prepares students for careers in the health professions, local state and federal agencies, health departments, educational institutions, healthcare organizations and health insurance companies, research organizations, crisis agencies, and many other fields. This degree is designed to prepare graduates for public health and related programs at the bachelor's degree level.

**Additional Information Required for State Submission:**

**TOP Code:** 1201.00 - Health Occupations, General

**CIP Code:** 51.0001 - Health and Wellness, General

**Distance Education:** 50-99%

**ADT Submission Form or Public Health**
**CCC Major or Area of Emphasis:** Public Health
**TOP Code:** 1201.00

**CSU Major(s):** Health Science, Health Science with Health Education option, Health Science with Public Health option, Health Science with Community Health option, Health Science with Health Promotion & Disease Prevention, Health Education, Public Health, Public Health Promotion, Kinesiology with Health Education, Kinesiology with Health Science option, Kinesiology with Health and Wellness Promotion, Kinesiology with Health Promotion and Disease Prevention and Collaborative Health and Human Services with Community Health option.
**Total Units: 23** *(all units are minimum semester units)*

In the four columns to the right under the **College Program Requirements**, enter the college's course identifier, title and the number of units comparable to the course indicated for the form. If the course may be double-counted with Cal-GETC, enter the GE Area to which the course is articulated. To review the GE Areas and associated unit requirements, please go to Chancellor's Office Academic Affairs page, RESOURCE section located at:

https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Educational-Services-and-Support/What-we-do/Curriculum-and-Instruction-Unit/Templates-For-Approved-Transfer-Model-Curriculum

or the ASSIST website:

https://www.assist.org/.

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

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

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

Attach the appropriate ASSIST documentation as follows:

- *Articulation Agreement by Major* (***AAM***) demonstrating lower division preparation in the major at a CSU;
- *CSU Baccalaureate Level Course List by Department* (***BCT***) for the transfer courses; and/or,
- *CSU GE Certification Course List by Area* (***GECC***).

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

## Associate in Science in Public Health for Transfer Degree College
## Name: Foothill College

| TRANSFER MODEL CURRICULUM (TMC) | | COLLEGE PROGRAM REQUIREMENTS | | | |
|---|---|---|---|---|---|
| **Course Title (units)** | **C-ID Descriptor** | **Course ID** | **Course Title** | **Units** | **Cal-GETC** |
| **REQUIRED CORE:** (13 units) | | | | | |
| Personal Health and Wellness (3) | PH 100 | HLTH 21 | Contemporary Health Concerns | 4 | N/A |

| TRANSFER MODEL CURRICULUM (TMC) | | COLLEGE PROGRAM REQUIREMENTS | | | |
|---|---|---|---|---|---|
| **Course Title (units)** | **C-ID Descriptor** | **Course ID** | **Course Title** | **Units** | **Cal-GETC** |
| Introduction to Public Health (3) | PH 101 | HLTH 20 | Introduction to Public Health | 5 | 4 |
| Introduction to Statistics (3) | MATH 110 | MATH 10 | Elementary Statistics | 5 | 2 |
| **OR** | | OR | | | |
| Public Health Statistics (3) | PH 114 | MATH 17 | Integrated Statistics II | 5 | 2 |
| **OR** | | OR | | | |
| Any statistics course articulated as Area 2 | GECC | PSYC 7 | Statistics for the Behavioral Sciences | 5 | 2 |
| | | OR | | | |
| | | SOC 7 | Statistics for the Behavioral Sciences | 5 | 2 |
| Introduction to Biology with lab (4) | ***AAM*** | BIOL 1A | Principles of Cell Biology | 6 | 5B/5C |
| | | OR | | | |
| | | BIOL 10 | General Biology: Basic Principles | 5 | 5B/5C |
| | | OR | | | |
| | | BIOL 14 | Human Biology | 5 | 5B/5C |
| **LIST A: Select one of the following** (4 units) | | | | | |
| Introduction to Chemistry (4) | CHEM 101 | CHEM 25 | Fundamentals of Chemistry | 5 | 5A/5C |
| **OR** | **OR** | OR | | | |
| General Chemistry for Science Majors I, with Lab (5) | CHEM 110 | CHEM 30A | Survey of Inorganic & Organic Chemistry | 5 | 5A/5C |
| **OR** | **OR** | OR | | | |
| Human Anatomy with lab (4) | BIOL 110B | BIOL 41 | Microbiology | 6 | 5B/5C |
| **OR** | **OR** | | | | |
| Human Physiology with lab (4) | BIOL 120B | | | | |
| **OR** | **OR** | | | | |
| Microbiology (4) | AAM | | | | |

| TRANSFER MODEL CURRICULUM (TMC) | | COLLEGE PROGRAM REQUIREMENTS | | | |
|---|---|---|---|---|---|
| **Course Title (units)** | **C-ID Descriptor** | **Course ID** | **Course Title** | **Units** | **Cal-GETC** |
| **LIST B: Select one of the following** (3 units) | | | | | |
| Cultural Humility or Competence in Health and Social Services | PH 104 | | | | |
| Health and Social Justice | PH 102 | HLTH 22 | Health & Social Justice | 4 | 4 |
| Social Determinants of Health, Disparities and Equities | PH 113 | | | | |
| Multicultural Health | AAM | | | | |

| TRANSFER MODEL CURRICULUM (TMC) | | COLLEGE PROGRAM REQUIREMENTS | | | |
|---|---|---|---|---|---|
| **Course Title (units)** | **C-ID Descriptor** | **Course ID** | **Course Title** | **Units** | **Cal-GETC** |
| Health Diversity | AAM | | | | |
| Social Inequality | AAM | | | | |
| **LIST C: Select one of the following** (3 units) | | | | | |
| Drugs, Health, and Society | PH 103 | HLTH 23 | Drugs, Health & Society | 4 | N/A |
| Explorations of Health Professions | PH 105 | | | | |

| TRANSFER MODEL CURRICULUM (TMC) | | COLLEGE PROGRAM REQUIREMENTS | | | |
|---|---|---|---|---|---|
| **Course Title (units)** | **C-ID Descriptor** | **Course ID** | **Course Title** | **Units** | **Cal-GETC** |
| Holistic Health | PH 106 | | | | |
| Stress Management | PH 107 | | | | |
| Investigating Disease Outbreaks | PH 108 | | | | |
| Global Health | PH 109 | | | | |

| TRANSFER MODEL CURRICULUM (TMC) | | COLLEGE PROGRAM REQUIREMENTS | | | |
|---|---|---|---|---|---|
| **Course Title (units)** | **C-ID Descriptor** | **Course ID** | **Course Title** | **Units** | **Cal-GETC** |
| Healthcare Systems | PH 110 | | | | |
| Foundations of Health Education | PH 111 | | | | |
| Health Information Technology | PH 115 | | | | |
| Women's Health | PH 116 | | | | |

| TRANSFER MODEL CURRICULUM (TMC) | | COLLEGE PROGRAM REQUIREMENTS | | | |
|---|---|---|---|---|---|
| **Course Title (units)** | **C-ID Descriptor** | **Course ID** | **Course Title** | **Units** | **Cal-GETC** |
| Introduction to Human Sexuality | PSY 130 | PSYC 49 | Human Sexuality | 4 | 4 |
| Any course articulated as major preparation for the public health and related majors at CSU or UC. | AAM | ANTH 1 | Introduction to Physical Anthropology | 4 | 5B |
| | | ANTH 1H | Honors Introduction to Physical Anthropology | 4 | 5B |
| | | ANTH 2A | Cultural Anthropology | 4 | 4 |
| | | ANTH 2AH | Honors Cultural Anthropology | 4 | 4 |
| | | BIOL 45 | Introduction to Human Nutrition | 4 | 5B |
| | | ECON 1B | Principles of Microeconomics | 5 | 4 |
| | | POLI 1 | Political Science: Introduction to American Government & Politics | 5 | 4 |
| | | POLI 2 | Comparative Government & Politics | 4 | 4 |
| | | POLI 2H | Honors Comparative Government & Politics | 4 | 4 |
| | | PSYC 1 | General Psychology | 5 | 4 |
| | | PSYC 1H | Honors General Psychology | 5 | 4 |
| | | PSYC 40 | Human Development | 5 | 4 |
| | | SOC 1 | Introduction to Sociology | 5 | 4 |
| | | SOC 1H | Honors Introduction to Sociology | 5 | 4 |
| **Total Units for the Major:** | **23** | | **Total Units for the Major:** | 32-35 | |
| | | | **Total Units that may be double-counted** (***The transfer GE Area limits must not be exceeded***) | | 24 |
| | | | **General Education (Cal-GETC) Units** | | **34** |
| | | | **Elective Units** | | 34-37 |
| | | | **Total Degree Units (maximum)** | | **60** |

# Archaeological Field Work, Certificate of Achievement

## Basic Information

**Faculty Author(s)**

| Users |
| --- |
| Samuel Connell |

**Department**
Anthropology

**Division**
Business and Social Sciences

**Title of Degree/Certificate**
Archaeological Field Work

**Type of Award**
Certificate of Achievement

**Workforce/CTE Program:**
No

**Effective Catalog Edition:**
2023-2024

## Certificate of Achievement Local Narrative

**Program Goals and Objectives**

The Certificate of Achievement in Archaeological Field Work prepares students for entry-level work in cultural resource management (CRM). The archaeological industry requires archaeology field schools for employment, and graduate schools across the globe require archaeology field schools for entry. This certificate program provides opportunities for students to actively engage in archaeological research in both field and laboratory settings. Courses are designed to introduce students to a diverse range of professional skills, including survey and excavation techniques, mapping and documentation, and artifact identification, processing, and analysis. Complementary courses emphasize public outreach and stakeholders with concepts such as traditional ecological knowledge (TEK), indigenous archaeology, and community-based participatory research woven into the program courses.

**Program Learning Outcomes**

- Students will be able to perform basic field methods in archaeology, to include survey, excavation, and laboratory analysis.

- Students will be able to understand the complex history of archaeologist and indigenous relationships through time.
- Students will be invested in public outcomes for archaeology, to include service experiences, community-based participatory research, and indigenous archaeology.
- Students will be able to explain the difference between Cultural Resource Management (CRM) archaeology and institutional academic archaeology.

## Catalog Description

The Certificate of Achievement in Archaeological Field Work is designed for students who are seeking to learn field techniques in archaeology. The certificate program provides 14 units of instruction in key elements: basic Archaeology, survey, lab, excavations and applied archaeology. Courses can be taken in person and/or some online.

## Program Requirements

**Core Course Units:** 8

Course List

| Code | Title | Units |
|---|---|---|
| ANTH F008. | INTRODUCTION TO ARCHAEOLOGY | 4 |
| or ANTH F008H | HONORS INTRODUCTION TO ARCHAEOLOGY | 4 |
| ANTH F052. | ARCHAEOLOGICAL FIELD METHODS | 4 |

**Support Course Units:** 6

Course List

| Code | Title | Units |
|---|---|---|
| Select two or more units from the following: | | |
| ANTH F016L | BASIC ARCHAEOLOGY LABORATORY | 1 |
| ANTH F017L | INTERMEDIATE ARCHAEOLOGY LABORATORY | 2 |
| ANTH F051. | ARCHAEOLOGY SURVEY | 2 |
| ANTH F057. | APPLIED ARCHAEOLOGY FIELD METHODS | 1 |
| And four or more units from the following: | | |
| ANTH F003. | WORLD PREHISTORY: THE RISE & FALL OF EARLY CIVILIZATIONS | 4 |
| ANTH F004. | FIRST PEOPLES OF NORTH AMERICA | 4 |
| ANTH F012. | APPLIED ANTHROPOLOGY | 4 |
| ANTH F020. | NATIVE PEOPLES OF CALIFORNIA | 4 |

Course List

| Code | Title | Units |
|---|---|---|
| ANTH F022. | THE AZTEC, MAYA, INCA & THEIR PREDECESSORS: CIVILIZATIONS OF THE AMERICAS | 4 |
| ANTH F067A | CULTURES OF THE WORLD: ECUADOR | 4 |
| ANTH F067B | CULTURES OF THE WORLD: BELIZE | 4 |
| ANTH F067C | CULTURES OF THE WORLD: BRITISH ISLES | 4 |

**Total Units:** 14

**Proposed Sequence**

| Term | Units |
|---|---|
| Year 1, Spring | 4 |
| Year 1, Summer | 4 |
| Year 1, Fall | 4 |
| Year 1, Winter | 2 |

**Master Planning**

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. There is currently a high demand for qualified individuals who understand archaeology methods. This program will allow students to achieve their goals whether it is to attend graduate schools, join the workforce directly, advance in place of employment, or transfer credit to a four-year college. The Certificate of Achievement in Archaeological Field Work is also a pivotal step for students who are retraining, returning to the workplace, and/or updating work skills.

**Enrollment and Completer Projections**

We expect more than 30 students to complete the program in the initial year. We can include the Ireland, Ecuador, Belize, Hawaii, and California areas of study in the program. Each year there will be at least three field program and lab components taking place through Foothill College. We are averaging over 100 unduplicated students per academic year.

**Historical Enrollment Data**

| Course # | Course Title | Y1 - Annual Sections | Y1 - Annual Enrollment | Y2 - Annual Sections | Y2 - Annual Enrollment |
|---|---|---|---|---|---|
| ANTH 3 | World Prehistory: The Rise & Fall of Early Civilizations | 1 | 40 | 1 | 40 |
| ANTH 4 | First Peoples of North America | 1 | 30 | 1 | 30 |
| ANTH 8 | Introduction to Archaeology | 3 | 90 | 3 | 90 |
| ANTH 8H | Honors Introduction to Archaeology | N/A | N/A | N/A | N/A |

| Course # | Course Title | Y1 - Annual Sections | Y1 - Annual Enrollment | Y2 - Annual Sections | Y2 - Annual Enrollment |
|---|---|---|---|---|---|
| ANTH 12 | Applied Anthropology | 1 | 30 | 1 | 30 |
| ANTH 16L | Basic Archaeology Laboratory | 2 | 55 | 2 | 55 |
| ANTH 17L | Intermediate Archaeology Laboratory | 1 | 20 | 1 | 20 |
| ANTH 20 | Native Peoples of California | 1 | 20 | 1 | 20 |
| ANTH 22 | The Aztec, Maya, Inca & Their Predecessors: Civilizations of the Americas | 1 | 20 | 1 | 20 |
| ANTH 51 | Archaeology Survey | 2 | 55 | 2 | 55 |
| ANTH 52 | Archaeological Field Methods | 1 | 30 | 1 | 30 |
| ANTH 57 | Applied Archaeology Field Methods | 2 | 55 | 3 | 55 |
| ANTH 67A | Cultures of the World: Ecuador | N/A | N/A | N/A | N/A |
| ANTH 67B | Cultures of the World: Belize | N/A | N/A | N/A | N/A |
| ANTH 67C | Cultures of the World: British Isles | N/A | N/A | N/A | N/A |

**Place of Program in Curriculum/Similar Programs**

This certificate allows Foothill to formalize previously non-transcriptable certificates. It is something that is needed on campus.

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

There is nothing in the region like this at the community colleges. Several local graduate schools offer MA programs in archaeology for CRM. Cabrillo College offered a program that is now closed. Palomar College in the San Diego area has tried a program similar to this and the current status is unclear. In Arizona, there is a program at Pima Community Colleges that is quite successful at training archaeological technicians in the region.

**Additional Information Required for State Submission:**

**TOP Code** 2202.20 - Archaeology

**CIP Code** 45.0301 - Archeology

**Will any new resources be required (e.g., facilities, equipment, personnel)?** No

**Gainful Employment:** No

**Distance Education:** 1-49%

**ASSIST is best used in combination with seeing a counselor on your campus.** It is intended to help students and counselors work together to establish an appropriate path toward transferring from a public California community college to a public California university.

**Major** Articulation Agreement

# Anthropology, BA

Effective during the **2023-2024** academic year

| To: California State University, Bakersfield | From: Foothill College |
|---|---|
| 2023-2024 General Catalog, Semester | 2023-2024 General Catalog, Quarter |

## GENERAL INFORMATION

This articulation agreement displays lower-division course requirements specific to the major. Students should always contact an academic advisor about degree requirements for their baccalaureate major.

**Helpful Resources:**

- CSUB Catalog
- Transfer Admission Requirements
- Academic Advising Student Centers
- CSUB Program Pathways Mapper

## ABOUT THE MAJOR

The program in Anthropology administers one degree, a Bachelor of Arts. Students have the option of adding a concentration in Cultural Resource Management, which is designed to enhance the field training, laboratory analysis, heritage management laws, and applied skills necessary for employment in this rapidly growing field of professional applied anthropology and historic preservation.
The Anthropology program faculty stresses a close working relationship with students and strongly encourages students to take full advantage of the many opportunities the department provides for collaborative research with faculty, student internships, and other direct collaboration of professional skills.

For additional information, visit the following:
Department of Anthropology
Program Requirements - Anthropology, BA

## MAJOR REQUIREMENTS

### 1 Complete the following

#### A

| | | | | | |
|---|---|---|---|---|---|
| **ANTH 1118** | Introduction to Archaeology | **3.00** | **ANTH 8** | Introduction to Archaeology | **4.00** |
| **ANTH 1208** | Introduction to Biological Anthropology | **3.00** | **ANTH 1** | Introduction to Physical Anthropology | **4.00** |
| | | | **OR** | | |

| | | | | | |
|---|---|---|---|---|---|
| | | | **ANTH 1H** | Honors Introduction to Physical Anthropology | **4.00** |
| **ANTH 1318** | Introduction to Cultural Anthropology | **3.00** | **ANTH 2A** | Cultural Anthropology | **4.00** |
| | | | **OR** | | |
| | | | **ANTH 2AH** | Honors Cultural Anthropology | **4.00** |
| **MATH 1209** | Statistics in the Modern World | **3.00** | **MATH 17** | Integrated Statistics II | **5.00** |

## 2 Complete the following

### A

| | | | | | |
|---|---|---|---|---|---|
| **ANTH 2308** | Native Peoples of North America | **3.00** | **ANTH 4** | First Peoples of North America | **4.00** |
| **ANTH 2310** | Peoples and Cultures of South Asia | **3.00** | No Course Articulated | | |

# LOWER DIVISION ELECTIVES

## 3 Select 1 course from the following

### A

| | | | | | |
|---|---|---|---|---|---|
| **ANTH 1109** | World Archaeology | **3.00** | No Course Articulated | | |
| **ANTH 1120** | Amazing Archaeology | **3.00** | No Course Articulated | | |
| **ANTH 1220** | Evolution and Scientific Creationism | **3.00** | No Course Articulated | | |
| **ANTH 2100** | Introductory Field Archaeology | **3.00** | **ANTH 52** | Archaeological Field Methods | **4.00** |
| **ANTH 2128** | Prehistory of the New World | **3.00** | **ANTH 3** | World Prehistory: The Rise & Fall of Early Civilizations | **4.00** |

**END OF AGREEMENT**

# General Education Review Request
# AREA V – COMMUNICATION & ANALYTICAL THINKING

**Course Number & Title:** Sheet Metal 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:** Sheet Metal 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):**
Sheet metal students learn and employ analytical skills throughout their program that will translate across other coursework and discipline. For example, they will learn inductive and deductive reasoning, problem solving, causal reasoning and scientific method while on the job site and while in their hands on training courses. And that reasoning will be employed in a host of applications that cross other disciplines such as math, physics, environmental science to name just a few.

APSM 101 BTSM Program, Year 1, Semester 1, Module 1-7 (Classroom Survival Skills). Students during classroom lecture are taught to identify keywords, build effective study habits, and use online resources for course assignments and reading material. This discipline not only applies to classroom activities but directly relates to employable practices in the field and shop.

APSM 104 BTSM Program, Year 1, Semester 2, Module 4-9 (Communication Skills). Students during classroom lecture are taught effective communication skills in the construction industry. Throughout the lesson, students view scenarios depicting situations which require either verbal or written responses. In practicing effective communication, students view a situation and draft a professional email addressing the scenario posed and send to the instructor for review. Examples of professional writing are offered to guide students to develop this skill.

APSM 120 BTSM Program, Year 5, Semester 1, Module 20-5 (Right Triangles) A sheet metal worker's understanding of right triangles is the foundation in completing shop and field layout. The right triangle throughout the program is used to calculate duct offsets, layout equipment in a field setting, and allow for straight orientation of installed elements. There is a direct cross over with math and scientific data as a discipline in this course.

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

**Matching course component(s):**
Sheet metal students are required to develop competencies in both communication and computation. As a part of their program, students are challenged to evaluate a problem, test solutions to that problem, and communicate to others what they have learned from these analytical processes. Sheet metal students are often required to switch between the discipline coding systems of math while fabricating a project and the discipline coding systems of other disciplines like communications and English when conveying the information they have learned. A main attribute of this field is communicating through symbols that are universally used throughout the field. A student must evaluate the symbols which are marked by other individuals and know how to build a project based on that notation. Shop notes also play a major role where students must learn how to interpret design intent of a mechanical system and later use that design intent to detail a project. Students must evaluate project documents and specifications to create a detail building plan.

APSM 102 BTSM Program, Year 1, Semester 1, Module 2-8 (Basic Layout). Students learn the symbols and markings that are typical in a sheet metal shop to identify brake and form lines. Students are equipped with the resources to receive material in a sheet metal shop notated with shop markings, and produce the desired project outcome based on symbol identification.

APSM 107 BTSM Program, Year 2, Semester 1, Module 7-4 (Intro to Plan Grid). Students gain an introductory use of the Autodesk software Plan Grid, a digital construction communication tool seen commonly in field

and shop activities. Students use the software to read mechanical plans, identify fittings, and communicate to the instructor for approval to fabricate. In a field setting, Plan grid is effectively used to notate changes to designs, problems seen in fabrication/installation, and necessary vendor information.

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

**Matching course component(s):**
Sheet metal students are continuously reading, interpreting and analyzing design intent prints. Students will use a range of different modalities to express what they have learned including written emails, notes and reports. Additionally, students will use non verbal communication within their HazCom course communicating through color diagrams, signs and symbols. Often students are called upon to utilize symbolic form when communicating construction standards.

APSM 102 BTSM Program, Year 1, Semester 1, Module 2-12 (HazCom). Through classroom lecture, students learn to properly identify OSHA pictograms used in hazard communication. There are 9 total pictograms used to relay information of potential hazards including flammables, oxidizers, corrosives, explosives, chemicals, Acute toxicity, environmental pollutants, health hazard, irritants, and gas cylinders. A sheet metal worker tasked with completing a job has to properly identify the use or exposure to these hazards, and notate accordingly.

APSM 113 BTSM Program, Year 3, Semester 1, Module 14-13 (Introduction to Welding Symbols) Students are required to understand welding symbols as recognized by the American Welding Society. Students should be able to analyze a weldment, and express the processes in symbolic form. This understanding is essential to completing welded assemblies which are capable of passing inspections.

APSM 103 BTSM Program, Year 1, Semester 1, Module 3-7 (Construction Standards). Students are tasked with reading and interpreting SMACNA standards for hanger layout, duct construction standards, field fabrication, etc. Through reading and understanding of these standards, students can create detailed construction drawings showing locations and methodologies of field and shop fabrication activities expressed in symbols.

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

**Matching course component(s):**
Sheet metal students are called upon to clearly express their ideas throughout the course work of the program. They must use a variety of modalities to communicate in this discipline including, memos, email, oral presentations, and blueprint feedback. Sheet metal students often work through collaboration to express their work and ideas. Through written memos and reports students produce work explaining equipment functionality. Students must also verbally communicate the logical cycle of test functions for equipment. In collaboration with engineers, students will produce a written chart notating pressures. This process must be clear and precise for functionality.

APSM 103 BTSM Program, Year 1, Semester 2, Module 3-9 (Communication Skills). Students during classroom lecture are taught effective communication skills in the construction industry. Throughout the lesson students view scenarios depicting situations which require either verbal or written responses. In practicing effective communication, students view a situation and draft a professional email addressing the scenario posed.

APSM 122 BTSM Program, Year 4, Semester 4, Module 22-9 (Duct Leakage Testing Calculations and report forms). Students will perform the functions of duct leakage testing. This process involves analyzing job specifications for allowable leakage, understanding pressure test machine chart symbols, and producing an organized document used for official commissioning of a project which shows the operating conditions of an HVAC system.

APSM136 BTSM Program, Year 4, Semester 4, Module 36-9 (Mechanical Acceptance Testing). Students perform the functions of Mechanical Acceptance Testing and complete Non Residential Compliance Acceptance Forms (NRCA-MCH forms). NRCA forms are used to display compliance to California's Title 24

standards. The forms cover functional testing of HVAC and Hydronic systems. These forms are used as official documentation in the Testing Adjusting and balancing of a project, which is essential for commissioning.

## 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):**
Sheet metal students collaborate in a number of ways throughout their courses to assess each other's work and share and evaluate ideas. To start they must understand the design intent coming from the curriculum provider. By examining the plans and specs they must interpret a plan to proceed and where they have questions they must inquire through verbal instructions with a project manager. There is a clear process of RFI (Request for Information) where students learn to reach out verbally for clarification from project managers and engineers, interpret feedback, then offer revisions and take a final position. Students also learn to use this feedback loop when assessing responses from clients and customers and must take this information in for their final evaluation.

APSM 125 BTSM Program, Year 5, Semester 3, Module 25-4 (Preparation for Shop Drawings). Students analyze project drawings for "Grand Valley State University" in efforts to prepare a shop drawing used for field installation. In reviewing the documents, the project detailer gets an understanding of the design intent of the mechanical, structural, and electrical engineers, as well as the limitations in constructability of the project. Understanding jobsite specifications and environmental limitations, allows the detailer to produce a drawing showing HVAC and equipment placement, which satisfies the design intent, while remaining constructible.

The APSM 125 class which is referenced is very collaborative. In terms of peer review, this creation of the drawing is a method of peer review. It is understanding a design intent which comes from one source, and then gets vetted with constructability concerns addressed. The detailed drawing which is produced, is then sent to a sheet metal shop, where fabricators collaborate on building fittings to be installed based on cut sheets drawn by a detailer. The detailed plan is also sent to a field setting where the installers critically assess the installation drawings. Often in this process there are questions, requests for information, and clarity provided with verbal and written communication.

**C6.** Identify goals when applying analytical skills;

**Matching course component(s):**
Sheet metal students rely continuously on identifying project and building goals to complete coursework. Students must call on a number of analytical skills like deductive reasoning, problem solving, and assessing the cause and effect of certain systems to name a few. One way they accomplish this is to study the workings of the HVAC system; identifying areas of concern or problems, applying potential solutions, eventually working through a testing process to achieve a balanced system.

APSM 175A BTSM Program, Year 4, Semester 1, Module 153AB-4 (Fan Laws Lab Assignment) Students learn Fan Laws which allow for effective balancing of an HVAC or Hydronic system. The fan laws allow for a balancer to take active measurements of an HVAC system and increase or reduce flow based on the live measurements relation to design intent. By understanding the fan laws a balancer can identify the "goal" or design intent of an HVAC system and balance accordingly.

**C7.** Recognize limitations of applicable methodologies;

**Matching course component(s):**
The importance of problem solving is a value instilled in the sheet metal curriculum. A key to problem solving is to recognize when limitations arise. One way students learn this is recognizing the limitations of equipment and tools. Students then learn how to communicate through problems. There is a peer review process where students critique the methods being used on a project. Students are made aware of what happens when things go wrong and how to listen to multiple points of view in order to navigate around

limitations and lead to efficient design choices. Sheet metal students learn the industry methods such as knowledge of fitting or measuring with right triangles to ensure proper use of industry systems like the HVAC system.

APSM 159A BTSM Program, Year 4, Semester 1, Module 153A-9 (Measuring and Obtaining Fan Performance Data). Students understand the limitations of HVAC Fan equipment. Understanding the limitations of equipment attached to the HVAC system allows a balancer to analyze problems related to the design of the system. Often in the industry, equipment is incorrectly under or oversized creating issues with energy consumption, airflow, and construction methodologies such as material gauges.

APSM 120 BTSM Program, Year 5, Semester 1, Module 20-5 (Right Triangles) A sheet metal worker's understanding of right triangles is the foundation in completing shop and field layout. The right triangle throughout the program is used to calculate duct offsets, layout equipment in a field setting, and allow for straight orientation of installed elements. There is a direct cross over with math and scientific data as a discipline in this course.

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

**Matching course component(s):**
Sheet metal students learn to use a number of technologies - Autocad / 3D modeling; Plan Grid; Bluebeam - within a course and throughout the program developing a mastery of the technology to assist in problem solving and decisions.
Additionally, for communication purposes mechanical prints play a pivotal role in their learning process. Students learn how to read, evaluate and create mechanical prints. To create these prints students must solve problems, make decisions and present their findings. Within this process students will go through an evaluation and heed feedback from project managers to make decisions on proper fittings.

APSM 127 BTSM Program, Year 5, Semester 4, Module 27-6 (The Floor Plan) Students learn and demonstrate understanding of the Autodesk software Autocad to create a floor plan used for field and shop communication. A detailer while modeling HVAC systems using Autocad, encounters issues in construction which get resolved through design revisions and requests for information to the project managers, architects, and engineers. The process of creating mechanical prints, is the communication which takes fittings from sheet metal shops, and installs them in the intended space.

APSM 107 BTSM Program, Year 2, Semester 1, Module 7-4 (Intro to Plan Grid). Students gain an introductory use of the Autodesk software Plan Grid, a digital construction communication tool seen commonly in field and shop activities. Students use the software to read mechanical plans, identify fittings, and communicate to the instructor for approval to fabricate. In a field setting, Plan grid is effectively used to notate changes to designs, problems seen in fabrication/installation, and necessary vendor information.

## 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):**
Sheet metal students must communicate in a variety of formats. Whether it is engaging with other workers or supervisors, or with customers and the public, students in this program are required to express themselves clearly, concisely, and persuasively.

Sheet Metal courses including but not limited to (APSM 105, APSM 102, APSM 101) BTSM Program, Year 1, Semester 2, Modules 5- #1-#13 (FSD training), BTSM Program, Year 1, Semester 1, Modules 2- #1-#14 (Math, Layout Basics, and Safety), BTSM Program, Year 1, Semester 1, Modules 1- #1-#18 (Trade Introduction)

## General Education Review Request
## AREA V – COMMUNICATION & ANALYTICAL THINKING

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

**Matching course component(s):**
Because the application of what sheet metal students learn and practice must be extremely precise to meet all existing codes and regulations, students learn and apply many mathematical concepts and data collection models.

Sheet Metal courses including but not limited to (APSM 116, APSM 119, APSM 127) BTSM Program, Year 3, Semester 4, Modules 16- #1-#14 (Plans and Specifications), BTSM Program, Year 3, Semester 4, Modules 19- #1-#12 (HVAC Air Systems and Duct Design), BTSM Program, Year 5, Semester 3, Modules 27- #1-#8 (Basic Autocad)

**B3.** Creative, critical, and analytical thinking (reasoning, questioning, problem solving, and consideration of consequence).

**Matching course component(s):**
Sheet metal students must communicate in a variety of formats. Whether it is engaging with other workers or supervisors, or with customers and the public, students in this program are required to express themselves clearly, concisely, and persuasively.

Sheet Metal courses including but not limited to (APSM 105, APSM 102, APSM 101) BTSM Program, Year 1, Semester 2, Modules 5-#1-#13 (FSD training), BTSM Program, Year 1, Semester 1, Modules 2-#1-#14 (Math, Layout Basics, and Safety)

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

**Matching course component(s):**
Students in the sheet metal program meet this standard in a variety of ways. Their training includes courses on the environmental impact of their work on the planet. They also learn about the role of their union in advancing the social and economic opportunities for historically marginalized groups. And through on the job training and other required program elements, sheet metal students also learn the real-world importance of their actions and behaviors on others.

Sheet Metal courses including but not limited to (APSM 122, APSM 119, APSM 175A, APSM 101) BTSM Program, Year 4, Semester 4, Modules 22-#1-#15 (Codes and Standards), BTSM Program, Year 3, Semester 4, Modules 19-#1-#12 (HVAC Air Systems and Duct Design), BTSM Program, Year 4, Semester 1, Modules 153A- #1-#10 (TABB Technician Certification BTSM Program, Year 1, Semester 1, Module 1-11 (Bias and Belonging)

**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):**

Requesting Faculty: Gina Firenzi Date: 5/3/24

Division Curriculum Rep: Timothy Myres Date: 5/7/24

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**FOR USE BY GE SUBCOMMITTEE:**

Review Committee Members: N/A

Recommended for Approval: _____ Not Recommended for Approval: _____ Date: _____

## General Education Review Request
## AREA V – COMMUNICATION & ANALYTICAL THINKING

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: _____

# General Education Review Request
# AREA VII - LIFELONG LEARNING

**Course Number & Title: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1 - Pipe Trades Training Center students)**

**Breadth Criteria:**

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

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

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

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

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

**Depth Criteria for Area VII – Lifelong Learning:**

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

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

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

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

# General Education Review Request
# AREA VII - LIFELONG LEARNING

**Course Number & Title: Air Conditioning and Refrigeration Technology Apprenticeship Program (Pathway #1 - Pipe Trades Training Center students)**

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:

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

**Matching course component(s):**
The disciplines within the building trades require a multidisciplinary approach to the study and execution of their work. HVAC students, for example, will frequently need to call upon several disciplines concomitantly in a single project or class. And HVAC student's analysis of a schematic can require math, English, and social science.

(HVAC Program, Year 3, Semester 2, Module 15, 16, 17: Control Systems, Pneumatic Controls, DDC Controls)

The following apprenticeship courses: APPT 152, APPT 154, APPT 159

Example: This semester integrates principles from electrical and mechanical engineering through the study of control systems, emphasizing the application of these principles in practical settings.

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

**Matching course component(s):**
In the spirit of this standard, HVAC students are learning skills and ways of thinking that have applications in all aspects of their lives. The problem-solving needed to determine the specs for fabrication of a component in a refrigeration system are easily applicable in determining personal decisions in a variety of everyday activities outside of college.

(HVAC Program, Year 2, Semester 1, Module 8 and 9: Refrigeration, Refrigeration Controls)

The following apprenticeship courses: APPT 153, APPT 154, APPT 158

Example: Courses focus on understanding mechanical and refrigeration systems, providing apprentices with the tools to make informed decisions regarding system maintenance and troubleshooting.

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

**Matching course component(s):**
HVAC students are required to maintain currency in their field particularly in the areas of hazard mitigation and the handling, storage and disposal of hazardous materials.

(HVAC Program, Year 1, Semester 1, Module 3: Trade Related Safety & Environment)

The following apprenticeship courses: APPT 151, APPT 152

Example: Safety training including OSHA standards and workplace hazards helps apprentices understand and mitigate risks associated with HVACR work.

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

**Matching course component(s):**
HVAC students, like many in the professional trades, have made conscious and informed decisions to become HVAC journeymen. They both know and live the economic value of their work on their own personal wellbeing and the betterment of society.

(HVAC Program,Year 5, Semester 1, Module 23 and 24: Air Side, Water Side Start Test & Balance)

The following apprenticeship courses: APPT 158, APPT 159

Example: Focuses on the importance of accurate system testing and balancing, critical for ensuring safe and healthy indoor air quality.

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

**Matching course component(s):**
HVAC students do not learn and work in a vacuum. Their testing and evaluation procedures include assessments of their technical skills and their understanding of their ethical and legal responsibilities in executing their jobs. Every HVAC student knows that not only their own personal survival depends on their safe execution of their jobs, but also the safety of many others who may occupy or otherwise inhabit the spaces they helped to fabricate.

(HVAC Program, Year 4, Semester 1, Module 19: Commercial HVACR Equipment)

The following apprenticeship courses: APPT 157, APPT 158

Example: Apprentices are taught to use technical documentation and CAD tools for system design and troubleshooting, enhancing their ability to use information effectively.

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

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

**Matching course component(s):**
The HVAC program is wraparound. Students receive assistance in many aspects of their lives and their careers. HVAC students are also provided the tools and resources to know where they need to improve and how they can get assistance making those improvements.

(HVAC Program, Year 1, Semester 1, Module 1: Union Heritage)

The following apprenticeship courses: APPT 151, APPT 129

Example: Orientation modules discuss career pathways in HVACR, helping apprentices plan their professional development.

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

**Matching course component(s):**

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

**Matching course component(s):**

**L9.** Use technology to analyze problems and create solutions.

**Matching course component(s):**
Students in the HVAC program are taught multiple technologies in the course of their study and practice, everything from auto-cad to airflow analysis.

(HVAC Program, Year 4, Semester 2, Module 21 and 22: Boilers and Chillers)

The following apprenticeship courses: APPT 158, APPT 159

## 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):**
HVAC apprenticeship students complete coursework using analytical reading, writing, speaking skills including evaluation, synthesis and research throughout the program – specifically students learn about and describe control systems, safe work practices including handling high pressure gas cylinders, various heating equipment, and Personal Protective Equipment (PPE).

(HVAC Program, Year 3, Semester 2, Module 15 - Control Systems); (HVAC Program, Year 3, Semester 2, Module 16 - Pneumatic Controls); (HVAC Program, Year 3, Semester 2, Module 17 - DDC Controls)

The following apprenticeship courses: APPT 154, APPT 156

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

**Matching course component(s):**
HVAC Apprenticeship students use computation throughout the program including in units such as "APPT 155 Advanced Electrical Controls" that requires use of Ohm's Law to determine wiring schematic values, discussion of meter usage diagrams in the electrical sequence of operation, conducting meter usage and alternating lights labs, and describing HVAC system load calculations, designs, and balancing.

(HVAC Program, Year 3, Semester 1, Module 13 - Advanced Electrical Controls)

The following apprenticeship courses: APPT 155, APPT 156, APPT 158, APPT 159

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

**Matching course component(s):**
HVAC Apprenticeship students analyze the relationships of business and economic activities to the functioning of society as a whole in units on the evolution of service, identifying customers and constructive communication styles, including developing listening, clarifying and empathy skills. This is done in the process of developing a critical eye.

(HVAC Program, Year 1, Semester 1, Module 2 - Customer Service)

The following apprenticeship courses: APPT 151, APPT 154, APPT 158

**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):**

**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):**

# General Education Review Request
# AREA VII - LIFELONG LEARNING

Requesting Faculty: Robert Cormia Date: 5/3/24

Division Curriculum Rep: Tim Myres Date: 5/8/24

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## 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:

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| Note: application did not go to subcommittee |

## FOR USE BY CURRICULUM OFFICE:

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

# General Education Review Request
# AREA VII – LIFELONG LEARNING

**Course Number & Title:** Sheet Metal Apprenticeship Program

**Breadth Criteria:**

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

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

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

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

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

**Depth Criteria for Area VII – Lifelong Learning:**

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

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

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

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

# General Education Review Request
# AREA VII – LIFELONG LEARNING

**Course Number & Title:** Sheet Metal 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:

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

**Matching course component(s):**
Sheet metal students acquire and demonstrate the knowledge skills and attitudes towards information across many disciplines as they matriculate through their program of study. For example, students must learn the math skills necessary to complete a variety of requirements in the program where precise measurements are critical. Students in the program must also communicate their work to various stakeholders using the discipline's reading and writing conventions.

**APSM 110 BTSM Program, Year 2, Semester 3, Module 10-6 (Measuring Techniques and Tools).** Students gain an understanding on the types of measurements needed in the sheet metal industry, and the various tools that can correctly perform the task. The lesson covers various methods and practices to attain critical measurements in order to install architectural and mechanical systems. Measuring tools transfers to multi disciplines within the trade for fabrication as well as system design.

**APSM 103 BTSM Program, Year 1, Semester 1, Module 3-3 (Geometric Principles**). Students learn concepts of geometric principles and apply techniques learned to layout patterns. Principles in this course are used for layout concepts in the field, and in shop fabrication.

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

**Matching course component(s):**
All the disciplinary requirements for the sheet metal program have practical daily applications that will serve the students in the program for the rest of their lives. Sheet metal students learn about the importance of mutual respect at the job sites where they train, which in turn reinforces their training in ethics, business standards, and the enriching features of diversity they've studied in their classes.

**APSM 121 BTSM Program, Year 5, Semester 2, Module 21-4 (Preparing for a Project)** Students will gain experience learning and preparing for simulated jobsite tasks of a project manager preparing for jobsite mobilization. Based on previous job success rates, proper jobsite planning leads to successful projects. Projects often include overcoming issues in design criteria or installation.

**APSM 104 BTSM Program, Year 1, Semester 2, Module 4-9 (Communication Skills).** Students during classroom lecture are taught effective communication skills in the construction industry. Students in the lesson are taught to analyze problems and develop proposed solutions which are effectively communicated and implemented.

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

**Matching course component(s):**
As part of their course of study, sheet metal students learn details of the health and safety standards they must follow. In addition, the students must maintain currency in their discipline and renew their training when required.

**APSM 119 BTSM Program, Year 4, Semester 1, Module 19-10 (Indoor Air Quality)**. Concepts of the scientific method are performed in the IAQ curriculum through an understanding of hazardous effects of an improperly installed or adjusted system. Technicians are able to analyze a system's functioning by symptoms experienced in the building occupants such as "Sick Building Syndrome" or CO2 poisoning. Once problems are noted, technicians can make corrections based on the hazards or inefficiencies experienced.

**APSM 102 BTSM Program, Year 1, Semester 1, Module 2-11 (Managing Safety and Health).** Students review real life jobsite fatalities and injuries and assess the root cause of the situation. In identifying the root cause of the issue, students develop and learn protocols to prevent jobsite injuries and fatalities with best practices.

**APSM 102 BTSM Program. Year 1, Semester 1 Module 2- 14 (Stairways and Ladders)** Students review, understand and practice OSHA requirements for stairways and ladders used in construction. This process involves an understanding of current OSHA requirements as well as implementation of inspection criteria, and the possibility of tagging ladders and stairways as unsafe.

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

**Matching course component(s):**
The health and well-being of the individual and society is a core study and practice in the sheet metal program. The complexity of the work the students do mixed with the toxicity of some of the materials they work with make it necessary for students in the program to learn everything from how to recognize asbestos hazards to basic first aid and life safety.

**APSM 104 BTSM Program, Year 1, Semester 3, Module 4-10 (Asbestos Awareness).** Asbestos awareness training uses scientific evidence based on known hazards of Asbestos exposure experienced above the permissible exposure limit, and proper identification and mitigation of the hazard. Students and workers in the construction industry, often work in existing buildings which contain hazardous asbestos. Students cover the OSHA criteria for hazard assessment, monitoring, hazard communication and training.

**APSM 101 BTSM Program, Year 1, Semester 1, Module 1-3 (Coyne First Aid and Basic Life Safety)**
Students practice reasoning skills to properly identify and address first aid emergencies which can occur. The course builds a baseline of first aid/safety through an environment analysis, and information on proper handling of injured persons. Paramount through the first aid course is using reasoning skills to not put the first aid responder at risk of injury, and to provide the best immediate care to the injured. Injuries such as electrical burns, fire hazards, fall hazards or confined space injuries, can pose serious problems to an individual looking to provide help in basic life safety and first aid.

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

**Matching course component(s):**
Sheet metal students learn and work in an industry that is profoundly shaped by the legal implications of their work. They are therefore required to use all of their disciplinary knowledge to comply with the codes and standards of their profession.

**APSM 119 BTSM Program, Year 4, Semester 1, Module 19-5 (Duct Leakage Testing**) Students complete hands on Duct Leakage testing based on the information presented in class lecture. Students must calculate air leakage rates, demonstrate how to seal leaks, reference duct leakage standards, perform testing procedures, and determine the overall allowable leakage of a duct system. This hands on activity is then applied through certification testing completed through the International Certification Bureau. This process is necessary for commissioning of a project which legal documents are submitted. Communication of systems which do not perform to a criteria is required to installation teams, project foreman, and project managers.

**APSM136 BTSM Program, Year 4, Semester 4, Module 36-9 (Mechanical Acceptance Testing).** Students perform the functions of Mechanical Acceptance Testing and complete Non Residential Compliance Acceptance Forms (NRCA-MCH forms). NRCA forms are used to display compliance to California's Title 24 standards. The forms cover functional testing of HVAC and Hydronic systems. These forms are used as official documentation in the Testing Adjusting and balancing of a project, which is essential for commissioning.

## General Education Review Request
## AREA VII – LIFELONG LEARNING

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

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

**Matching course component(s):**
Students studying sheet metal are by definition in a career defining program. Their success in the program is supported in a number of ways including the support courses available to them in a tutorial setting.

**APSM 101 BTSM Program, Year 1, Semester 1, Module 1-7 (Classroom Survival Skills).** Students during classroom lecture are taught to identify keywords, build effective study habits, and use online resources for course assignments and reading material. Time management is a focus on the coursework as it applies to not only in classroom activities but directly relates to employable practices in the field and shop.

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

**Matching course component(s):**

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

**Matching course component(s):**

**L9.** Use technology to analyze problems and create solutions.

**Matching course component(s):**

### 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):**
Sheet metal students must communicate in a variety of formats. Whether it is engaging with other workers or supervisors, or with customers and the public, students in this program are required to express themselves clearly, concisely, and persuasively.

Sheet Metal courses including but not limited to (APSM 105, APSM 102, APSM 101)

BTSM Program, Year 1, Semester 2, Modules 5- #1-#13 (FSD training), BTSM Program, Year 1, Semester 1, Modules 2- #1-#14 (Math, Layout Basics, and Safety), BTSM Program, Year 1, Semester 1, Modules 1- #1-#18 (Trade Introduction)

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

**Matching course component(s):**
Because the application of what sheet metal students learn and practice must be extremely precise to meet all existing codes and regulations, students learn and apply many mathematical concepts and data collection models.

Sheet Metal courses including but not limited to (APSM 116, APSM 119, APSM 127)

BTSM Program, Year 3, Semester 4, Modules 16- #1-#14 (Plans and Specifications), BTSM Program, Year 3, Semester 4, Modules 19- #1-#12 (HVAC Air Systems and Duct Design), BTSM Program, Year 5, Semester 3, Modules 27- #1-#8 (Basic Autocad)

# General Education Review Request
# AREA VII – LIFELONG LEARNING

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

**Matching course component(s):**
Sheet metal students must communicate in a variety of formats. Whether it is engaging with other workers or supervisors, or with customers and the public, students in this program are required to express themselves clearly, concisely, and persuasively.

Sheet Metal courses including but not limited to (APSM 105, APSM 102, APSM 101)

BTSM Program, Year 1, Semester 2, Modules 5-#1-#13 (FSD training), BTSM Program, Year 1, Semester 1, Modules 2-#1-#14 (Math, Layout Basics, and Safety), BTSM Program, Year 1, Semester 1, Modules 1-#1-#18 (Trade Introduction)

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

**Matching course component(s):**
Students in the sheet metal program meet this standard in a variety of ways. Their training includes courses on the environmental impact of their work on the planet. They also learn about the role of their union in advancing the social and economic opportunities for historically marginalized groups. And through on the job training and other required program elements, sheet metal students also learn the real-world importance of their actions and behaviors on others.

Sheet Metal courses including but not limited to (APSM 122, APSM 119, APSM 175A, APSM 101)

BTSM Program, Year 4, Semester 4, Modules 22-#1-#15 (Codes and Standards), BTSM Program, Year 3, Semester 4, Modules 19-#1-#12 (HVAC Air Systems and Duct Design), BTSM Program, Year 4, Semester 1, Modules 153A- #1-#10 (TABB Technician Certification BTSM Program, Year 1, Semester 1, Module 1-11 (Bias and Belonging)

**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):**
APSM 101 BTSM Program, Year 1, Semester 1, Module 1-2 (Intro to Electronic Tablets). Students are given a tool of an IPad which is used for classroom activities throughout the apprenticeship program. Students develop best practices for maintaining the technology as well as professional communication and navigation of the tablet.

APSM 127 BTSM Program, Year 5, Semester 4, Module 27-6 (The Floor Plan) Students learn and demonstrate understanding of the Autodesk software Autocad to create a floor plan used for field and shop communication. A detailer while modeling HVAC systems using Autocad, encounters issues in construction which get resolved through design revisions and requests for information to the project managers, architects, and engineers. The process of creating mechanical prints, is the communication which takes fittings from sheet metal shops, and installs them in the intended space.

APSM 107 BTSM Program, Year 2, Semester 1, Module 7-4 (Intro to Plan Grid). Students gain an introductory use of the Autodesk software Plan Grid, a digital construction communication tool seen commonly in field and shop activities. Students use the software to read mechanical plans, identify fittings, and communicate to the instructor for approval to fabricate. In a field setting, Plan grid is effectively used to notate changes to designs, problems seen in fabrication/installation, and necessary vendor information.

Requesting Faculty: Robert Cormia Date: 5/6/24

# General Education Review Request
# AREA VII – LIFELONG LEARNING

Division Curriculum Rep: Tim Myres Date: 5/8/24

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## 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:

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| Note: application did not go to subcommittee |

## FOR USE BY CURRICULUM OFFICE:

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