

College Curriculum Committee Meeting Agenda

Tuesday, April 16, 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: March 12, 2024	2:00	Action	#4/16/24-1	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 a. New Course Proposals b. Foothill GE List for 2024-25 c. Updating AP Chart and Creating IB/CLEP Policy d. ASCCC Spring Plenary Resolutions	2:17	Information	#4/16/24-2–39 #4/16/24-40– 41 #4/16/24-42 #4/16/24-43	CCC Team
5. Course Deactivation Exemption Requests	2:32	Action	#4/16/24-44– 46	Kaupp
6. GE Application: Area III: Sheet Metal Apprenticeship Program	2:37	2nd Read/ Action	#4/16/24-47	Kaupp
7. New Certificate Proposal: Pre-STEM	2:42	Action	#4/16/24-48	Kaupp
8. New Certificate Proposal: Business and Marketing	2:45	Action	#4/16/24-49	Kaupp
9. New Certificate Application: Spanish- Advanced	2:48	1st Read	#4/16/24-50	Kaupp
10. GE Application: Area VI: Steamfitting and Pipefitting Technology Apprenticeship Program	2:53	1st Read	#4/16/24-51	Kaupp
11. Program Maps—Updates for 2024-25	2:58	Information		Hueg
12. Updating Foothill GE	3:08	Discussion		Kaupp
13. COR Process Updates	3:18	Discussion		Kaupp
14. Good of the Order	3:27			Kaupp
15. Adjournment	3:30			Kaupp

*Times listed are approximate

Attachments:

- #4/16/24-1 Draft Minutes: March 12, 2024
- #4/16/24-2–39 New Course Proposals: ACTG 1AH, ACTG 55, ACTG 56, ART 402A, ART 402B, ART 402C, ART 402D, ART 402E, ART 402F, ART 402J, ART 403, ART 444, ART 445A, ART 445B, ART 445C, ART 445F, ART 446B, [ENGR 76A](#), JRYM 401, [MATH 47](#), [MATH 247](#), [NCBS 447](#), PHOT 408, PHOT 410, PHOT 411, THTR 407, THTR 420B, THTR 420C, THTR 422, THTR 424, THTR 438A, THTR 438D, THTR 443C, THTR 443E, THTR 447A, THTR 448G, THTR 449A, THTR 463A
- #4/16/24-40 Foothill General Education 2024-25
- #4/16/24-41 Foothill GE Changes for 2024-25
- #4/16/24-42 CCCCO Memo Re: IB, CLEP, and AP Chart Annual Updates

- #4/16/24-43 2024 Spring Plenary Session Resolutions for Discussion at Area Meetings
- #4/16/24-44–46 Course Deactivation Exemption Requests: HORT 60G, MDIA 52, PHOT 57B
- #4/16/24-47 Foothill General Education Application for Area III—Natural Sciences: Sheet Metal Apprenticeship Program
- #4/16/24-48 New Certificate Proposal: [Pre-STEM](#)
- #4/16/24-49 New Certificate Proposal: [Business and Marketing](#)
- #4/16/24-50 New Certificate Application: [Spanish-Advanced](#)
- #4/16/24-51 Foothill General Education Application for Area VI—United States Cultures & Communities: Steamfitting and Pipefitting Technology Apprenticeship Program

2023-2024 Curriculum Committee Meetings:

<u>Fall 2023 Quarter</u>	<u>Winter 2024 Quarter</u>	<u>Spring 2024 Quarter</u>
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:

- ~~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), 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)

COLLEGE CURRICULUM COMMITTEE

Committee Members – 2023-24

Meeting Date: 4/16/24Co-Chairs (2)

<u>✓*</u>	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)

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

Non-Voting Membership (4)

_____			ASFC Rep.	
<u>✓*</u>	Mary Vanatta	7439	Curr. Coordinator	vanattamary@fhda.edu
_____			Evaluations	
_____			SLO Coordinator	

Visitors

Chris Allen*

* Indicates in-person attendance

**College Curriculum Committee
Meeting Minutes
Tuesday, March 12, 2024
2:00 p.m. – 3:30 p.m.
Administrative Conference Room 1901; virtual option via Zoom**

Item	Discussion
1. Minutes: February 27, 2024	Motion to approve M/S (Draper, J. Fong). Approved.
2. Report Out and Check-in	<p>Speaker: All Articulation: Gilstrap shared TMC in Chicana/o/x Studies being worked on, as well as descriptors for such courses. Hueg asked if courses would meet the criteria for Ethnic Studies—Gilstrap responded, Ethnic Studies currently an umbrella, and Chicana/o/x Studies is within.</p> <p>Apprenticeship: Myres shared continuing to work on Foothill GE apps.</p> <p>BSS: No updates to report.</p> <p>Counseling: No updates to report.</p> <p>Fine Arts & Comm: No updates to report.</p> <p>HSH: No updates to report.</p> <p>Kinesiology & Athletics: No updates to report.</p> <p>Language Arts: Armerding shared working on curriculum sheets and Title 5 updates. Division CC holding workshop for faculty to work on both, incl. consideration of how equity guidelines could also be applied to curriculum sheets.</p> <p>LRC: Agyare shared Library offering extended hours next two weeks; mentioned Library will be under construction from spring break through August, to create all-gender restrooms.</p> <p>STEM: Parikh shared working on Title 5 updates; Engineering dept. working on new programs.</p> <p>SRC: Saroyan shared recently finished final interviews for new dean!</p> <p>Vanatta shared CourseLeaf CAT now open for faculty to begin working on their curriculum sheets; emailed owners this morning. Also mentioned will soon create Outlook events for spring quarter CCC meetings and asked reps to email with any changes.</p>
3. Public Comment on Items Not on Agenda	Vanatta congratulated Brannvall on being awarded tenure (as well as Amy Sarver)! Everyone clapped!
4. Announcements a. New Course Proposals	<p>Speakers: CCC Team The following proposals were presented: ART 404A, 404B, 404C, 404D, 404E, 404I, 406, 419A, 419B, 419C, 419D, 419G, 420, 447A, 447B; MUS 402A, 402B, 402C. Brannvall shared has received a lot of questions about including “for older adults” in course titles, and about including graded items; noted assignments can increase student engagement. Hueg suggested discussing outside of CCC and can check in w/ CCCCCO folks if guidance needed; noted generally noncredit not graded and assessments optional. V. Fong believes noncredit ESL courses could be used as model, noting students follow the same attendance policies and do the same work as those in credit versions.</p>

<p>b. CORs for Update 2025-26 (Title 5 list)</p>	<p>J. Fong noted CCCCCO folks said specific coding defines courses being for older adults, and additional info/language identifying courses as for older adults is local decision. Vanatta suggested CCC come up with recommended language to use in course titles and possibly in course descriptions; Hueg agreed. Connell noted lots of local area demand for such courses, not just from older adults, and wondered if including “for older adults” in title could impact interest. Parikh asked what constitutes an older adult—Kaupp responded, CCCCCO has stated it’s a local decision. Hueg noted even if we do define older adult, it wouldn’t be a restriction on enrollment. Kaupp agreed CCC needs to discuss both definition of older adult and how we want to market courses.</p> <p>Vanatta compiled list of courses that need to be reviewed/updated for the 2025-26 catalog; list was emailed to reps and deans on March 5. COR deadline for 2025-26, incl. Title 5 courses, is June 21. Gilstrap noted if any substantive changes planned for UC transferable courses, deadline is earlier—June 1. Parikh mentioned using new equity doc to help guide faculty in their COR updates; Vanatta will finalize ASAP once it’s approved.</p>
<p>5. Course Deactivation Exemption Requests</p>	<p>Speaker: Ben Kaupp List of courses not taught in four years was distributed via email on Jan. 31; divisions submitted requests to exempt courses, per Policy on Course Currency. Requests for the following courses were reviewed and voted on as a group, with the option to pull any course for individual discussion/vote: ACTG 1BH; ALCB 466, 468; ALTW 233; ANTH 2B, 67B; APPT 126, 190; APSM 123, 130, 131, 132, 133, 134, 155B; ART 15D; BUSI 19; CHLD 73; CNSL 87; C S 20A, 40A, 50C, 56B, 80A; EMS 200; ENGL 49; ESLL 248; GID 46, 47; HIST 54H; HORT 25, 90E, 91E; MATH 1BH, 1BHP, 44; NCEL 403A, 403B, 447; PHOT 22, 68C, 68E, 78B, 78C, 78D; R T 71, 201, 202; SOC 54H; SPAN 110, 111; THTR 7, 26.</p> <p>No discussion occurred regarding any specific requests.</p> <p>Motion to approve M/S (Reed, Parikh). Approved.</p>
<p>6. New Degree Proposal: Public Health ADT</p>	<p>Speaker: Ben Kaupp Proposal for new Public Health ADT. Gilstrap noted new descriptors have been created for courses (requiring resubmission), and this new ADT will replace the current Public Health Science ADT.</p> <p>Motion to approve M/S (Brannvall, Gilstrap). Approved.</p>
<p>7. New Certificate Proposal: Retail Operations Specialist</p>	<p>Speaker: Ben Kaupp Proposal for new Retail Operations Specialist Certificate of Achievement. Allen noted working in partnership w/ Goodwill Industries, launched new apprenticeship program last fall. Received grant last week to build a management pathway, and this cert. will hopefully be first step to associate degree. Hueg asked if courses already exist—Allen responded, created two new courses last year, plus collaborating w/ Business dept. Kaupp noted specifics tying cert. to Goodwill and asked about potential to expand, if needed—Allen responded, agreeing that keeping it broad is probably smart approach.</p> <p>Motion to approve M/S (Draper, J. Fong). Approved.</p>
<p>8. New Certificate Proposal: Cupertino Electric Journeyman Professional Development (noncredit)</p>	<p>Speaker: Ben Kaupp Proposal for new Cupertino Electric Journeyman Professional Development noncredit certificate. Allen mentioned plans to revisit title of cert., meeting w/ Cupertino Electric soon. Professional development</p>

	<p>required for industry, so they're looking to partner with us to provide courses.</p> <p>Motion to approve M/S (Gilstrap, J. Fong). Approved.</p>
<p>9. Best Practices for Equitable COR Updates: Equity in the COR - Why and How</p>	<p>Speaker: Ben Kaupp Second read of "Equity in the COR - Why and How" document. Minor update made to document since first read, to language re: Course Content. Parikh asked what today's goal is—Kaupp responded, approve document and discuss how to best distribute. Parikh shared feedback from Jeff Schinske, who is well-known researcher on equity in curriculum and was on sabbatical when Guiding Principles doc created last year, so unable to provide feedback. Parikh wonders if any of Schinske's suggestions could be incorporated into this doc, since we're not currently in the process of revising Guiding Principles.</p> <p>Schinske arrived, and Kaupp provided brief background of creation of Guiding Principles. Mentioned plans to create series of short videos on specific equity-related topics. Schinske shared he holds roles at state-wide level and noted certain things happening at state level relevant to CCC's equity work, incl. Common Course Numbering. Interested in participating in CCC's future efforts re: equity. Cormia mentioned recent discussions re: how to accommodate students who need "extra" attention for safety in Chemistry labs. Kaupp noted recent discussions on need to bring "doubly impacted" students into equity conversation. Brannvall curious to hear from Schinske before voting on doc; Schinske believes his feedback more related to Guiding Principles doc. Mentioned Course Content—not only do some courses contain high volume of trivial content, not retained by students, but volume may preclude inclusion of equity, because course is already so packed with content. Worthwhile for faculty to consider to what extent they're going beyond what is required (by C-ID, for example).</p> <p>Brannvall asked if it's even feasible for a college to completely redo or abandon canons when revising a course. Schinske agreed we must recognize the rules/guidelines imposed upon us and shared example of success—a few years ago made many changes to BIOL 40A/B/C to address equity, even though there were articulation-related concerns; able to maintain every articulation agreement! Parikh asked if reducing Course Content helpful just so equity can be incorporated—Schinske mentioned many decades of evidence show students leave STEM majors due to volume and pace of content in intro courses; students who make it through also find intro courses contain irrelevant content. This has also been found to be an issue in intro music theory courses, so not just related to STEM. Brannvall asked if this is the case for both lower and upper division courses and noted interest in maintaining rigor in courses, to ensure students will continue to be successful after they transfer. Schinske believes this raises questions about what students need to do to prepare and clarified this is not about reducing rigor but about content not being retained by students. Additionally, high volume can make it hard to focus on the more important aspects of a course.</p> <p>Parikh shared example of foundational, rigorous course she teaches, noting grading system based on essentiality of content; believes faculty are experts in their own spaces, and this approach could be applied to any course. Brannvall shared not interested in having her students memorize content but instead developing important skills, such as critical thinking, writing, research. Parikh suggested updating doc to add bullet on Course Content page: "additionally, volume and pace of</p>

	<p>Course Content can be a source of inequity and could be reconsidered.” Connell and Schinske agreed.</p> <p>Motion to approve with added bullet on Course Content page M/S (Parikh, Lee). Approved.</p> <p>Kaupp noted topic will continue to be discussed during spring quarter.</p>
<p>10. Resolution to Extend Student Graduation Petition Deadline</p>	<p>Speaker: Samuel Connell Second read of Resolution to Extend Student Graduation Petition Deadline, proposed by Connell. Connell asked if CCC has purview to influence these processes and deadlines, and what would happen if resolution passed; asked if study committee could be formed, at CCC or Academic Senate—Kaupp responded, CCC could make recommendations to Academic Senate but cannot directly make changes to these processes or deadlines. Kaupp believes first Resolved should be removed from document (based on insight shared during first read), but other three Resolved could be explored by a subcommittee. Gilstrap noted Counseling dept. does reach out to students re: graduation and wonders what would be studied by a subcommittee. Lee wonders if resolution is needed or if creation of a subcommittee would be more beneficial. Kaupp noted feedback from counselors that sometimes they spend more time doing behind-the-scenes work than counseling students and wonder if certain tasks could be automated. Believes there is some desire to streamline processes.</p> <p>Motion to create a subcommittee (approx. 5 participants) to discuss topic and return to CCC during spring quarter with recommendations on ideas M/S (Kaupp, Reed). Approved.</p> <p>Note that resolution was not voted on. Kaupp would like subcommittee to provide progress update to CCC by April 30.</p>
<p>11. GE Application: Area III: Sheet Metal Apprenticeship Program</p>	<p>Speaker: Ben Kaupp First read of GE application, which would approve Foothill GE Area III for students who complete the full major requirements for Sheet Metal, not one individual course. Kaupp reminded the group that the Apprenticeship folks have extended an invitation for site visits. Starer mentioned feedback from previous meeting incorporated when filling out this app and noted the division plans to use same format/approach for future apps; please let Apprenticeship folks know if any changes requested for future apps.</p> <p>Second read and possible action will occur at next meeting.</p>
<p>12. College Curriculum Committee Report on Progress Regarding Local General Education Requirements</p>	<p>Speaker: Ben Kaupp First read of document, which outlines CCC’s recommendations for updating Foothill GE pattern for 2025-26 catalog. Final version will be forwarded to Academic Senate. Dupree commented that language in bullet 1c (re: Lifelong Learning) seems contradictory; Kaupp will revise wording, but clarified that CCC leaning toward removing Lifelong Learning requirement while being committed to finding ways of encouraging students to continue to take such courses. Gibbs strongly recommends keeping Lifelong Learning requirement. Kaupp shared he’s received a lot of feedback stressing the importance of helping students complete requirements quickly. Further discussion occurred re: wording of bullet 1c, and group came up with: “It is our suggestion to respond to ASCCC’s request by using marketing and other efforts to encourage students to continue to take these classes, despite them no longer being required.”</p> <p>Lee asked about plan to vote on actual changes to Foothill GE—Kaupp</p>

	<p>responded, this doc is a progress report to send to Academic Senate, and conversations will occur w/ De Anza in hopes to align local GE between both colleges. Unsure when actual voting will take place, but hopes by end of spring quarter. Gilstrap mentioned recent discussions with new Articulation Officer at De Anza; Allen thanked Gilstrap for his work to align our curriculum w/ De Anza.</p> <p>Motion to suspend two reads rule M/S (Lee, Parikh). Approved.</p> <p>Motion to approve document with update to wording in bullet 1c M/S (Brannvall, J. Fong). Approved. Kaupp will present recommendations at upcoming Academic Senate meeting.</p>
13. Good of the Order	Cormia shared taking a class in humanizing STEM and believes faculty need to be very judicious re: what needs to be taught and which content is absolutely important, noting much has changed over the many decades since COR standards created.
14. Adjournment	3:28 PM

Attendees: Micaela Agyare (LRC), Chris Allen* (Dean, APPR), Ben Armerding (LA), Cynthia Brannvall* (FAC), Zach Cembellin* (Dean, STEM), Sam Connell* (BSS), Robert Cormia (STEM), Cathy Draper* (HSH), Angie Dupree* (BSS), Kelly Edwards (KA), Jordan Fong* (FAC), Valerie Fong* (Dean, LA), Patricia Gibbs (BSS), Evan Gilstrap* (Articulation Officer), Matthew Hajny (APPR), Kurt Hueg* (Administrator Co-Chair), Maritza Jackson Sandoval* (CNSL), Ben Kaupp* (Faculty Co-Chair), Andy Lee* (CNSL), Don Mac Neil (KA), Tim Myres* (APPR), Sarah Parikh* (STEM), Eric Reed* (LRC), Richard Saroyan (SRC), Jeff Schinske (STEM), Andrew Stafford (APPR), 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: 03/03/24 6:10 pm

Viewing: **ACTG F01AH : HONORS FINANCIAL ACCOUNTING I**

Last edit: 03/20/24 1:49 pm

Changes proposed by: Sara Seyedin (10517752)

In Workflow

- 1SS Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:25 pm
Samuel Connell
(connellsamuel):
Approved for 1SS
Curriculum Rep

Course Proposal Form

Faculty Author Sara Seyedin

Effective Term Summer 2025

Subject Accounting (ACTG) Course Number F01AH

Department Accounting (ACTG)

Division Business and Social Sciences (1SS)

Units 5

Hours 5 hours lecture

Course Title HONORS FINANCIAL ACCOUNTING I

Short Title HONORS FINANCIAL ACCOUNTING I

Proposed UC/CSU

Transferability

Proposed Description and Requisites: Study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, ethics in accounting, the application of generally accepted accounting principles, international financial reporting standards, the financial statements, and financial statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. Financial Accounting is covered over a 2-course sequence: ACTG 1A or ACTG 1AH and ACTG 1B or ACTG 1BH.

Proposed Discipline Accounting

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

- AA Degree
- Certificate of Achievement AA-T Degree
- AS-T Degree

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

No

Comments & Other Relevant Information for Discussion:

This course is the Honors version of Financial Accounting I.

Reviewer
Comments

Course Change Request

New Course Proposal

Date Submitted: 03/03/24 6:06 pm

Viewing: **ACTG F055. : INFORMATION SYSTEMS & CONTROLS (ISC)**

Last edit: 03/20/24 2:40 pm

Changes proposed by: Sara Seyedin (10517752)

In Workflow

1. 1SS Curriculum Rep

2. Curriculum Coordinator

3. Activation

Approval Path

1. 03/19/24 2:26 pm
Samuel Connell
(connellsamuel):
Approved for 1SS
Curriculum Rep

Course Proposal Form

Faculty Author Sara Seyedin & Arthur Ardizzone

Effective Term Summer 2025

Subject Accounting (ACTG) Course Number F055.

Department Accounting (ACTG)

Division Business and Social Sciences (1SS)

Units 5

Hours 5 hours lecture

Course Title INFORMATION SYSTEMS & CONTROLS (ISC)

Short Title

Proposed Transferability CSU Only

Proposed Description and Requisites: This course focuses on information systems, information technology governance and risk assessment, processing integrity and tests of controls, availability, confidentiality and privacy, SOC engagements, use and management of data, and Information Security and Protection of Information Assets.

Proposed Discipline Accounting

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

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

No

Comments & Other Relevant Information for Discussion:

Effective January 1, 2024 the American Institute of Certified Public Accountants (AICPA) and the National Association of State Boards of Accountancy (NASBA) updated the Certified Public Accountant (CPA) licensing model to better reflect the changing skills necessary to practice as a CPA. The revised testing approach, designated as the “CPA Evolution”, comprises two main sections, (1) Core & (2) Disciplines.

Core

- Auditing & Attestation (AUD)
- Financial Accounting & Reporting (FAR)
- Taxation & Regulation (REG)

Disciplines

- Business Analysis & Reporting (BAR)
- Information Systems & Controls (ISC)
- Tax Compliance & Planning (TCP)

All CPA exam applicants must take the Core portion of the exam; however, applicants are given their choice of selecting one of the Discipline area tests. The Discipline sections will allow applicants to focus on an area that they plan to specialize in and select a test that matches their interest. While the content of the Core area is very similar to areas previously tested on the CPA exam, the Discipline areas are mostly new content, not previously tested to this degree.

In order to help students, prepare for the new Discipline areas of the CPA exam, we are proposing this course to cover the unique contents covered in Information Systems & Controls (ISC) segment of the CPA exam.

Reviewer
Comments

Course Change Request

New Course Proposal

Date Submitted: 03/03/24 6:08 pm

Viewing: **ACTG F056. : BUSINESS ANALYSIS & REPORTING (BAR)**

Last edit: 03/20/24 2:42 pm

Changes proposed by: Sara Seyedin (10517752)

In Workflow

- 1SS Curriculum Rep
- Curriculum Coordinator
- Activation

Course Proposal Form

Faculty Author Sara Seyedin & Arthur Ardizzone

Effective Term Summer 2025

Subject Accounting (ACTG) Course Number F056.

Department Accounting (ACTG)

Division Business and Social Sciences (1SS)

Units 5

Hours 5 hours lecture

Course Title BUSINESS ANALYSIS & REPORTING (BAR)

Short Title

Proposed Transferability CSU Only

Proposed Description and Requisites: Given the increasing complexity of today's business environment, CPAs are expected to be proficient in a wide array of advanced technical accounting topics, covering both for-profit entities and governmental agencies. Determining the proper application of these advanced topics will require research skills as well as business analysis, and advanced data analytics capabilities. The main topics covered in this course include applied research, business analysis, technical accounting and reporting, state and local governments and data and technology concepts.

Proposed Discipline Accounting

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

AA Degree in Accounting

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

No

Approval Path

- 03/19/24 2:26 pm Samuel Connell (connellsamuel): Approved for 1SS Curriculum Rep

Comments & Other Relevant Information for Discussion:

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Core

- Auditing & Attestation (AUD)
- Financial Accounting & Reporting (FAR)
- Taxation & Regulation (REG)

Disciplines

- Business Analysis & Reporting (BAR)
- Information Systems & Controls (ISC)
- Tax Compliance & Planning (TCP)

All CPA exam applicants must take the Core portion of the exam; however, applicants are given their choice of selecting one of the Discipline area tests. The Discipline sections will allow applicants to focus on an area that they plan to specialize in and select a test that matches their interest. While the content of the Core area is very similar to areas previously tested on the CPA exam, the Discipline areas are mostly new content, not previously tested to this degree.

In order to help students, prepare for the new Discipline areas of the CPA exam, we are proposing this course to cover the unique contents covered in Business Analysis & Reporting (BAR) segment of the CPA exam.

Reviewer
Comments

Course Change Request

New Course Proposal

Date Submitted: 03/13/24 10:47 am

Viewing: **ART F402A : HISTORY OF ART: HISTORY OF WESTERN ART FROM PREHISTORY THROUGH EARLY CHRISTIANITY: FOR OLDER ADULTS**

Last edit: 03/21/24 9:00 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:28 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author Hilary Gomes

Effective Term Summer 2025

Subject Art (ART) Course Number F402A

Department Art (ART)

Division Fine Arts and Communication (1FA)

Units 0

Hours 4 hours lecture, 1.5 hours lab

Course Title HISTORY OF ART: HISTORY OF WESTERN ART FROM PREHISTORY THROUGH EARLY CHRISTIANITY: FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: History of Western Art from Prehistory through Early Christianity: An introductory survey course for older adults examining images, objects, and architecture produced from the Paleolithic era to the end of the Roman Empire. We will discuss Prehistoric, Mesopotamian, Egyptian, Greek, Roman, and Early Christian and Byzantine culture. This course includes Illustrated lectures and readings.

Proposed Discipline Art History

To which Degree(s) or Certificate(s) would this course potentially be added?
None, this will be a stand-alone non-credit course for older adults.

Are there any other departments that may be impacted from the addition of this course?
No

Comments & Other Relevant Information for Discussion:

This non-credit course for older adults will be stacked with ART 2A HISTORY OF WESTERN ART FROM PREHISTORY THROUGH EARLY CHRISTIANITY. The plans will be to add ART 2A and ART 402A to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/13/24 10:47 am

Viewing: **ART F402B : HISTORY OF WESTERN ART FROM THE MIDDLE AGES TO THE RENAISSANCE: FOR OLDER ADULTS**

Last edit: 03/21/24 8:59 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:29 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F402B
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	4 hours lecture, 1.5 hours lab		
Course Title	HISTORY OF WESTERN ART FROM THE MIDDLE AGES TO THE RENAISSANCE: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: History of Western art from ca. 600 through ca. 1600: An introductory survey course for older adults examining the Middle Ages and the Renaissance using images, objects, and architecture to develop a comprehensive understanding of the social, political, and religious forces that shaped this period. This course includes illustrated lectures and readings.

Proposed Discipline: Art History

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 2B HISTORY OF WESTERN ART FROM THE MIDDLE AGES TO THE RENAISSANCE. The plans will be to add ART 2B and ART 402B to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/13/24 10:49 am

Viewing: **ART F402C : HISTORY OF WESTERN ART FROM THE BAROQUE TO IMPRESSIONISM: FOR OLDER ADULTS**

Last edit: 03/21/24 9:24 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:30 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F402C
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	4 hours lecture, 1.5 hours lab		
Course Title	HISTORY OF WESTERN ART FROM THE BAROQUE TO IMPRESSIONISM: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: History of Western art from ca. 1600 to the 21st century: An introductory survey course for older adults examining images, objects, and architecture produced from the Baroque to contemporary world. This course will include illustrated lectures and readings.

Proposed Discipline: Art History

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 2C: HISTORY OF WESTERN ART FROM THE BAROQUE TO CONTEMPORARY. The plans will be to add ART 2C and ART 402C to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/13/24 10:49 am

Viewing: **ART F402D : AFRICAN, OCEANIC & NATIVE AMERICAN ART: FOR OLDER ADULTS**

Last edit: 03/21/24 9:28 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:30 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author Hilary Gomes

Effective Term Summer 2025

Subject Art (ART) Course Number F402D

Department Art (ART)

Division Fine Arts and Communication (1FA)

Units 0

Hours 4 hours lecture, 1.5 hours lab

Course Title AFRICAN, OCEANIC & NATIVE AMERICAN ART: FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: In this art history course for older adults, a chronological and thematic examination of arts produced by a selection of societies from Africa, Oceania, and Native North America. This course includes the influences of these diverse non-Western arts on American art and society. Art objects will be analyzed within the relevant social and historical context and as part of a larger matrix of myth, ritual, religious belief, politics, and worldview. The course will include an examination of art from West Africa (e.g., Nigeria: Ife, Benin, Yoruba, Igbo, etc.), Melanesia (e.g., New Guinea), Polynesia (e.g., Hawaii, Rapa Nui, New Zealand), and Native North America (e.g., Woodlands, Southwest, Plains, Northwest Coast, Arctic and Subarctic, etc.) on the art of this period. This course is designed to relate contemporary artistic expression to modern thought. Lectures will be directed towards illustrating and interpreting the subjects listed in the course content. We will study painting, sculpture, architecture, conceptual art, environmental art, and modern digital media from across the world. This course will include a field trip to a museum.

Proposed Discipline Art History

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 2D AFRICAN, OCEANIC & NATIVE AMERICAN ART. The plans will be to add ART 2D and ART 402D to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/13/24 10:49 am

Viewing: **ART F402E : A HISTORY OF WOMEN IN ART: FOR OLDER ADULTS**

Last edit: 03/21/24 9:31 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:31 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F402E
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	4 hours lecture, 1.5 hours lab		
Course Title	A HISTORY OF WOMEN IN ART: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: In this art history course for older adults is a chronological, thematic, and cross-cultural examination of artworks and gender issues concerning women artists from the early Middle Ages to the 21st century. This course includes the influences on art produced by women of such issues as race, gender, socio-economic and political conditions, increasing urbanization and conceptions of nature, etc.

Proposed Discipline: Art History

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 2E A HISTORY OF WOMEN IN ART. The plans will be to add ART 2E and ART 402E to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/13/24 10:49 am

Viewing: **ART F402F : INTRODUCTION TO ASIAN ART: FOR OLDER ADULTS**

Last edit: 03/21/24 9:34 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:31 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F402F
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	4 hours lecture, 1.5 hours lab		
Course Title	INTRODUCTION TO ASIAN ART: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: In this course for older adults, an introduction to the art of India, China, and Japan from the Neolithic Age to the present, covering painting, sculpture, architecture, and ceramics. This course emphasizes the cultural, social, and historical meaning of art and traces the changes in style, meaning, and use of art within the broader context of the great religious traditions of China, Japan, and India.

Proposed Discipline: Art History

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 2F INTRODUCTION TO ASIAN ART. The plans will be to add ART 2F and ART 402F to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/13/24 10:50 am

Viewing: **ART F402J : AMERICAN ART: FOR OLDER ADULTS**

Last edit: 03/21/24 9:37 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:31 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author Hilary Gomes

Effective Term Summer 2025

Subject Art (ART) Course Number F402J

Department Art (ART)

Division Fine Arts and Communication (1FA)

Units 0

Hours 4 hours lecture, 1.5 hours lab

Course Title AMERICAN ART: FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: In this art history course for older adults, examination of the history of the culturally diverse arts produced in North America (specifically the United States) from prehistory to the present. American art is considered thematically and chronologically, focusing on the important influences on art of nature, landscape, urbanization, gender, race, religion, ethnicity, socio-economic and political reforms, and civil and international wars.

Proposed Discipline Art History

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

Are there any other departments that may be impacted from the addition of this course?
No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 2J AMERICAN ART. The plans will be to add ART 2J and ART 402J to the stacked FA MOU.

Reviewer
Comments

Course Change Request

New Course Proposal

Date Submitted: 03/13/24 10:51 am

Viewing: **ART F403. : HISTORY OF MODERN ART FROM POST-IMPRESSIONISM TO THE PRESENT: FOR OLDER ADULTS**

Last edit: 03/21/24 9:39 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:31 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F403.
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	4 hours lecture, 1.5 hours lab		
Course Title	HISTORY OF MODERN ART FROM POST-IMPRESSIONISM TO THE PRESENT: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: A study of art and architecture for older adults from Post-Impressionism to the present day, emphasizing the importance of social, economic, and political influences on the art of this period. This course is designed to relate contemporary artistic expression to modern thought. Lectures will be directed towards illustrating and interpreting the subjects listed in the course content. We will study painting, sculpture, architecture, conceptual art, environmental art, and modern digital media from across the world. A field trip will be taken to a museum.

Proposed Discipline: Art History

To which Degree(s) or Certificate(s) would this course potentially be added? None. This will be a stand-alone non-credit course for older adults.

Are there any other departments that may be impacted from the addition of this course? No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 3 HISTORY OF MODERN ART FROM POST-IMPRESSIONISM TO THE PRESENT The plans will be to add ART 3 and ART 403 to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/07/24 12:00 pm

Viewing: **ART F444. : CERAMIC SCULPTURE: FOR OLDER ADULTS**

Last edit: 03/21/24 9:44 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:11 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F444.
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	3 hours lecture, 3 hours lab		
Course Title	CERAMIC SCULPTURE: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: Studio practice for older adults in designing and creating original ceramic sculpture.

Proposed Discipline: Art

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

Are there any other departments that may be impacted from the addition of this course?
No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 44 CERAMIC SCULPTURE. The plans will be to add ART 44 and ART 444 to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/07/24 10:33 am

Viewing: **ART F445A : BEGINNING CERAMICS HANDBUILDING:
FOR OLDER ADULTS**

Last edit: 03/21/24 9:46 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:11 pm
Jordan Fong
(fongjordan):
Approved for 1FA
Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F445A
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	3 hours lecture, 3 hours lab		
Course Title	BEGINNING CERAMICS HANDBUILDING: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: An introduction to basic ceramic hand-building techniques for older adults. This course will introduce ceramic hand-building techniques, including pinching, coil, and slab construction, as well as examine various high and low-fire glazing techniques.

Proposed Discipline: Art

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 45A BEGINNING CERAMICS HAND-BUILDING. The plans will be to add ART 45A and ART 445A to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/07/24 10:34 am

Viewing: **ART F445B : BEGINNING CERAMICS POTTER'S WHEEL:
FOR OLDER ADULTS**

Last edit: 03/21/24 9:49 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:12 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F445B
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	3 hours lecture, 3 hours lab		
Course Title	BEGINNING CERAMICS POTTER'S WHEEL: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: An introduction to throwing on the potter's wheel for older adults. This course will introduce the process of wedging clay, centering a pot, pulling a wall, shaping processes, and trimming techniques to complete well balanced forms on the potter's wheel.

Proposed Discipline: Art

To which Degree(s) or Certificate(s) would this course potentially be added?
None, this will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This will be a non-credit course for older adults (55 plus). The ART 445B course will be stacked with the credit ART 45B course. The plans will be to add ART 45B and ART 445B to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/07/24 11:05 am

Viewing: **ART F445C : ADVANCED CERAMICS: FOR OLDER ADULTS**

Last edit: 03/21/24 9:52 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:12 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F445C
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	3 hours lecture, 3 hours lab		
Course Title	ADVANCED CERAMICS: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: Laboratory practice for older adults in throwing advanced forms on the potter's wheel, combining hand-built and wheel-thrown forms, glazing these forms, and understanding kiln loading and firing procedures.

Proposed Discipline: Art

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

Are there any other departments that may be impacted from the addition of this course?
No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 45C ADVANCED CERAMICS. The plans will be to add ART 45C and ART 445C to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/07/24 11:07 am

Viewing: **ART F445F : LOW-TEMPERATURE CERAMIC FIRING & GLAZING TECHNIQUES: FOR OLDER ADULTS**

Last edit: 03/21/24 9:54 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 03/19/24 2:13 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Hilary Gomes		
Effective Term	Summer 2025		
Subject	Art (ART)	Course Number	F445F
Department	Art (ART)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	3 hours lecture, 3 hours lab		
Course Title	LOW-TEMPERATURE CERAMIC FIRING & GLAZING TECHNIQUES: FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: Provides intermediate level instruction for older adults in clay processes covering intermediate wheel-throwing Studio practice in the glazing and firing of ceramic pieces using four low-temperature methods: electric kiln oxidation firing, luster firing, raku firing and pit firing.

Proposed Discipline: Art

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 45F LOW-TEMPERATURE CERAMIC FIRING & GLAZING TECHNIQUES. The plans will be to add ART 45F and ART 445F to the stacked FA MOU.

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/07/24 11:53 am

Viewing: **ART F446B : POTTER'S WHEEL II: FOR OLDER ADULTS**

Last edit: 03/21/24 9:55 am

Changes proposed by: Hilary Gomes (10926523)

In Workflow

- 1FA Curriculum Rep
- Curriculum Coordinator
- Activation

Course Proposal Form

Faculty Author Hilary Gomes

Effective Term Summer 2025

Subject Art (ART) Course Number F446B

Department Art (ART)

Division Fine Arts and Communication (1FA)

Units 0

Hours 3 hours lecture, 3 hours lab

Course Title POTTER'S WHEEL II: FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Provides intermediate level instruction for older adults in clay processes covering intermediate wheel-throwing methods, glazing, decorating, and firing procedures. Explores technical problem solving, and creative design.

Proposed Discipline Art

To which Degree(s) or Certificate(s) would this course potentially be added?
None. This will be a stand-alone non-credit course for older adults.

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

No

Comments & Other Relevant Information for Discussion:

This is a non-credit course for older adults (55 plus) and will be stacked with credit course ART 46B POTTER'S WHEEL II. The plans will be to add ART 46B and ART 446B to the stacked FA MOU.

Reviewer
Comments

Approval Path

- 03/19/24 2:14 pm
Jordan Fong (fongjordan):
Approved for 1FA Curriculum Rep

Course Change Request

New Course Proposal

Date Submitted: 03/28/24 10:38 am

Viewing: **ENGR F076A : SEMICONDUCTOR TECHNOLOGY & SOCIETY**

Last edit: 04/11/24 11:22 am

Changes proposed by: Sarah Parikh (20087149)

In Workflow

- 1PS Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 04/09/24 2:07 pm
Sarah Parikh
(parikhsarah):
Approved for 1PS
Curriculum Rep

Course Proposal Form

Faculty Author	Sarah Parikh		
Effective Term	Summer 2025		
Subject	Engineering (ENGR)	Course Number	F076A
Department	Engineering (ENGR)		
Division	Science Technology Engineering and Mathematics (1PS)		
Units	1		
Hours	1 hour lecture		
Course Title	SEMICONDUCTOR TECHNOLOGY & SOCIETY		
Short Title			

Proposed Transferability CSU Only

Proposed Description and Requisites: This course provides an introduction to the technology that produces the integrated circuit components that run everything from our phones to our household appliances and computers. This course also investigates the societal impact of creating these components.

Prerequisites: None

Proposed Discipline Engineering

To which Degree(s) or Certificate(s) would this course potentially be added?
Engineering AS as a support course

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

No

Comments & Other Relevant Information for Discussion:

This course has been designed to bridge between high school and college and draw interest into engineering and science. The course is part of a pre-apprenticeship pathway and provides scaffolding for students to enter into the Semiconductor Process Technician Apprenticeship program.

Reviewer
Comments

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 11:22 am

Viewing: **JRYM F401. : FUNDAMENTAL FOREMAN DEVELOPMENT**

Last edit: 03/15/24 9:54 am

Changes proposed by: Paul Gigliotti (20600353)

In Workflow

- 1ED Curriculum Rep
- Curriculum Coordinator
- Activation

Course Proposal Form

Faculty Author Paul Gigliotti

Effective Term Summer 2025

Subject Journeypersons (JRYM) Course Number F401.

Department Apprenticeship (A P)

Division Apprenticeship (1ED)

Units 0

Hours 30 hours lecture total

Course Title FUNDAMENTAL FOREMAN DEVELOPMENT

Short Title

Proposed Transferability None

Proposed Description and Requisites: This course will cover the fundamentals of electrical foreman role, covering the CEI 5 x 5 roles and responsibilities.

Proposed Discipline Electricity

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

Potentially added to the inside wireman program

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

No

Comments & Other Relevant Information for Discussion:

New purposed non-credit course is intended for Cupertino Electric employees.

Reviewer
Comments

Approval Path

- 03/12/24 11:25 am
Tim Myres
(TimM): Approved for 1ED
Curriculum Rep

Course Change Request

New Course Proposal

Date Submitted: 03/20/24 2:21 pm

Viewing: **MATH F047. : PATH TO CALCULUS**

Last edit: 04/11/24 11:38 am

Changes proposed by: Marnie Francisco (10866512)

In Workflow

- 1PS Curriculum Rep
- Curriculum Coordinator
- Activation

Course Proposal Form

Faculty Author Marnie Francisco and Teresa Zwack

Effective Term Summer 2025

Subject Mathematics (MATH) Course Number F047.

Department Mathematics (MATH)

Division Science Technology Engineering and Mathematics (1PS)

Units 6

Hours 6 hours lecture

Course Title PATH TO CALCULUS

Short Title

Proposed UC/CSU

Transferability

Proposed Description and Requisites: Topics include a study of functions, function families, their properties and transformations, compositions and inverses. Function families include trigonometric, logarithmic, exponential, polynomial, and rational. Multiple representations of functions are emphasized.

Proposed Discipline Mathematics

To which Degree(s) or Certificate(s) would this course potentially be added?
AS Degree in General Studies Science

Are there any other departments that may be impacted from the addition of this course?
No

Comments & Other Relevant Information for Discussion:
This course is being created in response to AB 1705

Reviewer
Comments

Approval Path

- 04/09/24 2:18 pm Sarah Parikh (parikhsarah): Approved for 1PS Curriculum Rep

Course Change Request

New Course Proposal

Date Submitted: 03/20/24 2:31 pm

Viewing: **MATH F247. : SUPPORT FOR MATH 47**

Last edit: 04/11/24 1:51 pm

Changes proposed by: Marnie Francisco (10866512)

In Workflow

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

Course Proposal Form

Faculty Author Marnie Francisco and Teresa Zwack

Effective Term Summer 2025

Subject Mathematics (MATH) Course Number F247.

Department Mathematics (MATH)

Division Science Technology Engineering and Mathematics (1PS)

Units 3

Hours 3 hours lecture

Course Title SUPPORT FOR MATH 47

Short Title

Proposed None

Transferability

Proposed Description and Requisites: Core prerequisite skills, competencies, and concepts needed in Path to Calculus. Intended for students who are concurrently enrolled in MATH 47 at Foothill College and who want extra support. Topics include a review of skills including developing a knowledge of function families with their graphs and behavior, transformations, average rate of change, inverses, and compositions. Family functions include linear, quadratic and power.

Corequisite: MATH 47.

Proposed Mathematics

Discipline

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 course is being created in response to AB 1705

Reviewer

Comments

Approval Path

1. 04/09/24 2:24 pm Sarah Parikh (parikhsarah): Approved for 1PS Curriculum Rep

Course Change Request

New Course Proposal

Date Submitted: 03/21/24 9:24 am

Viewing: **NCBS F447. : SUPPORT FOR MATH 47**

Last edit: 04/11/24 1:52 pm

Changes proposed by: Marnie Francisco (10866512)

In Workflow

- 1PS Curriculum Rep
- Curriculum Coordinator
- Activation

Approval Path

- 04/09/24 2:27 pm
Sarah Parikh
(parikhsarah):
Approved for 1PS
Curriculum Rep

Course Proposal Form

Faculty Author Marnie Francisco and Teresa Zwack

Effective Term Summer 2025

Subject Non-Credit: Basic Skills (NCBS) Course Number F447.

Department Mathematics (MATH)

Division Science Technology Engineering and Mathematics (1PS)

Units 0

Hours 3 hours lecture

Course Title SUPPORT FOR MATH 47

Short Title

Proposed Transferability None

Proposed Description and Requisites: Core prerequisite skills, competencies, and concepts needed in Path to Calculus. Intended for students who are concurrently enrolled in MATH 47 at Foothill College and who want extra support. Topics include a review of skills including developing a knowledge of function families with their graphs and behavior, transformations, average rate of change, inverses, and compositions. Family functions include linear, quadratic and power.

Corequisite: MATH 47.

Proposed Discipline Mathematics

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 course is being created in response to AB 1705

Reviewer Comments

Course Change Request

New Course Proposal

Date Submitted: 03/14/24 8:33 am

Viewing: **PHOT F408. : PHOTOGRAPHY OF AMERICAN CULTURES FOR OLDER ADULTS**

Last edit: 03/21/24 11:39 am

Changes proposed by: Kate Jordahl (10781545)

In Workflow

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

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/19/24 2:34 pm
Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Kate Jordahl		
Effective Term	Summer 2025		
Subject	Photography (PHOT)	Course Number	F408.
Department	Photography (PHOT)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	4 hours lecture, 3 hours lab		
Course Title	PHOTOGRAPHY OF AMERICAN CULTURES FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: Geared towards older adults, this class is an examination of photography's role in shaping ideas about race, class, gender, sexuality and national identity in America, from its historical roots to the present. Includes a wide variety of genres, such as commercial photography, portraiture, social documentary, photojournalism, ethnographic and scientific photography, erotica, and fine-art photography. Students will look at images from ethical, cultural, and critical perspectives as they develop visual literacy skills.

Proposed Discipline: Photography

To which Degree(s) or Certificate(s) would this course potentially be added?
This would be a stand-alone class.

Are there any other departments that may be impacted from the addition of this course?
No

Comments & Other Relevant Information for Discussion:
This would be a mirror of the credit PHOT 8 class.

Reviewer Comments: **Jordan Fong (fongjordan) (02/26/24 10:55 am):** Rollback: Sending back to you based on last week's FAC Div CC meeting!

Course Change Request

New Course Proposal

Date Submitted: 03/14/24 8:34 am

Viewing: **PHOT F410. : HISTORY OF PHOTOGRAPHY FOR OLDER ADULTS**

Last edit: 03/21/24 11:42 am

Changes proposed by: Kate Jordahl (10781545)

In Workflow

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

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/19/24 2:35 pm
Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Kate Jordahl		
Effective Term	Summer 2025		
Subject	Photography (PHOT)	Course Number	F410.
Department	Photography (PHOT)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	3 hours lecture, 3 hours lab		
Course Title	HISTORY OF PHOTOGRAPHY FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: Geared towards older adults, this class explores the history of still photography from the earliest investigations of the camera obscura to late 20th century electronic imaging. Emphasis on the role of photographs as a social and cultural force and on our artistic heritage of camera work.

Proposed Discipline: Photography

To which Degree(s) or Certificate(s) would this course potentially be added?
This would be a stand-alone class.

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

No

Comments & Other Relevant Information for Discussion:
This is a mirror class for the credit PHOT 10 class.

Reviewer Comments: **Jordan Fong (fongjordan) (02/26/24 10:55 am):** Rollback: Sending back to you based on last week's FAC Div CC meeting!

Course Change Request

New Course Proposal

Date Submitted: 03/14/24 8:35 am

Viewing: **PHOT F411. : CONTEMPORARY ISSUES IN**

PHOTOGRAPHY FOR OLDER ADULTS

Last edit: 03/21/24 11:45 am

Changes proposed by: Kate Jordahl (10781545)

In Workflow

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

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/19/24 2:35 pm
Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

Course Proposal Form

Faculty Author	Kate Jordahl		
Effective Term	Summer 2025		
Subject	Photography (PHOT)	Course Number	F411.
Department	Photography (PHOT)		
Division	Fine Arts and Communication (1FA)		
Units	0		
Hours	3 hours lecture, 3 hours lab		
Course Title	CONTEMPORARY ISSUES IN PHOTOGRAPHY FOR OLDER ADULTS		
Short Title			

Proposed Transferability: None

Proposed Description and Requisites: Geared towards older adults, this class is a survey of contemporary issues in photography. Critical theory and other issues surrounding contemporary photographic practices are explored through the style and content of work by selected contemporary photographers. Censorship, copyright, appropriation, and other current issues affecting the contemporary photographer are discussed. The interplay of traditional and digital photography and how it affects our concepts of truth, reality, society, and culture.

Proposed Discipline: Photography

To which Degree(s) or Certificate(s) would this course potentially be added?
This would be a stand alone class.

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 a mirror of the credit PHOT 11.

Reviewer Comments: **Jordan Fong (fongjordan) (02/26/24 10:55 am):** Rollback: Sending back to you based on last week's FAC Div CC meeting!

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:46 pm

Viewing: **THTR F407. : INTRODUCTION TO DIRECTING FOR OLDER ADULTS**

Last edit: 03/22/24 9:13 am

Changes proposed by: Tom Gough (10517673)

In Workflow

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

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/05/24 2:39 pm
Jordan Fong (fongjordan): Rollback to Initiator
3. 03/19/24 2:16 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 F407.

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 3 hours lecture, 3 hours lab

Course Title INTRODUCTION TO DIRECTING FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted to older adults, this course is a comprehensive overview of the breadth of responsibilities expected of a theatrical director and how to prepare for said responsibilities, including: conceptualizing a production; working collaboratively as dictated by industry norms; play selection; auditions and methods of casting; preparation of the play script; building the rehearsal and production schedule; fundamentals of composition, movement, stage business, and characterization, as applied to the directing of plays.

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 class. This course mirrors THTR 7.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:55 am)**: Rollback: Sending back to you based on last week's FAC Div CC meeting!

Comments **Jordan Fong (fongjordan) (03/05/24 2:39 pm)**: Rollback: hours

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:54 pm

Viewing: **THTR F420B : ACTING II FOR OLDER ADULTS**

Last edit: 03/22/24 9:16 am

Changes proposed by: Tom Gough (10517673)

In Workflow

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

Course Proposal Form

Faculty Author Tom Gough

Effective Term Summer 2025

Subject Theatre Arts (THTR) Course Number F420B

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 4 hours lecture, 1 hour lab

Course Title ACTING II FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course features further development of concepts introduced in THTR 20A, with emphasis to expanding the students' performance potential through probing greater depths of character analysis and text interpretation.

Prerequisite: Successful completion of THTR 20A or equivalent.

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 20B.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:55 am)**: Rollback: Sending back to you based on last week's FAC Div CC meeting!

Comments **Jordan Fong (fongjordan) (03/05/24 2:40 pm)**: Rollback: hours

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/05/24 2:40 pm
Jordan Fong (fongjordan): Rollback to Initiator
3. 03/19/24 2:16 pm
Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:46 pm

Viewing: **THTR F420C : ACTING III FOR OLDER ADULTS**

Last edit: 03/22/24 9:20 am

Changes proposed by: Tom Gough (10517673)

In Workflow

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

Course Proposal Form

Faculty Author Tom Gough

Effective Term Summer 2025

Subject Theatre Arts (THTR) Course Number F420C

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 3 hours lecture, 3 hours lab

Course Title ACTING III FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course furthers development of concepts introduced in THTR 20A and 20B with focus on the performance of selected scenes from works of specific periods to acquaint students with the breadth of theatre performance genres.

Prerequisite: Successful completion of THTR 20A or equivalent.

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 20C.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:55 am)**: Rollback: Sending back to you based on last week's FAC Div CC meeting!
Comments **Jordan Fong (fongjordan) (03/05/24 2:40 pm)**: Rollback: hours

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/05/24 2:40 pm
Jordan Fong (fongjordan): Rollback to Initiator
3. 03/19/24 2:16 pm
Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

Key: 8909

[Preview Bridge](#)

Course Change Request

New Course Proposal

Date Submitted: 03/19/24 2:22 pm

Viewing: **THTR F422. : AUDITIONING FOR THEATRE FOR OLDER ADULTS**

Last edit: 03/22/24 9:26 am

Changes proposed by: Tom Gough (10517673)

In Workflow

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

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/05/24 2:40 pm
Jordan Fong (fongjordan): Rollback to Initiator
3. 03/19/24 2:36 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 F422.

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 2 hours lecture

Course Title AUDITIONING FOR THEATRE FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeting older adults, students will be introduced to a variety of auditioning scenarios and strategies. With a focus on stage techniques, the course will explore the practical application of audition theories. Topics will include monologues for general auditions, building a repertoire, preparing video auditions, strategies for cold readings and improvisation situations. Students will be introduced to theories of preparation and etiquette as well as the use of informational resources.

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 22.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:55 am):** Rollback: Sending back to you based on last week's FAC Div CC meeting!

Comments **Jordan Fong (fongjordan) (03/05/24 2:40 pm):** Rollback: hours

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:47 pm

Viewing: **THTR F424. : READERS THEATRE FOR OLDER ADULTS**

Last edit: 03/22/24 9:31 am

Changes proposed by: Tom Gough (10517673)

In Workflow

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

Course Proposal Form

Faculty Author Tom Gough

Effective Term Summer 2025

Subject Theatre Arts (THTR) Course Number F424.

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 3 hours lecture, 3 hours lab

Course Title READERS THEATRE FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course includes preparation and performance of individual and group readings from various types of literature, especially play scripts, employing a range of vocal skills, and presented in a dramatic context.

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 24.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:55 am):** Rollback: Sending back to you based on last week's FAC Div CC meeting!

Jordan Fong (fongjordan) (03/05/24 2:40 pm): Rollback: hours

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/05/24 2:40 pm
Jordan Fong (fongjordan): Rollback to Initiator
3. 03/19/24 2:16 pm
Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:53 pm

Viewing: **THTR F438A : MOVEMENT PRACTICUM I FOR OLDER ADULTS**

Last edit: 03/22/24 9:39 am

Changes proposed by: Tom Gough (10517673)

In Workflow

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

Approval Path

1. 02/26/24 10:55 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/05/24 2:40 pm
Jordan Fong (fongjordan): Rollback to Initiator
3. 03/19/24 2:16 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 F438A

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 1.5 hours lecture, 1.5 hours lab

Course Title MOVEMENT PRACTICUM I FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course is an investigation of the following areas of stage movement for the actor: body awareness, flexibility, alignment, balance, muscle isolation and coordination; stress reduction and relaxation on stage; breath control; recognized theories of movement; dance for the actor; physical safety. The application of these skills to the performance of dramatic literature from a wide range of ethnic, social and historical sources.

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 course for older adults. This course mirrors THTR 38A.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:55 am)**: Rollback: Sending back to you based on last week's FAC Div CC meeting!

Comments **Jordan Fong (fongjordan) (03/05/24 2:40 pm)**: Rollback: hours

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:53 pm

Viewing: **THTR F438D : STAGE COMBAT FOR OLDER ADULTS**

Last edit: 03/22/24 9:44 am

Changes proposed by: Tom Gough (10517673)

In Workflow

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

Course Proposal Form

Faculty Author Tom Gough

Effective Term Summer 2025

Subject Theatre Arts (THTR) Course Number F438D

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 1.5 hours lecture, 1.5 hours lab

Course Title STAGE COMBAT FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course features introduction to the concepts and practice of choreographed hand-to-hand and small weapons combat for stage and camera using techniques with emphasis on safety concepts and universal industry maneuver standards required for all stage combat circumstances.

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 38D.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:56 am):** Rollback: Sending back to you based on last week's FAC Div CC meeting!
Comments **Jordan Fong (fongjordan) (03/05/24 2:40 pm):** Rollback: hours

Approval Path

1. 02/26/24 10:56 am
Jordan Fong (fongjordan): Rollback to Initiator
2. 03/05/24 2:40 pm
Jordan Fong (fongjordan): Rollback to Initiator
3. 03/19/24 2:16 pm
Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:48 pm

Viewing: **THTR F443C : FOUNDATIONS IN CLASSICAL ACTING FOR OLDER ADULTS**

Last edit: 03/22/24 9:47 am

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 2:40 pm
Jordan Fong (fongjordan): Rollback to Initiator
3. 03/19/24 2:17 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 F443C

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 3 hours lecture, 3 hours lab

Course Title FOUNDATIONS IN CLASSICAL ACTING FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course features an introduction to the specific acting challenges presented by performing classical scripts, pre-18th century. Incorporate skills of language analysis, verbal acumen and physical interpretation, including exploration of body awareness into performance preparation and execution as they specifically relate to performing classical texts.

Prerequisite: Successful completion of THTR 20A or equivalent.

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 43C.

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 2:40 pm): Rollback: hours

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:48 pm

Viewing: **THTR F443E : IMPROVISATION FOR OLDER ADULTS**

Last edit: 03/22/24 9:49 am

Changes proposed by: Tom Gough (10517673)

In Workflow

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

Course Proposal Form

Faculty Author Tom Gough

Effective Term Summer 2025

Subject Theatre Arts (THTR) Course Number F443E

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 3 hours lecture, 3 hours lab

Course Title IMPROVISATION FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course is a presentation of the fundamentals and graduating skills of organic performance without script or text. Practical application of the theories of improvisational basic skills, universally translated to virtually all forms of improvisation, towards performance.

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 43E.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:56 am):** Rollback: Sending back to you based on last week's FAC Div CC meeting!
Comments **Jordan Fong (fongjordan) (03/05/24 2:41 pm):** Rollback: hours

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. 03/19/24 2:17 pm
Jordan Fong (fongjordan): Approved for 1FA Curriculum Rep

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:51 pm

Viewing: **THTR F447A : INTRODUCTION TO MUSICAL THEATRE PRODUCTION FOR OLDER ADULTS**

Last edit: 03/22/24 10:00 am

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. 03/19/24 2:17 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 F447A

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 18 hours lab

Course Title INTRODUCTION TO MUSICAL THEATRE PRODUCTION FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course will introduce the fundamentals of musical theatre performance through the rehearsal and performance of a fully staged musical theatre production. Students are required to attend rehearsals and performances.

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 47A.

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

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:49 pm

Viewing: **THTR F448G : INTRODUCTION TO VOICE-OVER ACTING FOR OLDER ADULTS**

Last edit: 03/22/24 10:03 am

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. 03/19/24 2:17 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 F448G

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 3 hours lecture, 3 hours lab

Course Title INTRODUCTION TO VOICE-OVER ACTING FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course is an introduction to voice-over acting, providing an overview of required skills, general industry knowledge, and career opportunities. Instruction and practice in techniques of the various genres and performance styles, including character (animation, video games, toys), commercial (radio, TV, online), and narration (audio books, documentaries, corporate training videos, e-learning, websites). Fundamental components also include microphone technique, home studio setup, auditioning and marketing.

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 48G.

Reviewer **Jordan Fong (fongjordan) (02/26/24 10:56 am)**: Rollback: Sending back to you based on last week's FAC Div CC meeting!
Comments **Jordan Fong (fongjordan) (03/05/24 2:41 pm)**: Rollback: hours

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:51 pm

Viewing: **THTR F449A : PERFORMANCE PRODUCTION I FOR OLDER ADULTS**

Last edit: 03/22/24 10:09 am

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. 03/19/24 2:17 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 F449A

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 1 hour lecture, 15 hours lab

Course Title PERFORMANCE PRODUCTION I FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course is supervised participation as a performer in scheduled non-musical productions of the Theatre Arts Department with a designated emphasis towards confidence in performing, as well as integrative familiarity in the full process of mounting a production for public performance. Culminates in a fully staged theatrical production.

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 49A.

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

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

Course Change Request

New Course Proposal

Date Submitted: 03/12/24 3:49 pm

Viewing: **THTR F463A : FILM & TELEVISION ACTING WORKSHOP FOR OLDER ADULTS**

Last edit: 03/22/24 10:11 am

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. 03/19/24 2:17 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 F463A

Department Theatre Arts (THTR)

Division Fine Arts and Communication (1FA)

Units 0

Hours 3 hours lecture, 3 hours lab

Course Title FILM & TELEVISION ACTING WORKSHOP FOR OLDER ADULTS

Short Title

Proposed Transferability None

Proposed Description and Requisites: Targeted towards older adults, this course introduces students to the basic fundamentals of on-camera acting in a practical modality. Students work with the variety of styles currently used in film and television, including commercial, dramatic, documentary, and industrial. Students will experiment to develop the actor's relationship and understanding of camera acting techniques.

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 63A.

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

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

FOOTHILL COLLEGE GENERAL EDUCATION & GRADUATION REQUIREMENTS

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

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

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

Code	Title	Units
I. Humanities		
ART 1	INTRODUCTION TO ART	4.5
ART 2A	HISTORY OF ART: HISTORY OF WESTERN ART FROM PREHISTORY THROUGH EARLY CHRISTIANITY	4.5
or ART 2AH	HONORS HISTORY OF ART: HISTORY OF WESTERN ART FROM PREHISTORY THROUGH EARLY CHRISTIANITY	
ART 2B	HISTORY OF WESTERN ART FROM THE MIDDLE AGES TO THE RENAISSANCE	4.5
or ART 2BH	HONORS HISTORY OF WESTERN ART FROM THE MIDDLE AGES TO THE RENAISSANCE	
ART 2C	HISTORY OF WESTERN ART FROM THE BAROQUE TO CONTEMPORARY	4.5
ART 2D	AFRICAN, OCEANIC & NATIVE AMERICAN ART	4.5
ART 2E	A HISTORY OF WOMEN IN ART	4.5
ART 2F	INTRODUCTION TO ASIAN ART	4.5
ART 2J	AMERICAN ART	4.5
ART 4A	FUNDAMENTALS IN DRAWING	4

ART 4G	MURAL MAKING: COMMUNITY ART PROJECT	4
ART 5A	2-D FOUNDATIONS	4
ART 5B	3-D FOUNDATIONS	4
ART 20	COLOR THEORY	4
ART 45B	BEGINNING CERAMICS POTTER'S WHEEL	4
BUSI 70	BUSINESS & PROFESSIONAL ETHICS	4
CRWR 6	INTRODUCTION TO CREATIVE WRITING	5
CRWR 25A	POETRY IN COMMUNITY	5
CRWR 39A	INTRODUCTION TO SHORT FICTION WRITING	5
CRWR 41A	POETRY WRITING	5
DANC 10	TOPICS IN DANCE HISTORY	5
ENGL 5	LOUD & QUEER: LITERATURE OF SEXUAL/GENDER IDENTITY	4
ENGL 7	NATIVE AMERICAN LITERATURE	4
ENGL 10A	LITERATURE & THE ENVIRONMENT	4
ENGL 12	AFRICAN AMERICAN LITERATURE	4
ENGL 12A	ALL POWER TO THE PEOPLE: LITERATURE OF THE BLACK PANTHER PARTY	4
ENGL 14	TRAVELING THE WORLD THROUGH CONTEMPORARY LITERATURE	4
ENGL 16	INTRODUCTION TO LITERATURE	4
ENGL 17	INTRODUCTION TO SHAKESPEARE	4
ENGL 22	WOMEN WRITERS	4
ENGL 24	UNMASKING COMICS: THE DAWN OF THE GRAPHIC NOVEL	4
ENGL 27G	DETECTIVE & MYSTERY FICTION	4
ENGL 31	LATINO/A LITERATURE	4
ENGL 34C	LITERATURE INTO FILM	4
ENGL 37	SCIENCE FICTION LITERATURE: REIMAGINEERING REALITY	4
ENGL 38	LITERATURE OF PROTEST	4
ENGL 40	ASIAN AMERICAN LITERATURE	4
ENGL 43A	SURVEY OF BRITISH LITERATURE I: BEOWULF TO THE LATE 18TH CENTURY	5
or ENGL 43AH	HONORS SURVEY OF BRITISH LITERATURE I: BEOWULF TO THE LATE 18TH CENTURY	
ENGL 43B	SURVEY OF BRITISH LITERATURE II: THE ROMANTIC PERIOD TO THE PRESENT	5
or ENGL 43BH	HONORS SURVEY OF BRITISH LITERATURE II: THE ROMANTIC PERIOD TO THE PRESENT	
ENGL 45A	SURVEY OF AMERICAN LITERATURE I: BEGINNINGS TO 1865	5
or ENGL 45AH	HONORS SURVEY OF AMERICAN LITERATURE I: BEGINNINGS TO 1865	
ENGL 45B	SURVEY OF AMERICAN LITERATURE II: 1865 TO THE PRESENT	5
or ENGL 45BH	HONORS SURVEY OF AMERICAN LITERATURE II: 1865 TO THE PRESENT	
ENGL 49	CALIFORNIA LITERATURE: GOLDEN STATE CULTURES, GEOGRAPHIES & HISTORIES	4
ETHN 1	INTRODUCTION TO ETHNIC STUDIES	4
ETHN 2	INTRODUCTION TO AFRICAN AMERICAN STUDIES	4
ETHN 3	INTRODUCTION TO LATINX STUDIES	4
ETHN 4	INTRODUCTION TO NATIVE AMERICAN STUDIES	4

ETHN 5	INTRODUCTION TO ASIAN AMERICAN STUDIES	4	or MUS 2CH	HONORS GREAT COMPOSERS & MUSIC MASTERPIECES	
ETHN 7	INTRODUCTION TO PACIFIC ISLANDS & OCEANIA STUDIES	4	MUS 2D	WORLD MUSIC: ROOTS TO CONTEMPORARY GLOBAL FUSION	5
GID 1	HISTORY OF GRAPHIC DESIGN	4	MUS 2F	HISTORY OF AMERICAN MUSICAL THEATRE	4
HUMN 1	CULTURES, CIVILIZATIONS & IDEAS: THE ANCIENT WORLD	4	MUS 8	MUSIC OF AMERICAN CULTURES	5
or HUMN 1H	HONORS CULTURES, CIVILIZATIONS & IDEAS: THE ANCIENT WORLD		or MUS 8H	HONORS MUSIC OF AMERICAN CULTURES	
HUMN 2	CULTURES, CIVILIZATIONS & IDEAS: OF EMPIRES & CONFLICT	4	MUS 11D	HISTORY OF ELECTRONIC MUSIC: ORIGINS-1970	4
HUMN 3	WORLD MYTHS IN LITERATURE ARTS & FILM	4	MUS 11E	HISTORY OF ELECTRONIC MUSIC: 1970-PRESENT	4
or HUMN 3H	HONORS WORLD MYTHS IN LITERATURE ARTS & FILM		PHIL 2	INTRODUCTION TO SOCIAL & POLITICAL PHILOSOPHY	4
HUMN 4	TRAUMA & THE ARTS	4	PHIL 4	INTRODUCTION TO PHILOSOPHY	4
or HUMN 4H	HONORS TRAUMA & THE ARTS		PHIL 11	INTRODUCTION TO THE PHILOSOPHY OF ART & AESTHETICS	4
HUMN 5	CULTURES, CIVILIZATIONS & IDEAS: THE MODERN WORLD	4	PHIL 20A	HISTORY OF WESTERN PHILOSOPHY FROM SOCRATES THROUGH ST. THOMAS	4
or HUMN 5H	HONORS CULTURES, CIVILIZATIONS & IDEAS: THE MODERN WORLD		PHIL 20B	HISTORY OF WESTERN PHILOSOPHY FROM THE RENAISSANCE THROUGH KANT	4
HUMN 6	THE SHOCK OF THE NEW: FROM THE MODERN TO THE CONTEMPORARY	4	PHIL 24	COMPARATIVE WORLD RELIGIONS: EAST	4
HUMN 7	GLOBAL RELIGIONS: CONTEMPORARY PRACTICES & PERSPECTIVES	4	PHIL 25	COMPARATIVE WORLD RELIGIONS: WEST	4
or HUMN 7H	HONORS GLOBAL RELIGIONS: CONTEMPORARY PRACTICES & PERSPECTIVES		PHOT 5	INTRODUCTION TO PHOTOGRAPHY	4
HUMN 8	EX MACHINA: THE PARADOX OF BEING HUMAN IN THE DIGITAL AGE	4	PHOT 8	PHOTOGRAPHY OF AMERICAN CULTURES	5
HUMN 9	ONCE UPON A TIME? THE IMMORTAL LURE OF FAIRY TALES	4	or PHOT 8H	HONORS PHOTOGRAPHY OF AMERICAN CULTURES	
HUMN 10	ON THE MOVE: THE IMMIGRANT EXPERIENCE IN LITERATURE, FILM & MULTIMEDIA	4	PHOT 10	HISTORY OF PHOTOGRAPHY	4
HUMN 11	INTRODUCTION TO POPULAR CULTURE	4	or PHOT 10H	HONORS HISTORY OF PHOTOGRAPHY	
or HUMN 11H	HONORS INTRODUCTION TO POPULAR CULTURE		PHOT 11	CONTEMPORARY ISSUES IN PHOTOGRAPHY	4
HUMN 13	VIDEO GAMES & POPULAR CULTURE	4	or PHOT 11H	HONORS CONTEMPORARY ISSUES IN PHOTOGRAPHY	
HUMN 14	THE ART OF PEACE: NARRATIVE REPRESENTATIONS OF PACIFISM	4	SPAN 4	INTERMEDIATE SPANISH I	5
JAPN 14A	ADVANCED CONVERSATION I	4	SPAN 5	INTERMEDIATE SPANISH II	5
JAPN 14B	ADVANCED CONVERSATION II	4	SPAN 6	INTERMEDIATE SPANISH III	5
KINS 5	SPORTS & CINEMA	4	THTR 1	INTRODUCTION TO THEATRE	4
MDIA 1	INTRODUCTION TO FILM STUDIES	4	THTR 2A	HISTORY OF DRAMATIC LITERATURE: CLASSICAL TO MOLIERE	4
or MDIA 1H	HONORS INTRODUCTION TO FILM STUDIES		THTR 2F	HISTORY OF AMERICAN MUSICAL THEATRE	4
MDIA 2A	HISTORY OF FILM 1895-1945	4	THTR 8	MULTICULTURAL THEATRE ARTS IN MODERN AMERICA	4
MDIA 2B	HISTORY OF FILM 1945-CURRENT	4	THTR 26	INTRODUCTION TO FASHION HISTORY & COSTUME DESIGN	4
MDIA 2C	CURRENT TRENDS IN FILM, TV & THE INTERNET	4	II. English		
MDIA 11	INTRODUCTION TO POPULAR CULTURE	4	ENGL 1A	COMPOSITION & READING	5
or MDIA 11H	HONORS INTRODUCTION TO POPULAR CULTURE		or ENGL 1AH	HONORS COMPOSITION & READING	
MDIA 13	VIDEO GAMES & POPULAR CULTURE	4	ESLL 26	ADVANCED COMPOSITION & READING	5
MUS 1	INTRODUCTION TO MUSIC	4	Additionally, students who complete the major requirements for the Apprenticeship - Plumbing Technology program will satisfy Area II.		
MUS 2A	GREAT COMPOSERS & MUSIC MASTERPIECES	5	III. Natural Sciences (with Laboratory)		
or MUS 2AH	HONORS GREAT COMPOSERS & MUSIC MASTERPIECES		ANTH 1 & 1L	INTRODUCTION TO PHYSICAL ANTHROPOLOGY and PHYSICAL ANTHROPOLOGY LABORATORY	5
MUS 2B	GREAT COMPOSERS & MUSIC MASTERPIECES	5	or ANTH 1H & 1HL	HONORS INTRODUCTION TO PHYSICAL ANTHROPOLOGY and HONORS PHYSICAL ANTHROPOLOGY LABORATORY	
or MUS 2BH	HONORS GREAT COMPOSERS & MUSIC MASTERPIECES		ANTH 13 & 13L	INTRODUCTION TO FORENSIC ANTHROPOLOGY and FORENSIC ANTHROPOLOGY LABORATORY	5
MUS 2C	GREAT COMPOSERS & MUSIC MASTERPIECES	5			

ASTR 10A & ASTR 10L	GENERAL ASTRONOMY: SOLAR SYSTEM and ASTRONOMY LABORATORY	6	ECON 9 or ECON 9H	INTERNATIONAL POLITICAL ECONOMY HONORS INTERNATIONAL POLITICAL ECONOMY	4
ASTR 10B & ASTR 10L	GENERAL ASTRONOMY: STARS, GALAXIES, COSMOLOGY and ASTRONOMY LABORATORY	6	ECON 25	THE GLOBAL ECONOMY	4
or ASTR 10BH & ASTR 10L	HONORS GENERAL ASTRONOMY: STARS, GALAXIES, COSMOLOGY and ASTRONOMY LABORATORY		GEOG 2	HUMAN GEOGRAPHY	4
BIOL 9 & 9L	ENVIRONMENTAL BIOLOGY and ENVIRONMENTAL BIOLOGY LABORATORY	5	GEOG 5	INTRODUCTION TO ECONOMIC GEOGRAPHY	4
BIOL 10	GENERAL BIOLOGY: BASIC PRINCIPLES	5	GEOG 10	WORLD REGIONAL GEOGRAPHY	4
BIOL 13	MARINE BIOLOGY	5	HIST 3A	WORLD HISTORY FROM PREHISTORY TO 750 CE	4
BIOL 14	HUMAN BIOLOGY	5	HIST 3B	WORLD HISTORY FROM 750 CE TO 1750 CE	4
BIOL 15	CALIFORNIA ECOLOGY/NATURAL HISTORY	5	HIST 3C	WORLD HISTORY FROM 1750 CE TO THE PRESENT	4
BIOL 41	MICROBIOLOGY	6	HIST 4A	HISTORY OF WESTERN CIVILIZATION TO 800 CE	4
CHEM 1A	GENERAL CHEMISTRY	5	HIST 4B	HISTORY OF WESTERN CIVILIZATION: 700-1800	4
CHEM 25	FUNDAMENTALS OF CHEMISTRY	5	HIST 4C	HISTORY OF WESTERN CIVILIZATION 1789- PRESENT	4
CHEM 30A	SURVEY OF INORGANIC & ORGANIC CHEMISTRY	5	HIST 8	HISTORY OF LATIN AMERICA	4
GEOG 1	PHYSICAL GEOGRAPHY	5	HIST 10	HISTORY OF CALIFORNIA: THE MULTICULTURAL STATE	4
HORT 15	ORIENTATION TO ENVIRONMENTAL HORTICULTURE	4	HIST 17A	HISTORY OF THE UNITED STATES TO 1815	4
PHYS 2A	GENERAL PHYSICS	5	HIST 17B	HISTORY OF THE UNITED STATES FROM 1812 TO 1914	4
PHYS 4A	GENERAL PHYSICS (CALCULUS)	6	HIST 17C	HISTORY OF THE UNITED STATES FROM 1914 TO THE PRESENT	4
PSE 20	INTRODUCTION TO PHYSICAL SCIENCE	5	HIST 18	INTRODUCTION TO MIDDLE EASTERN CIVILIZATION	4
Additionally, students who complete the major requirements for the Apprenticeship - Plumbing Technology program will satisfy Area III.			HIST 20	HISTORY OF RUSSIA & THE SOVIET UNION	4
IV. Social and Behavioral Sciences			KINS 2	SPORT IN SOCIETY	5
ANTH 2A or ANTH 2AH	CULTURAL ANTHROPOLOGY HONORS CULTURAL ANTHROPOLOGY	4	KINS 10	WOMEN IN SPORTS	5
ANTH 2B	PATTERNS OF CULTURE	4	KINS 51	PERFORMANCE ENHANCING SUBSTANCES IN SPORT & EXERCISE	4
ANTH 3	WORLD PREHISTORY: THE RISE & FALL OF EARLY CIVILIZATIONS	4	POLI 1	POLITICAL SCIENCE: INTRODUCTION TO AMERICAN GOVERNMENT & POLITICS	5
ANTH 5 or ANTH 5H	MAGIC, SCIENCE & RELIGION HONORS MAGIC, SCIENCE & RELIGION	4	POLI 3	INTRODUCTION TO POLITICAL PHILOSOPHY/ POLITICAL THEORY	5
ANTH 8 or ANTH 8H	INTRODUCTION TO ARCHAEOLOGY HONORS INTRODUCTION TO ARCHAEOLOGY	4	or POLI 3H	HONORS INTRODUCTION TO POLITICAL PHILOSOPHY/POLITICAL THEORY	
ANTH 12	APPLIED ANTHROPOLOGY	4	POLI 4	CALIFORNIA POLITICS & GOVERNMENT	5
ANTH 14	LINGUISTIC ANTHROPOLOGY	4	POLI 9	INTERNATIONAL POLITICAL ECONOMY	4
ANTH 15	MEDICAL ANTHROPOLOGY: METHODS & PRACTICE	4	or POLI 9H	HONORS INTERNATIONAL POLITICAL ECONOMY	
ANTH 20	NATIVE PEOPLES OF CALIFORNIA	4	POLI 15	INTERNATIONAL RELATIONS/WORLD POLITICS	4
ANTH 22	THE AZTEC, MAYA, INCA & THEIR PREDECESSORS: CIVILIZATIONS OF THE AMERICAS	4	or POLI 15H	HONORS INTERNATIONAL RELATIONS/WORLD POLITICS	
BUSI 22 or BUSI 22H	PRINCIPLES OF BUSINESS HONORS PRINCIPLES OF BUSINESS	5	PSYC 1	GENERAL PSYCHOLOGY	5
CHLD 1	CHILD GROWTH & DEVELOPMENT: PRENATAL THROUGH EARLY CHILDHOOD	4	or PSYC 1H	HONORS GENERAL PSYCHOLOGY	
CHLD 2	CHILD GROWTH & DEVELOPMENT II: MIDDLE CHILDHOOD THROUGH ADOLESCENCE	4	PSYC 2	CULTURAL PSYCHOLOGY	4
CNSL 3 or CNSL 3H	IDENTITY, CULTURE & EDUCATION HONORS IDENTITY, CULTURE & EDUCATION	4.5	PSYC 4	INTRODUCTION TO BIOPSYCHOLOGY	5
ECON 1A	PRINCIPLES OF MACROECONOMICS	5	PSYC 9	POSITIVE PSYCHOLOGY	4
ECON 1B	PRINCIPLES OF MICROECONOMICS	5	PSYC 10	RESEARCH METHODS & DESIGNS	5
			PSYC 14	CHILD & ADOLESCENT DEVELOPMENT	4
			PSYC 21	PSYCHOLOGY OF WOMEN: SEX & GENDER DIFFERENCES	4
			PSYC 22	PSYCHOLOGY OF PREJUDICE & DISCRIMINATION	4
			PSYC 25	INTRODUCTION TO ABNORMAL PSYCHOLOGY	4
			PSYC 30	SOCIAL PSYCHOLOGY	4
			PSYC 33	INTRODUCTION TO PERSONALITY PSYCHOLOGY	4

PSYC 40	HUMAN DEVELOPMENT	5
PSYC 49	HUMAN SEXUALITY	4
SOC 1	INTRODUCTION TO SOCIOLOGY	5
or SOC 1H	HONORS INTRODUCTION TO SOCIOLOGY	
SOC 10	SOCIAL RESEARCH METHODS & DESIGNS	5
SOC 11	INTRODUCTION TO SOCIAL WELFARE	5
SOC 15	LAW & SOCIETY	4
SOC 19	ALCOHOL & DRUG ABUSE	4
SOC 20	MAJOR SOCIAL PROBLEMS	4
SOC 23	RACE & ETHNIC RELATIONS	4
SOC 28	SOCIOLOGY OF GENDER	4
SOC 30	SOCIAL PSYCHOLOGY	4
SOC 40	ASPECTS OF MARRIAGE & FAMILY	4
SOC 45	SOCIOLOGY OF SEXUALITY	4
WMN 5	INTRODUCTION TO WOMEN'S STUDIES	4
WMN 21	PSYCHOLOGY OF WOMEN: SEX & GENDER DIFFERENCES	4

Additionally, students who complete the major requirements for any of the following Apprenticeship programs will satisfy Area IV: Air Conditioning and Refrigeration Technology (Pathway 1); Plumbing Technology; Sheet Metal.

V. Communication and Analytical Thinking

COMM 1A	PUBLIC SPEAKING	5
or COMM 1AH	HONORS PUBLIC SPEAKING	
COMM 1B	ARGUMENTATION & PERSUASION	5
COMM 2	INTERPERSONAL COMMUNICATION	5
COMM 3	INTRODUCTION TO COMMUNICATION STUDIES	5
COMM 4	GROUP DISCUSSION	5
COMM 55	CAREER & LEADERSHIP COMMUNICATION IN THE GLOBAL WORKPLACE	5
C S 1A	OBJECT-ORIENTED PROGRAMMING METHODOLOGIES IN JAVA	4.5
C S 1B	INTERMEDIATE SOFTWARE DESIGN IN JAVA	4.5
C S 1C	ADVANCED DATA STRUCTURES & ALGORITHMS IN JAVA	4.5
C S 2A	OBJECT-ORIENTED PROGRAMMING METHODOLOGIES IN C++	4.5
C S 2B	INTERMEDIATE SOFTWARE DESIGN IN C++	4.5
C S 2C	ADVANCED DATA STRUCTURES & ALGORITHMS IN C++	4.5
C S 3A	OBJECT-ORIENTED PROGRAMMING METHODOLOGIES IN PYTHON	4.5
C S 18	DISCRETE MATHEMATICS	5
ENGL 1B	COMPOSITION, CRITICAL READING & THINKING THROUGH LITERATURE	5
or ENGL 1BH	HONORS COMPOSITION, CRITICAL READING & THINKING THROUGH LITERATURE	
ENGL 50C	TECHNICAL WRITING	5
GEOG 11	INTRODUCTION TO MAPPING & SPATIAL REASONING	4
GIST 11	INTRODUCTION TO MAPPING & SPATIAL REASONING	4
MATH 1A	CALCULUS	5
or MATH 1AH	HONORS CALCULUS I	

MATH 1B	CALCULUS	5
or MATH 1BH	HONORS CALCULUS II	
MATH 1C	CALCULUS	5
MATH 10	ELEMENTARY STATISTICS	5
MATH 12	CALCULUS FOR BUSINESS & ECONOMICS	5
MATH 17	INTEGRATED STATISTICS II	5
MATH 22	DISCRETE MATHEMATICS	5
MATH 40A	QUANTITATIVE REASONING	5
MATH 44	MATH FOR THE LIBERAL ARTS	5
MATH 48A	PRECALCULUS I	5
MATH 48B	PRECALCULUS II	5
MATH 48C	PRECALCULUS III	5
MDIA 3	INTRODUCTION TO FILM & MEDIA CRITICISM	4
PHIL 1	CRITICAL THINKING & WRITING	5
PHIL 7	INTRODUCTION TO SYMBOLIC LOGIC	5
PSYC 7	STATISTICS FOR THE BEHAVIORAL SCIENCES	5
SOC 7	STATISTICS FOR THE BEHAVIORAL SCIENCES	5

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

VI. United States Cultures and Communities

CHLD 51A	AFFIRMING DIVERSITY IN EDUCATION	4
CNSL 3	IDENTITY, CULTURE & EDUCATION	4.5
or CNSL 3H	HONORS IDENTITY, CULTURE & EDUCATION	
COMM 10	GENDER, COMMUNICATION & CULTURE	5
COMM 12	INTERCULTURAL COMMUNICATION	5
ENGL 7	NATIVE AMERICAN LITERATURE	4
ENGL 12	AFRICAN AMERICAN LITERATURE	4
ENGL 12A	ALL POWER TO THE PEOPLE: LITERATURE OF THE BLACK PANTHER PARTY	4
ENGL 40	ASIAN AMERICAN LITERATURE	4
ENGL 45A	SURVEY OF AMERICAN LITERATURE I: BEGINNINGS TO 1865	5
or ENGL 45AH	HONORS SURVEY OF AMERICAN LITERATURE I: BEGINNINGS TO 1865	
ENGL 45B	SURVEY OF AMERICAN LITERATURE II: 1865 TO THE PRESENT	5
or ENGL 45BH	HONORS SURVEY OF AMERICAN LITERATURE II: 1865 TO THE PRESENT	
ETHN 1	INTRODUCTION TO ETHNIC STUDIES	4
ETHN 2	INTRODUCTION TO AFRICAN AMERICAN STUDIES	4
ETHN 3	INTRODUCTION TO LATINX STUDIES	4
ETHN 4	INTRODUCTION TO NATIVE AMERICAN STUDIES	4
ETHN 5	INTRODUCTION TO ASIAN AMERICAN STUDIES	4
ETHN 7	INTRODUCTION TO PACIFIC ISLANDS & OCEANIA STUDIES	4
ETHN 8	INTRODUCTION TO LAND & LABOR	4
HIST 10	HISTORY OF CALIFORNIA: THE MULTICULTURAL STATE	4
HUMN 12	POPULAR CULTURE & UNITED STATES HISTORY	4
or HUMN 12H	HONORS POPULAR CULTURE & UNITED STATES HISTORY	
MDIA 8A	RACE & GENDER IN AMERICAN MEDIA	4
MDIA 12	POPULAR CULTURE & UNITED STATES HISTORY	4

or MDIA 12H	HONORS POPULAR CULTURE & UNITED STATES HISTORY		ATHL 32	INTERCOLLEGIATE SWIMMING I (MEN & WOMEN)	3
MUS 8	MUSIC OF AMERICAN CULTURES	5	ATHL 32A	PRESEASON CONDITIONING FOR SWIMMING	2
or MUS 8H	HONORS MUSIC OF AMERICAN CULTURES		ATHL 32C	FUNCTIONAL FITNESS FOR SWIMMING	1
PHOT 8	PHOTOGRAPHY OF AMERICAN CULTURES	5	ATHL 32F	INTERCOLLEGIATE SWIMMING II (MEN & WOMEN)	2
or PHOT 8H	HONORS PHOTOGRAPHY OF AMERICAN CULTURES		ATHL 33	INTERCOLLEGIATE WATER POLO I (WOMEN)	2
PSYC 22	PSYCHOLOGY OF PREJUDICE & DISCRIMINATION	4	ATHL 33A	PRESEASON CONDITIONING FOR WOMEN'S WATER POLO	2
SOC 8	POPULAR CULTURE	4	ATHL 33B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S WATER POLO	2
SOC 23	RACE & ETHNIC RELATIONS	4	ATHL 33C	FUNCTIONAL FITNESS FOR WOMEN'S WATER POLO	1
THTR 8	MULTICULTURAL THEATRE ARTS IN MODERN AMERICA	4	ATHL 33F	INTERCOLLEGIATE WATER POLO II (WOMEN)	3
WMN 5	INTRODUCTION TO WOMEN'S STUDIES	4	ATHL 41A	INTERCOLLEGIATE SAND VOLLEYBALL I (WOMEN)	2
Additionally, students who complete the major requirements for any of the following Apprenticeship programs will satisfy Area VI: Plumbing Technology; Sheet Metal.			ATHL 41B	INTERCOLLEGIATE SAND VOLLEYBALL II (WOMEN)	3
VII. Lifelong Learning			ATHL 42	INTERCOLLEGIATE VOLLEYBALL I (WOMEN)	2
The student must successfully complete a total of four units or more in lifelong learning from two different academic departments. For the purpose of this area, ATHL, DANC, PHDA and PHED will be considered one academic department.			ATHL 42B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S VOLLEYBALL	2
ATHL 4	INTERCOLLEGIATE FOOTBALL I (MEN)	2	ATHL 42C	FUNCTIONAL FITNESS FOR WOMEN'S VOLLEYBALL	1
ATHL 4A	PRESEASON CONDITIONING FOR FOOTBALL	2	ATHL 42F	INTERCOLLEGIATE VOLLEYBALL II (WOMEN)	3
ATHL 4B	SPORT TECHNIQUES & CONDITIONING FOR FOOTBALL	2	ATHL 44	INTERCOLLEGIATE TENNIS I (MEN)	3
ATHL 4C	FUNCTIONAL FITNESS FOR FOOTBALL	1	ATHL 44A	PRESEASON CONDITIONING FOR MEN'S TENNIS	2
ATHL 4E	INTERCOLLEGIATE FOOTBALL (MEN)	1	ATHL 44C	FUNCTIONAL FITNESS FOR MEN'S TENNIS	1
ATHL 4F	INTERCOLLEGIATE FOOTBALL II (MEN)	3	ATHL 44F	INTERCOLLEGIATE TENNIS II (MEN)	2
ATHL 11	INTERCOLLEGIATE BASKETBALL I (MEN)	3	ATHL 45	INTERCOLLEGIATE TENNIS I (WOMEN)	3
ATHL 11A	PRESEASON CONDITIONING FOR MEN'S BASKETBALL	2	ATHL 45A	PRESEASON CONDITIONING FOR WOMEN'S TENNIS	2
ATHL 11B	SPORT TECHNIQUES & CONDITIONING FOR MEN'S BASKETBALL	2	ATHL 45C	FUNCTIONAL FITNESS FOR WOMEN'S TENNIS	1
ATHL 12	INTERCOLLEGIATE BASKETBALL I (WOMEN)	3	ATHL 45F	INTERCOLLEGIATE TENNIS II (WOMEN)	2
ATHL 12A	PRESEASON CONDITIONING FOR WOMEN'S BASKETBALL	2	BIOL 8	BASIC NUTRITION	5
ATHL 12B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S BASKETBALL	2	BIOL 9	ENVIRONMENTAL BIOLOGY	4
ATHL 12E	INTERCOLLEGIATE BASKETBALL (WOMEN)	1	BIOL 12	HUMAN GENETICS	4
ATHL 21	INTERCOLLEGIATE SOCCER I (MEN)	2	BIOL 81	LEARNERS ENGAGED IN ADVOCATING FOR DIVERSITY IN STEM	4
ATHL 21A	PRESEASON CONDITIONING FOR MEN'S SOCCER	2	CHEM 81	LEARNERS ENGAGED IN ADVOCATING FOR DIVERSITY IN STEM	4
ATHL 21B	SPORT TECHNIQUES & CONDITIONING FOR MEN'S SOCCER	2	CNSL 1	COLLEGE SUCCESS	3
ATHL 21C	FUNCTIONAL FITNESS FOR MEN'S SOCCER	1	CNSL 56	LIFELONG LEARNING STRATEGIES	3
ATHL 21F	INTERCOLLEGIATE SOCCER II (MEN)	3	CNSL 72	STRESS, WELLNESS & COPING	3
ATHL 22	INTERCOLLEGIATE SOCCER I (WOMEN)	2	CNSL 90	INTRODUCTION TO ONLINE LEARNING	1.5
ATHL 22A	PRESEASON CONDITIONING FOR WOMEN'S SOCCER	2	COMM 2	INTERPERSONAL COMMUNICATION	5
ATHL 22B	SPORT TECHNIQUES & CONDITIONING FOR WOMEN'S SOCCER	2	COMM 10	GENDER, COMMUNICATION & CULTURE	5
ATHL 22C	FUNCTIONAL FITNESS FOR WOMEN'S SOCCER	1	COMM 12	INTERCULTURAL COMMUNICATION	5
ATHL 22F	INTERCOLLEGIATE SOCCER II (WOMEN)	3	COMM 55	CAREER & LEADERSHIP COMMUNICATION IN THE GLOBAL WORKPLACE	5
ATHL 31	INTERCOLLEGIATE SOFTBALL I (WOMEN)	3	CRLP 7	SELF-ASSESSMENT	4
ATHL 31A	PRESEASON CONDITIONING FOR SOFTBALL	2	CRLP 73	EFFECTIVE RESUME WRITING	1
ATHL 31C	FUNCTIONAL FITNESS FOR SOFTBALL	1	CRLP 74	SUCCESSFUL INTERVIEWING TECHNIQUES	1
			C S 81	LEARNERS ENGAGED IN ADVOCATING FOR DIVERSITY IN STEM	4
			DANC 2A	BEGINNING MODERN DANCE	1
			DANC 2B	INTERMEDIATE MODERN DANCE	1
			DANC 3A	BEGINNING JAZZ DANCE	1

DANC 3B	INTERMEDIATE JAZZ DANCE	1	PHED 22C	CORE CONDITIONING	1
DANC 4A	BEGINNING BALLROOM & SOCIAL DANCE	1	PHED 23A	TRAIL HIKING	1
DANC 4B	INTERMEDIATE BALLROOM & SOCIAL DANCE	1	PHED 23B	DAY HIKING	1
DANC 4C	ADVANCED BALLROOM & SOCIAL DANCE	1	PHED 24	INTRODUCTION TO GOLF	1
DANC 7	CHOREOGRAPHY	1	PHED 24A	SWING DEVELOPMENT FOR THE EXPERIENCED GOLFER	1
DANC 13A	INTRODUCTION TO CONTEMPORARY DANCE	1	PHED 25A	SWING ANALYSIS	1
DANC 13B	INTERMEDIATE CONTEMPORARY DANCE	1	PHED 26	BEGINNING TENNIS SKILLS	1
DANC 14	DANCE CONDITIONING	1	PHED 26A	INTERMEDIATE TENNIS	1
DANC 18A	INTRODUCTION TO HIP-HOP DANCE	1	PHED 27	WALK FOR HEALTH	1
DANC 18B	INTERMEDIATE HIP-HOP DANCE	1	PHED 27A	RUN FOR FITNESS	1
HLTH 20	INTRODUCTION TO PUBLIC HEALTH	5	PHED 27B	INTERMEDIATE RUN FOR FITNESS	1
HLTH 21	CONTEMPORARY HEALTH CONCERNS	4	PHED 27C	INTERMEDIATE WALK FOR HEALTH	1
HLTH 22	HEALTH & SOCIAL JUSTICE	4	PHED 31A	FUTSAL: INDOOR SOCCER BEGINNING	1
HLTH 23	DRUGS, HEALTH & SOCIETY	4	PHED 31B	FUTSAL: INDOOR SOCCER INTERMEDIATE	1
KINS 4	CONCEPTS OF PHYSICAL FITNESS & WELLNESS	4	PHED 31C	FUTSAL: INDOOR SOCCER ADVANCED	1
KINS 16A	PREVENTION OF ATHLETIC INJURIES	3	PHED 33	BEGINNING TABLE TENNIS	1
KINS 16B	EMERGENCY ATHLETIC INJURY CARE	3	PHED 33A	INTERMEDIATE TABLE TENNIS	1
KINS 16C	TREATMENT & REHABILITATION OF ATHLETIC INJURIES	3	PHED 33B	ADVANCED TABLE TENNIS	1
KINS 49	MANAGING PHYSICAL STRESS	3	PHED 36A	BEGINNING ARCHERY	1
LIBR 10	INTRODUCTION TO COLLEGE RESEARCH	1	PHED 36B	INTERMEDIATE ARCHERY	1
or LIBR 10H	HONORS INTRODUCTION TO COLLEGE RESEARCH		PHED 36C	ADVANCED ARCHERY	1
MATH 83	LEARNERS ENGAGED IN ADVOCATING FOR DIVERSITY IN STEM	4	PHED 37	BEGINNING BADMINTON: SINGLES & DOUBLES	1
PHDA 15A	MODIFIED TOTAL FITNESS	1	PHED 37A	INTERMEDIATE BADMINTON: SINGLES & DOUBLES	1
PHDA 16	MODIFIED GENERAL CONDITIONING	1	PHED 37B	ADVANCED BADMINTON: SINGLES & DOUBLES	1
PHDA 17	MODIFIED RESISTIVE EXERCISE	1	PHED 38A	BASKETBALL FUNDAMENTALS	1
PHDA 18	INDIVIDUALIZED EXERCISE FOR SPECIAL POPULATIONS	1	PHED 38B	BASKETBALL GAME SKILLS	1
PHDA 21A	MODIFIED AQUATICS	1	PHED 38C	BEGINNING BASKETBALL	1
PHDA 21B	MODIFIED WATER EXERCISE	1	PHED 40	BEGINNING VOLLEYBALL	1
PHDA 23	MODIFIED AEROBIC EXERCISE	1	PHED 40A	INTERMEDIATE VOLLEYBALL	1
PHED 10A	AQUATICS: LEVEL I, BEGINNING SWIMMING	1	PHED 40C	VOLLEYBALL: GAME SKILLS	1
PHED 10B	AQUATICS: LEVEL II, INTERMEDIATE SWIMMING	1	PHED 41	INDOOR CYCLING: SPIN	1
PHED 11A	WATER EXERCISE	1	PHED 41A	INDOOR CYCLING: HILLS & SPRINTS	1
PHED 11B	AQUATIC FITNESS	1	PHED 41B	INTERMEDIATE INDOOR CYCLING	1
PHED 13	BEGINNING WATER POLO	1	PHED 45	FITNESS FOR LIFE	1
PHED 13C	WATER POLO: GAME SKILLS	1	PHED 45A	FOUNDATIONS OF STRENGTH & CONDITIONING	1
PHED 15A	BEGINNING PICKLEBALL	1	PHED 45C	CIRCUIT TRAINING	1
PHED 15B	INTERMEDIATE PICKLEBALL	1	PHED 46	WEIGHT LIFTING FOR HEALTH & FITNESS	1
PHED 15C	ADVANCED PICKLEBALL	1	PHED 46A	INTERMEDIATE WEIGHT TRAINING FOR HEALTH & FITNESS	1
PHED 18	BEGINNING TAI CHI (TAIJI)	1	PHED 46B	ADVANCED WEIGHT LIFTING FOR HEALTH & FITNESS	1
PHED 18B	INTERMEDIATE TAI CHI (TAIJI)	1	PHED 47B	THIGHS, ABS & GLUTEUS (TAG)	1
PHED 18C	ADVANCED TAI CHI (TAIJI)	1	PHED 47C	HIGH-INTENSITY INTERVAL TRAINING (HIIT)	1
PHED 19B	KICKBOXING FOR FITNESS	1	PHED 49B	BOOT CAMP TRAINING	1
PHED 19C	INTERMEDIATE KICKBOXING FOR FITNESS	1	PSYC 49	HUMAN SEXUALITY	4
PHED 19D	ADVANCED KICKBOXING FOR FITNESS	1	SOC 19	ALCOHOL & DRUG ABUSE	4
PHED 21A	BEGINNING HATHA YOGA	1	SOC 40	ASPECTS OF MARRIAGE & FAMILY	4
PHED 21B	INTERMEDIATE HATHA YOGA	1	Additionally, students who complete the major requirements for the Apprenticeship - Plumbing Technology program will satisfy Area VII.		
PHED 21C	ADVANCED HATHA YOGA	1	English Proficiency: ENGL 1A or ENGL 1AH or ESSL 26.		
PHED 22	BEGINNING FLEXIBILITY & MOBILITY	1			
PHED 22A	INTERMEDIATE FLEXIBILITY & MOBILITY	1			
PHED 22B	PILATES & YOGA	1			

Ethnic Studies: Any course in the ETHN (Ethnic Studies) subject code, currently approved for Area F of CSU GE and Area 7 of IGETC.

Math Proficiency: College-level math course at or above the level of Intermediate Algebra.

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

Effective Summer Session 2024

4/16/24

**FOOTHILL COLLEGE
CHANGES TO GENERAL EDUCATION & GRADUATION REQUIREMENTS 2024-25**

Area I - Humanities

- Removed (deactivated): MDIA 4, MDIA 7, MUS 7F, SPAN 13A, SPAN 13B, SPAN 14A, SPAN 14B

Area II - English - No changes

Area III - Natural Sciences (with laboratory) - No changes

Area IV - Social & Behavioral Sciences

- Added: ANTH 5H, Apprenticeship - Air Conditioning and Refrigeration Technology (Pathway 1), Apprenticeship - Sheet Metal

Area V - Communication & Analytical Thinking

- Added: MATH 33*

Area VI - United States Cultures & Communities

- Added: HUMN 12H, MDIA 12H, Apprenticeship - Sheet Metal

Area VII - Lifelong Learning

- Added: C S 81, PHED 19B, PHED 19C, PHED 19D
- Removed (deactivated): ATHL 31E, ATHL 31F, DANC 1A, DANC 1B, DANC 1C, PHDA 15B, PHDA 15C, PHDA 20, PHDA 24, PHDA 25, PHED 10C, PHED 11C, PHED 13A, PHED 20A, PHED 20B, PHED 21, PHED 21D, PHED 22E, PHED 24C, PHED 24D, PHED 25B, PHED 26C, PHED 43A, PHED 49A

**MATH 33 hasn't been added to the GE listing, yet, because we're waiting to receive the transfer GE approvals before activating the course*

Graduation Requirements

- Added: Ethnic Studies: Any course in the ETHN (Ethnic Studies) subject code, currently approved for Area F of CSU GE and Area 7 of IGETC.



TO: Chief Executive Officers
Chief Instructional Officers
Chief Student Services Officers
Chief Business Officers
Academic Senate Presidents

FROM: Raul Arambula, Dean, Educational Services & Support

RE: International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

This memorandum is to provide guidance regarding title 5, §55052.5 regulations that went into effect May 1, 2021 pertaining to IB and CLEP examinations. Title 5, §55052.5 requires the Chancellor of the California Community Colleges, in collaboration with the Academic Senate of California Community Colleges, to develop and require each community college district to implement a uniform policy regarding IB and CLEP credit.

In accordance with the regulation, the policy stipulates that any student who passes an International Baccalaureate Organization IB examination and/or a CLEP examination with a minimum passing score in the subject matter (see Appendices B & C), is awarded general education area credit. Where no general education area credit matches are available, the college may award elective credit. Each community college shall also note on the student's academic record that the credit was earned through an IB and/or CLEP examination.

The text for title 5, §55052.5 is attached as a reference (Appendix A). Also included for reference is an updated Advanced Placement (AP) Examination chart (see Appendix D), which also requires a uniform policy per title 5, §55052.

This memorandum contains the following additions:

- Appendix B: IB Examination Passing Scores Chart - Mathematics: Analysis and Approaches, Mathematics: Applications and Interpretations
- Appendix D: AP Examination Passing Scores Chart – Calculus BC/AB Subscore, Computer Science AB, English Language, English Literature, PreCalculus, Spanish Language, Spanish Literature, World History

If you have any questions regarding this guidance, please contact Dean Raul Arambula (rarambula@CCCCO.edu) and Specialist Bob Quinn (bquinn@CCCCO.edu).

International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

June 16, 2023

cc: Aisha Lowe, Executive Vice Chancellor, ESS
Rebecca Ruan-O'Shaughnessy, Vice Chancellor, ESS
Erin Larson, Dean, ESS
Ginni May, ASCCC President
Sean Madden, Community College Program Assistant, ESS
CCCCO Staff

Appendices:

- Appendix A: Title 5, §55052.5
- Appendix B: IB Examination Passing Scores Chart
- Appendix C: CLEP Examination Passing Scores Chart
- Appendix D: AP Examination Passing Scores Chart

Appendix A: Title 5, Section 55052.5

§ 55052.5. International Baccalaureate and College Level Examination Program Examinations. The Chancellor, in collaboration with the Academic Senate for the California Community Colleges, shall develop policy guidelines on the minimum passing scores for the International Baccalaureate and/or College Level Examination Program examinations. The policy guidelines shall be distributed to community college districts on an annual basis.

The governing board of a community college district shall adopt policies to grant credit for satisfactory completion of International Baccalaureate and/or College Level Examination Program examinations typically recognized by colleges and universities as measuring competencies comparable to those achieved in baccalaureate level courses or general education areas.

The faculty in the appropriate discipline must approve International Baccalaureate and/or College Level Examination Program examination scores deemed to constitute satisfactory performance for direct course credit and/or general education area credit. Credit may be awarded for the California Intersegmental General Education Transfer Curriculum, California State University General Education Breadth, or local community college general education requirements, as most appropriate. Where no direct course or general education area matches an International Baccalaureate or College Level Examination Program exam, the college may award elective credit. Requirements may be met by such examinations in accordance with policies and procedures approved by the curriculum committee established pursuant to section 55002.

The student's academic record shall be clearly annotated to reflect that credit was earned through an international baccalaureate and/or college level examination program examination.

Note: Authority cited: Sections 66700 and 70901, Education Code. Reference: Sections 70901 and 70902, Education Code.

International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

June 16, 2023

Appendix B: IB Examination Passing Scores Chart

IB Examination	Passing Scores	CCC Title 5 GE Areas	Minimum Semester Units ¹
Biology HL	5	Natural Science	3
Chemistry HL	5	Natural Science	3
Economics HL	5	Social/Behavioral Sciences	3
Geography HL	5	Social/Behavioral Sciences	3
History (any region) HL	5	Social/Behavioral Sciences or Humanities	3
Language A Literature HL	4	Humanities	3
Language A Language and Literature HL	4	Humanities	3
Language B (any language) HL	4	Not Applicable	0
Mathematics: Analysis and Approaches HL	4	Language & Rationality	3
Mathematics: Applications and Interpretation HL	4	Language & Rationality	3
Physics HL	5	Natural Science	3
Psychology HL	5	Social/Behavioral Sciences	3
Theatre HL	4	Humanities	3

¹ Minimum Units: 3 semester/4 quarter

Appendix C: CLEP Examination Passing Scores Chart

CLEP Examination	Passing Scores	CCC Title 5 GE Areas	Minimum Semester Units ²
American Government	50	Social/Behavioral Sciences	3
American Literature	50	Humanities	3
Analyzing and Interpreting Literature	50	Humanities	3
Biology	50	Natural Sciences	3
Calculus	50	Language and Rationality	3
Chemistry	50	Natural Sciences	3
College Algebra	50	Language and Rationality	3
College Algebra – Trigonometry	50	Language and Rationality	3
College Composition	50	Not Applicable	0
College Composition – Modular	50	Not Applicable	0
College Mathematics	50	Not Applicable	0
English Composition (no essay)	50	Not Applicable	0
English Composition (with essay)	50	Not Applicable	0

² Minimum Units: 3 semester/4 quarter

International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

June 16, 2023

CLEP Examination	Passing Scores	CCC Title 5 GE Areas	Minimum Semester Units ²
Financial Accounting	50	Not Applicable	0
French Level I	50	Not Applicable	0
French Level II	59	Humanities	3
Freshman College Composition	50	Not Applicable	0
German Level I	50	Not Applicable	0
German Level II	60	Humanities	3
History, United States I	50	Social/Behavioral Sciences	3
History, United States II	50	Social/Behavioral Sciences	3
Human Growth and Development	50	Social/Behavioral Sciences	3
Humanities	50	Humanities	3
Information Systems and Computer Apps	50	Not Applicable	0
Introduction to Educational Psychology	50	Not Applicable	0
Introductory Business Law	50	Not Applicable	0
Introductory Psychology	50	Social/Behavioral Sciences	3
Introductory Sociology	50	Social/Behavioral Sciences	3

International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

June 16, 2023

CLEP Examination	Passing Scores	CCC Title 5 GE Areas	Minimum Semester Units ²
Natural Sciences	50	Natural Sciences	3
Pre-Calculus	50	Language and Rationality	3
Principles of Accounting	50	Not Applicable	0
Principles of Macroeconomics	50	Social/Behavioral Sciences	3
Principles of Management	50	Not Applicable	0
Principles of Marketing	50	Not Applicable	0
Principles of Microeconomics	50	Social/Behavioral Sciences	3
Social Sciences and History	50	Not Applicable	0
Spanish Level I	50	Not Applicable	0
Spanish Level II	63	Humanities	3
Spanish with Writing I	50	Not Applicable	0
Spanish with Writing Level II	63	Humanities	3
Western Civilization I	50	Humanities or Social/Behavioral Sciences	3
Western Civilization II	50	Social/Behavioral Sciences	3

International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

June 16, 2023

Appendix D: AP Examination Passing Scores Chart

AP Examination	Passing Scores	CCC Title 5 GE Areas	Minimum Semester Units ³
Art History	3	Humanities	3
Biology	3	Natural Sciences	4
Calculus AB	3	Language and Rationality	3
Calculus BC	3	Language and Rationality	3
Calculus BC/AB Subscore	3	Language and Rationality	3
Chemistry	3	Natural Sciences	4
Chinese Language and Culture	3	Humanities	3
Comparative Government and Politics	3	Social/Behavioral Sciences	3
Computer Science A	3	Not Applicable	0
Computer Science AB	3	Not Applicable	0
Computer Science Principles	3	Language and Rationality	3
English Language and Composition	3	Language and Rationality	3
English Language	3	Language and Rationality	3

International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

June 16, 2023

AP Examination	Passing Scores	CCC Title 5 GE Areas	Minimum Semester Units ³
English Literature and Composition	3	Language and Rationality and Humanities	6
English Literature	3	Language and Rationality and Humanities	6
Environmental Science	3	Natural Sciences	4
European History	3	Social/Behavioral Sciences or Humanities	3
French Language and Culture	3	Humanities	3
German Language and Culture	3	Humanities	3
Human Geography	3	Social/Behavioral Sciences	3
Italian Language and Culture	3	Humanities	3
Japanese Language and Culture	3	Humanities	3
Latin	3	Humanities	3
Macroeconomics	3	Social/Behavioral Sciences	3
Microeconomics	3	Social/Behavioral Sciences	3
Physics 1	3	Natural Sciences	4
Physics 2	3	Natural Sciences	4
Physics C (mechanics)	3	Natural Sciences	4

International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

June 16, 2023

AP Examination	Passing Scores	CCC Title 5 GE Areas	Minimum Semester Units ³
Physics C (electricity/magnetism)	3	Natural Sciences	4
PreCalculus	3	Language and Rationality	3
Psychology	3	Social/Behavioral Sciences	3
Seminar	3	Not Applicable	0
Spanish Language and Culture	3	Humanities	3
Spanish Language	3	Humanities	3
Spanish Literature and Culture	3	Humanities	3
Spanish Literature	3	Humanities	3
Statistics	3	Language and Rationality	3
Studio Art – 2D	3	Not Applicable	0
Studio Art – 3D	3	Not Applicable	0
Studio Art – Drawing	3	Not Applicable	0
U.S. Government and Politics	3	Social/Behavioral Sciences	3
U.S. History	3	Social/Behavioral Sciences or Humanities	3
World History	3	Social/Behavioral Sciences or Humanities	3
World History Modern	3	Social/Behavioral Sciences or Humanities	3

International Baccalaureate (IB), College-Level Examinations Placement (CLEP) Examinations, and Advanced Placement (AP) Examination Chart Annual Updates

June 16, 2023

³ Minimum Units: 3 semester/4 quarter



ACADEMIC SENATE
for California Community Colleges
LEADERSHIP • EMPOWERMENT • VOICE

ASCCC 2024 Spring Plenary Session Resolutions

For Discussion at Area Meetings
March 22, 2024

Disclaimer:

The enclosed resolutions do not reflect the position of the Academic Senate for California Community Colleges, its Executive Committee, or standing committees. They are presented for the purpose of discussion by the field and are to be debated and voted on by academic senate delegates at the Academic Senate Fall Plenary Session held on April 20, 2024.

Resolutions Committee

Erik Reese, ASCCC Resolutions Chair

Robert L. Stewart, Jr., 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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PLENARY RESOLUTIONS PROCESS

In order to ensure that deliberations are organized, effective, and meaningful, the Academic Senate for California Community Colleges uses the following resolution procedure:

- Pre-plenary resolutions are developed by the Executive Committee (through its committees) and submitted to the pre-plenary area meetings for review.
- Amendments and new pre-plenary resolutions are generated in the area meetings.
- The Resolutions Committee meets to review all pre-plenary resolutions and combine, reword, append, or render moot these resolutions as necessary.
- Resolutions and amendments must be submitted to the Resolutions Committee before the posted deadlines each day by using the webform available on the [Resolutions Process webpage](#).
- New resolutions submitted on the second day of the plenary session are held to the next session unless the resolution is declared urgent by the Executive Committee.
- Resolutions and amendments are debated and voted upon in the general sessions on the last day of the plenary session by the delegates.
- All resources are available on the [ASCCC website](#).

Prior to plenary session, it is each attendee's responsibility to read the following documents:

- Senate Delegate Roles and Responsibilities (found in [Local Senates Handbook](#))
- Resolution Procedures (Part II in [Resolutions Handbook](#))
- Resolution Writing and General Advice (Part III in [Resolutions Handbook](#))

New delegates are strongly encouraged to watch the New Attendee Information pre-plenary webinar.

Explore California legal codes via <https://leginfo.legislature.ca.gov/faces/home.xhtml>

Explore California Code of Regulations, including title 5, via <https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?transitionType=Default&contextData=%28sc.Default%29>

The following legend has been used to identify consent calendar items, new resolutions, and new amendments:

- Consent Calendar resolutions and amendments are marked with *
- Resolutions and amendments submitted at area meetings are marked with +
- Resolutions and amendments submitted through Thursday of the plenary session are marked with #

Amendments and urgent resolutions submitted on Friday are marked with ^.

CONSENT CALENDAR

Resolutions may be placed on the consent calendar by the Resolutions Committee for any of the following criteria: 1) believed noncontroversial, 2) do not potentially reverse a previous position of the ASCCC, 3) do not compete with another proposed plenary session resolution. Resolutions and any subsequent clarifying amendments that meet these criteria have been included on the consent calendar. If an amendment is submitted that proposes to substantially change a resolution on the consent calendar, that resolution will be removed from the consent calendar.

Resolutions may be removed from the consent calendar at area meetings, making requests of the Resolutions Committee, and immediately before adopting the consent calendar on the last day of plenary session. Reasons for removing a resolution from the consent calendar may include moving of a substantial amendment, a desire to debate the resolution, a desire to divide the motion, a desire to vote against the resolution, or even a desire to move for the adoption by the body by acclamation.

- * 101.01 S24 Update the Paper The Course Outline of Record: A Curriculum Reference Guide Revisited
- * 111.01 S24 Adopt “Part-time Faculty: Equity, Rights, and Roles in Governance” Paper
- * 112.01 S24 Disciplines List — Artificial Intelligence
- * 112.02 S24 Disciplines List — Nursing
- * 112.03 S24 Disciplines List — Art
- * 113.01 S24 Support SB 895 (Roth, as of March 9, 2024) to Establish the Baccalaureate Degree in Nursing Pilot Program
- * 113.02 S24 Support ACR 147 (Alvarez as of February 16, 2024): California's First-Generation College Celebration Day

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 Chancellor’s Office

101 CURRICULUM

***101.01 S24 Update the 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 51200² and 51201³ 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 2021⁴ and 09.01 Fall 2023⁵ 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 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

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 Equity⁷, 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*⁸ and disseminate the paper to local academic senates upon its adoption.

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

¹ https://www.asccc.org/sites/default/files/COR_0.pdf

² [https://govt.westlaw.com/calregs/Document/15F7D7FA34C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/15F7D7FA34C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

³ [https://govt.westlaw.com/calregs/Document/15F7FF0A34C6911EC93A8000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/15F7FF0A34C6911EC93A8000D3A7C4BC3?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

⁷ <https://www.asccc.org/resolutions/create-paper-part-time-faculty-equity>

⁸ <https://asccc.org/sites/default/files/2024-03/Part-time%20Faculty%20Equity%2C%20Rights%2C%20and%20Roles%20in%20Governance%20%20ca.docx>

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;

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

***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

***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 addition 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

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 applications⁹;

Whereas, Bachelor of Science in Nursing (BSN) degrees are increasingly preferred in the hiring of RNs¹⁰ 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 Bachelor of Science in Nursing (BSN) program there were only 12,963 spaces available of which only 9,179 ultimately enrolled¹¹;

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 fields¹²; and

⁹ [Spetz J., Chu L., Blash L., Forecasts of the Registered Nurse Workforce in California, Phillip R. Lee Institute for Health Policy Studies, August 2022](#)

¹⁰ [American Association of Colleges of Nursing \(AACN\) Research Brief, Employment of New Nurse Graduates and Employee Preferences for Baccalaureate Prepared Nurses, October 2023](#)

¹¹ [Spetz J., Chu L., Blash L., California Board of Registered Nursing 2021-2022 Annual School Report, August 2023](#)

¹² [ASCCC Resolution 06.02 F19 Expansion of Baccalaureate Degree Programs in Allied Health](#)

Whereas, SB 895 (Roth, as of March 9, 2024)¹³ 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;

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

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

***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) 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) 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

Academic Senate for California Community Colleges
One Capitol Mall, Suite 230 Sacramento, CA 95814 (916) 445-4753 info@asccc.org www.asccc.org

¹³ SB 895 (Roth, 2024): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB895

Foothill College
College Curriculum Committee
Course Deactivation Exemption Request

Per the [Policy on Course Currency](#), approved by the College Curriculum Committee on April 21, 2015, courses that have not been taught within the last 4 years will be deactivated and thereby removed from Foothill publications unless there is an exemption request by the Division Curriculum Committee that is approved by the College Curriculum Committee. Courses not approved for continuance will be removed from the catalog for the following academic year.

Division: HSH

Course Number: HORT F060G

Course Title: Landscape Design: Intermediate Computer Applications

Justification for retaining the course (please include information as to why the course was not taught in four years):

This course is a follow up course to Vectorworks and would give the student additional skill in a software that is used in landscape design.

Next quarter(s) in which the course will be scheduled:

Spring 2025

Please briefly explain the Division's plan for a regular cycle of offering this course, including a plan for future success of the course:

This class will be offered every two years.

Comments & other relevant information for discussion:

None

Division Dean: Nancy Cheung

Date: 3/9/2024

Division Curriculum Representative: Catherine Draper

Date: 3/8/2024

Date of Approval by Division Curriculum Committee: 3/8/2024

Foothill College
College Curriculum Committee
Course Deactivation Exemption Request

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Division: Fine Arts and Communication

Course Number: MDIA 52

Course Title: SCRIPTWRITING FOR FILM & VIDEO

Justification for retaining the course (please include information as to why the course was not taught in four years):

This class is part of the AS-T in Film and will become a core requirement to complete the degree in 2025. Beginning in the 2024-2025 academic year it must be taught on a regular basis.

Next quarter(s) in which the course will be scheduled:

Winter 2025

Please briefly explain the Division's plan for a regular cycle of offering this course, including a plan for future success of the course:

This class will be offered at least once per year starting in 2024-2025, twice annually the following year (depending on student demand as our degree seeking student body continues to grow).

Comments & other relevant information for discussion:

Division Dean: Ron Herman

Date: 4/7/24

Division Curriculum Representative: Cynthia Brannvall

Date: 4/9/24

Date of Approval by Division Curriculum Committee: 4/9/24

Foothill College
College Curriculum Committee
Course Deactivation Exemption Request

Per the [Policy on Course Currency](#), approved by the College Curriculum Committee on April 21, 2015, courses that have not been taught within the last 4 years will be deactivated and thereby removed from Foothill publications unless there is an exemption request by the Division Curriculum Committee that is approved by the College Curriculum Committee. Courses not approved for continuance will be removed from the catalog for the following academic year.

Division: Fine Arts and Communication

Course Number: PHOT 57B

Course Title: PROFESSIONAL PRACTICES IN PHOTOGRAPHY

Justification for retaining the course (please include information as to why the course was not taught in four years):

This class was taught regularly but has been alternating with the GID 60/61 in recent years. We have revised the class to be Photo 57, and it will be an integral part of our Photography AA and Certificates in the future with an enhanced CTE focus. Since Photo 57 will not be available until Summer 2025 and we want to keep this content and class on our degree and certificates, we ask for this class to not be deactivated.

Next quarter(s) in which the course will be scheduled:

Spring 2025 if possible. Planning the scheduling of this important class will be based on enrollment and demand.

Please briefly explain the Division's plan for a regular cycle of offering this course, including a plan for future success of the course:

As we continue to develop our guided pathways and our stacked certificates and our AA, we will offer this class every Spring. Photo 57b will be part to our Associate's Degree and as the Certificate of Achievement in Photography as a core class and be part of the Certificate of Achievement in Commercial Photography and Certificate of Achievement in Digital Photography Techniques as a support course.

Comments & other relevant information for discussion:

Division Dean: Ron Herman

Date: 3/15/24

Division Curriculum Representative: Jordan C. Fong

Date: 3/19/24

Date of Approval by Division Curriculum Committee: 3/19/24

General Education Review Request

AREA III - NATURAL SCIENCES

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 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

General Education Review Request AREA III - NATURAL SCIENCES

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-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: 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:

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

Matching course component(s):

Sheet metal students learn the scientific method throughout their course of study. The program modules for sheet metal integrate the scientific method by teaching technicians to diagnose and correct indoor air quality issues through systematic observation and experimentation. Developing and testing hypotheses both on the job and during formal instruction, sheet metal students also learn the limits of testing models.

"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."

Sheet Metal courses including but not limited to (APSM 116, APSM 119, APSM 122)

BTSM Program, Year 3, Semester 4, Module 16-12 (GVSU reading Plans), BTSM Program, Year 3, Semester 3, Module 19-6 (Heating Systems), BTSM Program, Year 4, Semester 4, Module 22-#8-#15 (Duct Leakage Testing), BTSM Program, Year 3, Semester 3, Module 19-4 (Filters)

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

Matching course component(s):

Throughout their course of study, sheet metal students learn to critically assess scientific evidence in materials selection, such as asbestos identification and mitigation, reinforcing the importance of safety and health standards. The ability to make judgements about the validity of scientific evidence is also critical to meeting health and safety codes in the industry.

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

“APSM 107/ Lesson 12/Expansion and Contraction: Students are expected to understand the concepts of water movement, and principles related to scientific evidence of moisture infiltration in order to properly install architectural water proofing systems. The understanding of scientific principles of water infiltration, allows the students to correctly size, fabricate, and install architectural sheet metal systems ensuring a water tight system allowing for expansion and contraction.”

Sheet Metal courses including but not limited to (APSM 104, APSM 112, APSM 119, APSM 128)

BTSM Program, Year 1, Semester 1, Module 4-10 (Asbestos Awareness), BTSM Program, Year 2, Semester 4, Module 12-6 (OSHA Cranes and Derricks in Construction), BTSM Program, Year 3, Semester 3, Module 19-4 (Filters), BTSM Program, Year 2, Semester 4, Module 12-4 (Fire Smoke Dampers), BTSM Program, Year 4, Semester 4, Module 12-#1-#12 (Fire Smoke Damper Certification Testing)

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

Matching course component(s):

Through rigging and welding exercises, sheet metal students both learn and apply principles from physics, understanding the practical implications of scientific laws in safe material handling. Sheet metal students must also apply these understandings at job sites where safety and code compliance are paramount.

“APSM 112/ Lesson 9/Hoisting and Rigging: Students enrolled in hoisting and rigging exercises must correctly calculate and demonstrate safe sling or choker usage in preparation of a material lift. This calculation involves an understanding of weight calculations, proper sling angles, and calculations of center of gravity for many materials and shapes. The class uses known scientific principles and manufacturer data to the end goal of a student understanding how to prepare for a safe material lift.”

Sheet Metal courses including but not limited to (APSM 112, APSM 113, APSM 114, APSM 118, APSM 106)

BTSM Program, Year 2, Semester 4, Module 12-9 (Hoisting and Rigging), BTSM Program, Year 1, Semester 4, Module 6-4 (Fluxes), BTSM Program, Year 3, Semester 1, Module 13-#1-#10 (Welding and Welding Safety), BTSM Program, Year 3, Semester 1, Module 14-#1-#10 (Welding 2 Courses), BTSM Program, Year 3, Semester 2, Module 18-#1-#12 (Industrial Welding Course)

N4. The ability to use inductive and deductive reasoning;

Matching course component(s):

The selection of appropriate tools and first aid measures in sheet metal courses showcases the application of inductive and deductive reasoning in trade practices. Sheet metal students must also read and write written responses to their assignments which requires the application of both inductive and deductive reasoning.

“APSM 101/ Lesson 12/Hardware of the Craft: Students who begin the study of hardware of the craft are using reasoning skills in selecting the proper hardware for fasteners, hangers, and anchors. Understanding material types, gauges, physical and spatial limitations for installation, job specifications, codes, standards, are all part of the selection process for hardware in the sheet metal industry.”

Sheet Metal courses including but not limited to (APSM 101, APSM 102, APSM 107)

BTSM Program, Year 1, Semester 1, Module 1-12 (Hardware of the Craft), BTSM Program, Year 1, Semester 1, Module 1-13 (Sheet Metal Tools), BTSM Program, Year 1, Semester 1, Module 2-8 (Shop Equipment 1), BTSM Program, Year 2, Semester 1, Module 7-1 (First Aid)

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

Matching course component(s):

Evaluating tools for sheet metal work and measuring techniques in sheet metal courses cultivates critical thinking by comparing alternative solutions to practical problems. Sheet metal students must also read and write written responses to their assignments which requires the evaluation of differing opinions from their peers and other experts and authors.

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

“APSM 110/Lesson 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. This would involve contrasting opinions and evaluating ideas, because job scenarios are all different and selecting the best tool for the job is dependent on the conditions.”

Sheet Metal courses including but not limited to (APSM 101, APSM 102, APSM 128, APSM 110)

BTSM Program, Year 2, Semester 3, Module 10-6 (Measuring Techniques and Tools), BTSM Program, Year 1, Semester 1, Module 1-13 (Sheet Metal Tools, BTSM Program, Year 1, Semester 1, Module 2-8 (Shop Equipment 1), BTSM Program, Year 4, Semester 4, Module 28-12 (FSD certification Testing)

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

Matching course component(s):

Flashing overview and welding classes emphasize evaluating and using scientific data for material selection and understanding weld joint geometry, demonstrating effective communication of technical specifications. Additionally, sheet metal students must communicate with peers, supervisors, and customers about complex science driven solutions.

“APSM 113/Lesson 10/Parts of a Weld/Weld Geometry: Students who complete this lesson will be able to properly identify parts of a weld and a weld joint. When discussing weld procedures or specifications, understanding naming conventions which are described in AWS codes or job specifications involves a focused understanding on parts of a weld and weld joint geometry. This lesson further goes into parts of a weld with identification of discontinuities seen in welding which guide students in hands on welding exercises.”

Sheet Metal courses including but not limited to (APSM 136, APSM 126, APSM 113, APSM 108)

BTSM Program, Year 4, Semester 3, Module 36-#1-#14 (Mechanical Acceptance Testing), BTSM Program, Year 5, Semester 4, Module 16-#1-#9 (Foreman Training Course), BTSM Program, Year 3, Semester 1, Module 13-10 (Parts of a Weld/Weld Joint Geometry), BTSM Program, Year 2, Semester 2, Module 8-1 (Flashing Overview)

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

Matching course component(s):

Heating and cooling systems lessons introduce current scientific theories on thermodynamics, enabling sheet metal technicians to not just meet the demands of the profession, but to understand the scientific theories that undergird their course of study.

“APSM 119/Lesson 6/ Heating Systems: An understanding of Heating systems and Heat Transfer is used by HVAC technicians to make system adjustments for the end result of changing the ambient temperature of a room. Understanding BTU calculations, outside air calculations, and properties of air are essential in the process of learning how to condition an environment for comfort and safety.”

Sheet Metal courses including but not limited to (APSM 159A, APSM 119, APSM 177A)

BTSM Program, Year 4, Semester 1, Module 153-#1-#10 (Introduction to Testing, Adjusting & Balancing of HVAC Systems), BTSM Program, Year 3, Semester 3, Module 19-6 (Heating Systems), BTSM Program, Year 4, Semester 2, Module 153B-#1-#9 (Title 24)

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

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Matching course component(s):

The nature of the profession means that sheet metal students learn and practice in a laboratory setting. The main sheet metal learning center is as living lab where students develop and test their approaches to a real-world problem in the lab and use their training to evaluate and assess their approaches to solving problems. Among other things, sheet metal students conduct measurements of sheet metal in construction environments, measurements and calibration of tools, application of tools and methods in quality assurance.

“APSM 105/ Lesson 9/ Rectangular Duct Elbows: Students are instructed on the proper layout and fabrication of various degree elbows seen in the sheet metal industry. This shop practice involves use of layout tools, hand tools, shop equipment, and safety awareness. This directly relates to shop fabrication work seen in the sheet metal industry.”

Sheet Metal courses including but not limited to (APSM 103, APSM 104, APSM 105, APSM 109)

BTSM Program, Year 1, Semester 2, Module 3-1 (Review of Allowances and Pattern Making), BTSM Program, Year 1, Semester 2, Module 3-6 (Graphic Visualization), BTSM Program, Year 1, Semester 2, Module 4-#5-#9 (Fabrication and Layout of Plenum), BTSM Program, Year 1, Semester 3, Module 5-#10-#11 (Drafting and Construction of Rectangular Elbow), BTSM Program, Year 2, Semester 3, Module 9-5 (Compound Transitions)

N9. Experience applying recognized scientific methodology in laboratory activities.

Matching course component(s):

As this quote from the COR for APSM 103 indicates, sheet metal students “use sheet metal tools, including hand tools and snips, shear, roll, and hand brake. Use of arithmetic and algebraic principles relating to sheet metal layout, fabrication of duct, pan, 45-degree tap-in, and plenum. Demonstration of other shop equipment used in the sheet metal industry. Planning field activities involving sequences of steps for measurement, constructing of pieces, folding and modification, field engineering applications, testing and certification of material modifications.” These activities must need that sheet metal students have a thorough and practical familiarity with scientific methodology in lab settings.

“APSM 113/Lesson 6/DASH Principles: Students who have completed the safety portion of welding begin the shop practice of welding and apply the principles of DASH (distance, angle, speed, heat). Students begin welding using the Shielded Metal Arc Welding Process on Black iron and Galvanized steel. Proper electrode manipulation is referenced through the discussion of DASH and applied in the shop practice.”

Sheet Metal courses including but not limited to (APSM 103, APSM 104, APSM 105)

BTSM Program, Year 1, Semester 2, Module 3-2 (Shop Equipment 2), BTSM Program, Year 1, Semester 2, Module 4-#5-#9 (Fabrication and Layout of Plenum), BTSM Program, Year 1, Semester 3, Module 5-#10-#11 (Drafting and Construction of Rectangular Elbow), BTSM Program

Depth Map: Additionally, include any of the following:

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

Matching course component(s):

Science and engineering are coupled in the field of construction materials, and sheet metal components are foundational (fundamental) in automotive and aerospace (transportation) construction and building science. Modern materials innovation is essential (high performance materials) energy efficiency, lightweighting, metal finishing and treatments (decorative materials). Students in the sheet metal program therefore are required to learn not just the specifics of their industry but the role scientific revolutions have had on that industry and society as a whole.

“APSM 122/Lesson 2/Building Codes, APSM 122/Lesson 3/Mechanical Codes: A student’s ability to read codes is extremely important as criteria for construction adapts for life safety concerns and quality installations. These classes teach students not to memorize code cycles, but to learn references for any code to be enforced for a project. Implementation of new codes and procedures ensures a building is constructed to an approved

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design and safety criteria.”

Sheet Metal courses including but not limited to (APSM 136, APSM 122)

BTSM Program, Year 4, Semester 3, Module 36-#1-#14 (Mechanical Acceptance Testing), BTSM Program, Year 4, Semester 4, Module 22-3 (Mechanical Codes)

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

Matching course component(s):

Sheet metal work traces its roots back millennia, representing a rich tapestry of craftsmanship across various cultures and tribes around the world. This ancient craft, evolving through the ingenuity and resourcefulness of diverse peoples, showcases the wide-ranging contributions to metalworking techniques and applications. From the intricate metalwork of ancient Egypt and the Far East to the sturdy armors of medieval Europe, sheet metal has been a cornerstone in the development of civilizations, highlighting the creativity and skill of countless unnamed artisans.

“APSM 103/Lesson 7/History of the Trade in the Bay Area: Students will have an understanding of the history of Local 104 and the originating members of our trade who were comprised mostly of immigrants. The presentation also highlights diversity within our trade through the highlighting of minority group representation.”

BTSM Program, Year 1, Semester 1, Module 3-7 (History of the Trade in the Bay Area)

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

Matching course component(s):

The application of metal and metal materials has allowed humans to coexist in varied and extreme environments, from oceans to extreme heat and cold to atmosphere and space. Humans are dependent on the environment for ecosystem system services, minerals and other raw materials, (construction materials, .e.g. wood, stone, even ice) as well as thermal and chemical energy. The work, and therefore training, of sheet metal students is always in response to the environment an understanding of human impact on it. At the core of their training sheet metal students are quite literally terraformers, world shapers.

“APSM 102/ Lesson 12/ Managing Safety and Health: Preventing injuries and illness from health hazards seen on the jobsite effects all those in construction as well as families and communities of those employed in the industry. An individual who is exposed to asbestos for example, without proper training can actually introduce the hazard in the home without proper hazardous waste containment.”

Sheet Metal courses including but not limited to (APSM 111, APSM 112, APSM 113)

BTSM Program, Year 2, Semester 4, Module 11-1 (SMACNA Guidelines), BTSM Program, Year 2, Semester 4, Module 12-2 (Material Handling and Staging), BTSM Program, Year 3, Semester 1, Module 13-2 (Welding Safety)

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

Matching course component(s):

In addition to the environmental health and safety training sheet metal students receive, they also must understand how the internal environment of a building must meet the needs of the humans who occupy. Additionally, the sheet metal students must understand the external environment of a build to a gauge, for example, how airflow in and around the building will impact venting. When seen this way, sheet metal students are participating in and learning to understand the impact of humans on their many environments. Combining this with their training in critical thinking and ethics makes this curriculum a potent lens to understand the world.

“APSM 122/ Lesson 5/ SMACNA Standards: Students reference SMACNA standards and learn to navigate multiple SMACNA documents effectively. SMACNA creates standards and helps implement code enforcement

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for proper design, fabrication, installation, testing of HVAC systems and architectural installations. Knowing SMACNA standards for proper design and construction of systems directly effects the surrounding environment through research in energy efficient system designs which reduces environmental impact. Building to the standards also addresses indoor air quality concerns directly improving breathing conditions and safety for the occupants.”

Sheet Metal courses including but not limited to (APSM 112, APSM 124, APSM 107, APSM 122)

BTSM Program, Year 2, Semester 4, Module 12-2 (Outlets Dampers and Duct Accessories), BTSM Program, Year 2, Semester 1, Module 7-10 (Energy Efficiency through Duct Design), BTSM Program, Year 5, Semester 2, Module 24-2 (Moisture Control)

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

Matching course component(s):

Sheet metal apprenticeship training is not merely about mastering the technical skills of cutting, shaping, and joining metal; it also encompasses a deep appreciation for the history of science, highlighting the pivotal ideas and experiments that have paved the way to our current understanding of metallurgy. Apprentices are immersed in the study of modern metallurgy, including the development of high-performance alloys, advanced manufacturing techniques, and the intricacies of tooling for precise shaping and forming. This comprehensive curriculum ensures a well-rounded knowledge of high-performance materials and welding, as well as the environmental and economic aspects of recycling steel and aluminum. Such an approach not only honors the legacy of past innovations but also prepares apprentices for future advancements in the field.

“APSM 103/ Lesson 7/History of the Trade in the Bay Area: A discussion and presentation on the history of Local 104 as well as a history of the labor movements of the early 1900’s. Present conditions of our local training are addressed through the history of the labor movement in the bay area.”

(APSM 118, APSM 177A, APSM 159A, APSM 175A)

BTSM Program, Year 3, Semester 2, Module 18-#1-#12 (Industrial Welding Course), BTSM Program, Year 4, Semester 2, Module 153B-5 (Title 24), BTSM Program, Year 4, Semester 2, Module 153A-8 (Measure Airflow at Registers), BTSM Program, Year 4, Semester 2, Module 153AB-5 (Fan Laws Lab Assignment)

Depth Map: Additionally, must emphasize the following:

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

Matching course component(s):

The application of metal and metal materials has allowed humans to coexist in varied and extreme environments, from oceans, to extreme heat and cold to atmosphere and space. Humans are dependent on environment for ecosystem system services, minerals and other raw materials, (construction materials, .e.g. wood, stone, even ice) as well as thermal and chemical energy. The work, and therefore training, of sheet metal students is always in response to the environment an understanding of human impact on it. At the core of their training sheet metal students are quite literally terraformers, world shapers.

“APSM 106/ Lesson 7/Soldering Practice: Students are given shop instruction and practice on soldering techniques. Soldering involves base metal preparation, material identification, and proper flux/ soldering iron selection. Once all materials are correctly selected and identified, students heat soldering irons to ideal temperatures to prevent material warping, and proper joint wetting.”

Sheet Metal courses including but not limited to (APSM 111, APSM 112, APSM 113)

BTSM Program, Year 2, Semester 4, Module 11-1 (SMACNA Guidelines), BTSM Program, Year 2, Semester 4, Module 12-2 (Material Handling and Staging), BTSM Program, Year 3, Semester 1, Module 13-2 (Welding Safety)

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

Matching course component(s):

The nature of the profession means that sheet metal students learn and practice in a laboratory setting. The main sheet metal learning center is as living lab where students develop and test their approaches to a real-world problem in the lab and use their training to evaluate and assess their approaches to solving problems. Among other things, sheet metal students conduct measurements of sheet metal in construction environments, measurements and calibration of tools, application of tools and methods in quality assurance.

“APSM 113/ Lesson 11/ Discontinuities and Defects: Students learn through classroom discussion and shop practice how to correctly identify discontinuities and weld defects. Proper identification of weld discontinuities allows students to make adjustments to welding equipment or technique correction to improve irregularities in a weldment.”

Sheet Metal courses including but not limited to (APSM 103, APSM 104, APSM 105)

BTSM Program, Year 1, Semester 2, Module 3-1 (Review of Allowances and Pattern Making), BTSM Program, Year 1, Semester 2, Module 3-6 (Graphic Visualization), BTSM Program, Year 1, Semester 2, Module 4-#5-#9 (Fabrication and Layout of Plenum), BTSM Program, Year 1, Semester 3, Module 5-#10-#11 (Drafting and Construction of Rectangular Elbow), BTSM Program, Year 2, Semester 3, Module 9-5 (Compound Transitions)

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):

The nature of the profession means that sheet metal students learn and practice in a laboratory setting. The main sheet metal learning center is as living lab where students develop and test their approaches to a real-world problem in the lab and use their training to evaluate and assess their approaches to solving problems. Among other things, sheet metal students conduct measurements of sheet metal in construction environments, measurements and calibration of tools, application of tools and methods in quality assurance.

“APSM 175A/ Lesson 15/Measure Minimum Ventilation Airflow. Students interpret performance data from manufacturer submittals and design documents. Students then directly take performance data from project submittals and use airflow measuring equipment to compare to performance data. The results quantify the performance of a system without the results being preconfigured by an instructor.”

Sheet Metal courses including but not limited to (APSM 103, APSM 104, APSM 105)

BTSM Program, Year 1, Semester 2, Module 3-1 (Review of Allowances and Pattern Making), BTSM Program, Year 1, Semester 2, Module 3-6 (Graphic Visualization), BTSM Program, Year 1, Semester 2, Module 4-#5-#9 (Fabrication and Layout of Plenum), BTSM Program, Year 1, Semester 3, Module 5-#10-#11 (Drafting and Construction of Rectangular Elbow), BTSM Program, Year 2, Semester 3, Module 9-5 (Compound Transitions)

N18. Analysis and interpretation of data;

Matching course component(s):

The nature of the profession means that sheet metal students learn and practice in a laboratory setting. The main sheet metal learning center is as living lab where students develop and test their approaches to a real-world problem in the lab and use their training to evaluate and assess their approaches to solving problems. Among other things, sheet metal students conduct measurements of sheet metal in construction environments, measurements and calibration of tools, application of tools and methods in quality assurance.

Sheet Metal courses including but not limited to (APSM 103, APSM 104, APSM 105)

“APSM 107/ Lesson 7/ Round Unequal 45 Degree Tee: Students building on concepts of drawing

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interpretation skills, parallel line development, and shop practices, will fabricate a round tee fitting. This process involves calculating stretch outs including fabrication allowances for seams and collars. Students use hand forming skills to shape and construct the fitting.”

BTSM Program, Year 1, Semester 2, Module 3-1 (Review of Allowances and Pattern Making), BTSM Program, Year 1, Semester 2, Module 3-6 (Graphic Visualization), BTSM Program, Year 1, Semester 2, Module 4-#5-#9 (Fabrication and Layout of Plenum), BTSM Program, Year 1, Semester 3, Module 5-#10-#11 (Drafting and Construction of Rectangular Elbow), BTSM Program, Year 2, Semester 3, Module 9-5 (Compound Transitions)

N19. Formulation and testing of hypotheses;

Matching course component(s):

Sheet metal students learn the scientific method throughout their course of study. The program modules for sheet metal integrate the scientific method by teaching technicians to diagnose and correct indoor air quality issues through systematic observation and experimentation. Developing and testing hypotheses both on the job and during formal instruction, sheet metal students also learn the limits of testing models.

“APSM 118/ Lesson 3/ Industrial Metal Properties and Weights. Students when given a chart for material weights per linear foot, have to calculate weights of structural components when formed. This class involves reviewing manufacturer data, and applying known weight calculations to structures with varying fabrication lengths. Determining weights of materials allows for proper planning of material lifting and supporting. Calculations of weights are tested in classroom and shop activities.”

Sheet Metal courses including but not limited to (APSM 116, APSM 119, APSM 122)

BTSM Program, Year 3, Semester 4, Module 16-12 (GVSU reading Plans), BTSM Program, Year 3, Semester 3, Module 19-6 (Heating Systems), BTSM Program, Year 4, Semester 4, Module 22-#8-#15 (Duct Leakage Testing), BTSM Program, Year 3, Semester 3, Module 19-4 (Filters)

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

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.

“APSM 101/ Lesson 7/Classroom Survival Skills: Students demonstrate, through testing, the ability to identify signal words in readings and lectures to enhance note taking skills. Proper note taking skills not only benefits students in classroom studies, but in on the job training activities. Students learn to not only take notes, but practice absorbing concepts which are being taught through the process of surveying, questioning, recalling and reviewing.”

Sheet Metal courses including but not limited to (APSM 104, APSM 101, APSM 126)

BTSM Program, Year 1, Semester 1, Module 1-6 (Classroom Survival Skills), BTSM Program, Year 1, Semester 3, Module 4-9 (Communication Skills), BTSM Program, Year 1, Semester 1, Module 1-6 (Harassment Awareness), BTSM Program, Year 5, Semester 4, Module 26-4 (Managing and Leading Others), BTSM Program, Year 5, Semester 4, Module 26-7 (Human Relations)

N21. A minimum of one collaborative activity;

Matching course component(s):

All sheet metal courses are taught in a cohort model. Like many of Foothill’s allied health students, sheet metal student matriculate as a group working and learning together. This approach to learning is fundamentally a collaborative one. Beyond this, however, sheet metal students are required to collaborate with other professionals at a job location and thus require the cross communication skills need to work with members of other trades and the larger network of a generally contracted job.

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“APSM 126_Lesson 5_Project Management: Students work in groups to outline job activities and coordinate successful job completion. Students work together to take field measurements, design HVAC systems, coordinate schedules, coordinate installation of hangers and job completion.”

Sheet Metal courses including but not limited to (APSM 116, APSM 119, APSM 127)

BTSM Program, Year 3, Semester 4, Module 16-#10,#8 (Structural Drawings, Electrical Drawings), BTSM Program, Year 3, Semester 3, Module 19-12 (Introduction to Commissioning), BTSM Program, Year 5, Semester 4, Module 27-5 (Annotations)

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

Matching course component(s):

The nature of the profession means that sheet metal students learn and practice in a laboratory setting. The main sheet metal learning center is as living lab where students develop and test their approaches to a real-world problem in the lab and use their training to evaluate and assess their approaches to solving problems. Among other things, sheet metal students conduct measurements of sheet metal in construction environments, measurements and calibration of tools, application of tools and methods in quality assurance.

“APSM 124/ Lesson 3/ Metal Panels: Students learn through shop practice how to design, fabricate and install various metal panels. Installation of metal panels goes into specifics of quality craftsmanship, layout, and waterproofing functionality. Students coordinate the fabrication and installation of metal panel work with field simulated architectural elements and custom scenarios.”

Sheet Metal courses including but not limited to (APSM 103, APSM 104, APSM 105)

BTSM Program, Year 1, Semester 2, Module 3-1 (Review of Allowances and Pattern Making), BTSM Program, Year 1, Semester 2, Module 3-6 (Graphic Visualization), BTSM Program, Year 1, Semester 2, Module 4-#5-#9 (Fabrication and Layout of Plenum), BTSM Program, Year 1, Semester 3, Module 5-#10-#11 (Drafting and Construction of Rectangular Elbow), BTSM Program, Year 2, Semester 3, Module 9-5 (Compound Transitions)

Depth Map: Additionally, include any of the following:

N23. Keep accurate and complete experimental records;

Matching course component(s):

Apprentices learn the importance of maintaining detailed logs of their work, essential for both project management and scientific inquiry. This is especially important when working on commercial construction sites, power engineering, and aircraft, where detailed logs are required. This is also critical when making repairs or modifications which require a formal “sign-off” for audit or compliance.

“PSM 119/ Lesson 5/ Duct Leakage Testing: Students perform the functions of duct leakage testing and correctly fill out a duct leakage testing chart. Information which is documented on the chart from testing is used to quantify if an HVAC system holds pressure within design tolerances and satisfies the engineered intent of a system.”

Sheet Metal courses including but not limited to (APSM 107, APSM 126, APSM 121)

BTSM Program, Year 2, Semester 1, Module 7-04 (Introduction to Plan Grid), BTSM Program, Year 5, Semester 1, Module 21-#1-#11 (Project Management Course), BTSM Program, Year 5, Semester 4, Module 26-#1-#10 (Foreman Training)

N24. Perform quantitative and qualitative measurements;

Matching course component(s):

The nature of the profession means that sheet metal students learn and practice in a laboratory setting. The main sheet metal learning center is as living lab where students develop and test their approaches to a real-

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world problem in the lab and use their training to evaluate and assess their approaches to solving problems. Among other things, sheet metal students conduct measurements of sheet metal in construction environments, measurements and calibration of tools, application of tools and methods in quality assurance.

Sheet Metal courses including but not limited to (APSM 103, APSM 104, APSM 105)

“SM 102/ Lesson 4/ Areas. Students learn to calculate areas of shapes. Area calculations are used in the sheet metal industry for square footage calculations and material ordering, as well as design and Tab functions.”

BTSM Program, Year 1, Semester 2, Module 3-1 (Review of Allowances and Pattern Making), BTSM Program, Year 1, Semester 2, Module 3-6 (Graphic Visualization), BTSM Program, Year 1, Semester 2, Module 4-#5-#9 (Fabrication and Layout of Plenum), BTSM Program, Year 1, Semester 3, Module 5-#10-#11 (Drafting and Construction of Rectangular Elbow), BTSM Program, Year 2, Semester 3, Module 9-5 (Compound Transitions)

N25. Interpret experimental results and draw reasonable conclusions;

Matching course component(s):

Apprentices are trained to interpret results and make informed decisions based on quantitative data, a skill The nature of the profession means that sheet metal students learn and practice in a laboratory setting. The main sheet metal learning center is as living lab where students develop and test their approaches to a real-world problem in the lab and use their training to evaluate and assess their approaches to solving problems. Among other things, sheet metal students conduct measurements of sheet metal in construction environments, measurements and calibration of tools, application of tools and methods in quality assurance.

“APSM 121/ Lesson 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.”

Sheet Metal courses including but not limited to (APSM 103, APSM 104, APSM 105)

BTSM Program, Year 1, Semester 2, Module 3-1 (Review of Allowances and Pattern Making), BTSM Program, Year 1, Semester 2, Module 3-6 (Graphic Visualization), BTSM Program, Year 1, Semester 2, Module 4-#5-#9 (Fabrication and Layout of Plenum), BTSM Program, Year 1, Semester 3, Module 5-#10-#11 (Drafting and Construction of Rectangular Elbow), BTSM Program, Year 2, Semester 3, Module 9-5 (Compound Transitions)

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

Matching course component(s):

Understanding statistical analysis enables apprentices to ensure consistency in construction outcomes, aligning with industry specifications for high-quality work. The apprenticeship program also includes training in software including Excel, emphasizing statistical analysis, plotting and reporting of data, and especially recognizing variance.

“APSM 120/ Lesson 7/ Calculating Duct Offsets: Students learn to calculate lengths of offsets in various arrangements. Students apply known elevation data, and material size information to calculate cut joints between joining members. Reliable accumulation of measurements and sizes is crucial to obtaining correct cut lengths and installation completion.”

Sheet Metal courses including but not limited to (APSM 177A, APSM 159A, APSM 175A)

BTSM Program, Year 4, Semester 2, Module 153B-5 (Title 24), BTSM Program, Year 4, Semester 2, Module 153A-8 (Measure Airflow at Registers), BTSM Program, Year 4, Semester 2, Module 153AB-5 (Fan Laws Lab Assignment)

N27. Critically evaluate the design of an experiment;

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Matching course component(s):

The application of metal and metal materials has allowed humans to coexist in varied and extreme environments, from oceans, to extreme heat and cold to atmosphere and space. Humans are dependent on environment for ecosystem system services, minerals and other raw materials, (construction materials, .e.g. wood, stone, even ice) as well as thermal and chemical energy. The work, and therefore training, of sheet metal students is always in response to the environment an understanding of human impact on it. At the core of their training sheet metal students are quite literally terraformers, world shapers.

“APSM 177A/ Lesson 5/Measure and Plot Pump Performance Data on a Pump Curve: Students analyze, test, and quantify the flow of a hydronic system using a pump curve. The pump curve determines hydronic flow through a system, and guides the technician as to which valves to reduce or open to balance the flow.”

Sheet Metal courses including but not limited to (APSM 111, APSM 112, APSM 113)

BTSM Program, Year 2, Semester 4, Module 11-1 (SMACNA Guidelines), BTSM Program, Year 2, Semester 4, Module 12-2 (Material Handling and Staging), BTSM Program, Year 3, Semester 1, Module 13-2 (Welding Safety)

N28. Design experiments to test hypotheses;

Matching course component(s):

The application of metal and metal materials has allowed humans to coexist in varied and extreme environments, from oceans, to extreme heat and cold to atmosphere and space. Humans are dependent on environment for ecosystem system services, minerals and other raw materials, (construction materials, .e.g. wood, stone, even ice) as well as thermal and chemical energy. The work, and therefore training, of sheet metal students is always in response to the environment an understanding of human impact on it. At the core of their training sheet metal students are quite literally terraformers, world shapers.

“APSM 175A/ Unit 11/ Methods of Balancing Proportional and Sequential: Students by taking airflow measurements using various testing adjusting and balancing instruments will calculate airflow, and estimate the value of volume damper reducing to achieve design air. This estimation will then be quantified with further equipment usage and airflow measurement, testing a hypothesis.”

Sheet Metal courses including but not limited to (APSM 111, APSM 112, APSM 113)

BTSM Program, Year 2, Semester 4, Module 11-1 (SMACNA Guidelines), BTSM Program, Year 2, Semester 4, Module 12-2 (Material Handling and Staging), BTSM Program, Year 3, Semester 1, Module 13-2 (Welding Safety)

N29. Work effectively in small groups and teams.

Matching course component(s):

All sheet metal courses are taught in a cohort model. Like many of Foothill’s allied health students, sheet metal student matriculate as a group working and learning together. This approach to learning is fundamentally a collaborative one. Beyond this, however, sheet metal students are required to collaborate with other professionals at a job location and thus require the cross-communication skills need to work with members of other trades and the larger network of a generally contracted job.

“APSM 126/Lesson 9/Lean Construction: Lean construction covers methodologies of building with an emphasis on environmental sustainability. Lean construction projects review common methodologies for building, and look towards materials and building practices which reduce environmental impact.”

Sheet Metal courses including but not limited to (APSM 124, APSM 120, APSM 112)

BTSM Program, Year 5, Semester 3, Module 24-6 (Standing Seam Roofs), BTSM Program, Year 5, Semester 1, Module 20-09 (Duct Shaft Support Layout), BTSM Program, Year 2, Semester 4, Module 12-11 (Installing Ductwork)

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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)

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,

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

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: Robert Cormia Date: 3/4/2024

Division Curr Rep: Timothy Myres Date: 3/4/2024

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: _____

APSM 106 Course Outline



COURSE OUTLINE – SMQ06

8 HR	Basic AUTOCAD
1.5 HR	Solder Safety & Preparation
1 HR	Solder
1 HR	Flux
6 HR	Soldering Irons
3 HR	Identifying & Preparing Materials
10 HR	Soldering Practices
2 HR	Common Solder Errors
1 HR	Post Soldering
5.5 HR	Shop Final
<u>1 HR</u>	<u>Written Final</u>
40 HRS	TOTAL

Rev: 5/17/2023

APSM 107 Course Outline



COURSE OUTLINE – SMQ07

1 HR	Review Apprentice Policies
3 HR	Coyne Basic Life Safety
2 HR	Intro to Mechanical Plans
1 HR	Intro to Plan Grid
3 HR	Intro to Parallel Line Development
5 HR	Round Gore Elbow
3 HR	Fab Round Unequal Size 45 Degree Tee
2.5 HR	Layout Only - Round 90 Degree Offset Tee
1 HR	Architectural Principles & Safety
8 HR	Energy Efficiency through Duct Design
2 HR	Water Movement, Systems & Sealants
2 HR	Expansion & Contraction
2 HR	Basics of Architectural Layout
3 HR	Shop Final Exam
1.5 HR	Written Final
40 HRS	TOTAL

Rev: 07/24/2022

(APSM 113) SMQ13-02 Lesson Plan

Title: Introduction to Shielded Metal Arc Welding (SMAW)

Time Required: 3 hours (180 min.)

Performance Objective:

After a presentation, “Introduction to Shielded Metal Arc welding”, and an instructor demonstration on setting up the SMAW welding machine, students will demonstrate, through testing, the ability to properly select electrodes, connect the SMAW power source, leads, and the electrode holder in preparation to begin welding.

Equipment/Resources Needed:

- Laptop and projector with access to Total Track
- Power Point presentation “Introduction to SMAW”
- ITI Welding Student Manual 1-4 (pg 74-99 of Ereader)
- Welding Power source, ground clamp, leads, electrode holder
- Various SMAW Electrodes (6010, 6011, 6013, 7018)
- Assignment 13-02 Introduction to SMAW
- Assignment 13-03 Electrodes, duty cycle and currents

Introduction:

Developed in 1888, shielded metal arc welding is one of the oldest and simplest welding processes still used to this day. Often times in the field, this process will be called “stick welding” due to the electrode used in the process. This process has remained relevant due to the ease of setup, the ability to weld many metals, and the ability to weld out of position. Many welds which sheet metal workers encounter in the field will be out of position welds, where compactness and ease of setup may be the best option for a successful job completion.

Shielded metal arc welding also has disadvantages which need to be considered:

Due to the high temperatures of the arc, (9000 degrees), it is easy to burn through metals lighter than 18 gauge. The slag which is deposited on the weld must be removed, thus making the process slower. The welder has to cease welding to change electrodes as they are consumed adding further inefficiencies.

Despite the inefficiencies of the process, shielded metal arc welding is the best process to begin practicing welding, as it contains all of the basic fundamentals for power setup, as well as electrode manipulation. This base in knowledge will carry us over to other welding processes covered in the program.

Presentation:

What you say

After this presentation, we will be able to successfully complete the following objectives:

We will cover the **assembly of the SMAW equipment**. In the field or in a shop, the welder will be required to correctly and efficiently setup the welding machine. Throughout our practice in the shop, we will be setting up and breaking down our machines daily, keeping safety and equipment protection in mind.

You will be able to **identify all of the components of the welding machine by name**. Using proper names for equipment allows for ease of communication, and shows professionalism in your craft.

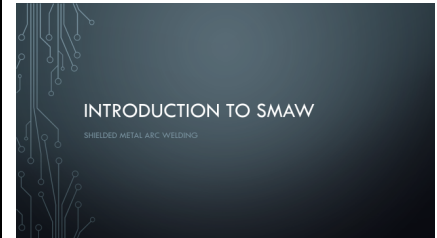
We will discuss electrodes, and be able to **properly identify electrode classifications for the SMAW process**. Correctly identifying electrodes is a starting point to ensure quality welds, and proper base metal fusion.

We will **identify the function of each component** identified to guide us in the shop.

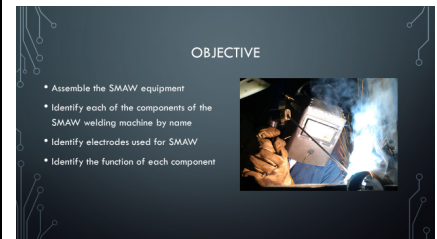
Before setting up, always check for safety by:

- Checking the welding leads and lead connections for cuts or disconnections.
- Make sure all connections are secured not only for safety, but improperly connected equipment can effect weld quality.
- Check for fire extinguishers in two separate locations.
- Checking the location of the power source, primary power fuse, and disconnects.

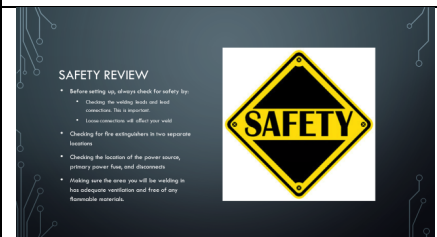
What you show



Begin Power Point presentation "Introduction to SMAW"



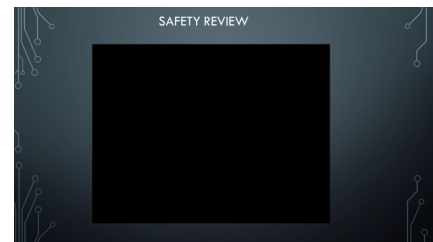
Slide 2 Objectives



Slide 3 Safety Review

- Each of the welding booths in our shop has a power disconnect. It is important that before disconnecting any power source, the circuit be turned to the off position. This is not only proper electrical safety practice, but depending on the power plug style type, it will maintain the electrical connectors.
- Making sure the area you will be welding in has adequate ventilation.
 - Our shop booths are equipped with exhaust ventilation pulling smoke, and preventing inhalation of fumes. In addition, there is also make-up air provided. It is important before welding occurs in the shop, the exhaust fans and make-up air unit be turned on.
- Make sure your area is free of any flammable materials which can ignite.
 - This includes papers from notes or project documentation.
 - Lighters in pockets
 - Brooms in the welding booths

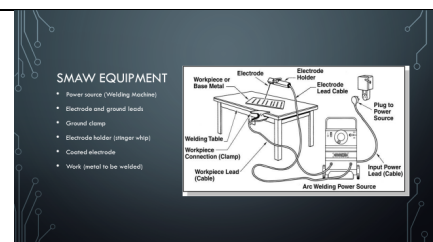
Note to instructor: Continue to Slide 4 and play the video for “Safety Review”



Slide 4 Safety Review

The SMAW equipment consists of the following:

- **A power source or welding machine.**
 - Our training facilities are equipped with both Lincoln and Miller welding machines, and throughout the week, each student will have practice on both types of machines.
- **Electrode and ground Leads**
 - The connection of the electrode and ground leads will determine our polarity.
- **The ground clamp,** in our shop practice, we will be connecting directly to our welding booth table.



Slide 5 SMAW Equipment

- **The electrode holder**, properly secures the electrode used to weld. This can also be known as the “stinger, or whip”.

Note to instructor display the stinger whip with an electrode.

- **A coated electrode**, initiates the arc and is manipulated to create a weld. These electrodes are identified by the American Welding Society, and the classifications will be discussed in future slides.
- **The work or material to be welded.** In our shop practice, we will be working with 10 gauge steel, which is ideal for practicing hand technique with the electrode. As mentioned previously, this process is not ideal for materials lighter than 18 gauge thickness.

Note to instructor: It is beneficial to have a welding setup in the classroom to not only identify the components in the presentation, but display the physical component in the classroom. Continue to Slide “SMAW Equipment Setup” and display the video



Slide 6 Equipment Setup

The electrode in the SMAW process initiates the arc, which melts both the electrode and the base metal. The molten metal from the electrode mixes with the molten base metal to form the weld pool, or the weld puddle as it is also called.

- As the electrode moves along the joint, the deposited metal mixes with the base material and solidifies. As the heat from the arc melts the base metal, it also melts the flux coating on the electrode.
- This flux coating produces slag, which provides the following:
 - **Shielding**- some of the coating decomposes to form a gaseous shield for the molten metal.



Slide 7 Electrodes

- **Deoxidation**- the coating provides a fluxing agent to remove impurities, oxygen and other atmospheric gases.
- **Alloying**-the coating provides additional alloying elements for the weld deposit.
- **Ionizing**- when the flux coating becomes molten, it improves electrical characteristics to increase arc stability.
- **Insulating**-the solidified slag provides an insulating blanket to slow down the weld metal cooling rate.

- It is important to note that often times a discontinuity associated with SMAW is slag inclusions. Slag inclusions occur when slag becomes entrapped in the molten weld pool. It is important when completing starts and stops of welds, to thoroughly clean all slag from the weld and base metal to prevent this discontinuity.

The American Welding Society has developed a classification system used for identifying electrodes. It is important to properly identify electrodes to make sure the correct materials are selected for a job and proper material storage protocols can be followed.

The picture shown in the presentation shows an electrode classification for an E6010 SMAW electrode.

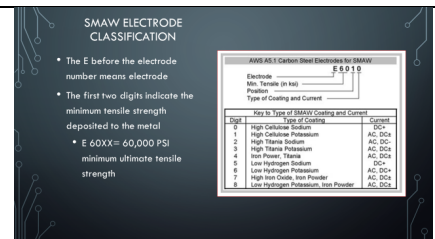
This picture has also been uploaded to the files section of Total Track for your personal information.

The classification begins with the letter **E** which stands for Electrode.

- The primary element of the SMAW process is the electrode. It is made of a metal core wire covered with a layer of granular flux, held together with a bonding agent.

The second, is the number **60** which denotes the minimum tensile strength in kilo pounds per square inch (ksi).

E 60XX= 60,000 KSI minimum ultimate tensile strength.



Slide 8:SMAW Electrode Classification

- Ultimate tensile strength is the maximum amount of tensile stress that a material can withstand before it breaks or fractures, as defined by the AWS.

The third digit indicates the position which the electrode is to be used.

- The number **1** signifies that the electrode can be used in all positions including flat, horizontal, vertical, and overhead.
- Since this process can be used in many positions, it is important to note that the correct electrode is being used for the position of the weld.

The final number signifies the current and coating of the electrode.

- The number **0** signifies DC+ current type, which we will cover in proceeding slides.

Note to instructor: Proceed to Slide #9 and show the weld positions noted in the chart. Explain to the students that our practice in the shop with SMAW will begin with the flat position.

Electrode	Position	Current	Shielding Gas	Notes
E6010	All	AC or DC	None	Carbon arc cutting
E6011	All	AC or DC	None	Carbon arc cutting
E6012	All	AC or DC	None	Carbon arc cutting
E6013	All	AC or DC	None	Carbon arc cutting
E6015	All	AC or DC	None	Carbon arc cutting
E6016	All	AC or DC	None	Carbon arc cutting
E6017	All	AC or DC	None	Carbon arc cutting
E6018	All	AC or DC	None	Carbon arc cutting
E6020	All	AC or DC	None	Carbon arc cutting
E6021	All	AC or DC	None	Carbon arc cutting
E6022	All	AC or DC	None	Carbon arc cutting
E6023	All	AC or DC	None	Carbon arc cutting
E6024	All	AC or DC	None	Carbon arc cutting
E6025	All	AC or DC	None	Carbon arc cutting
E6026	All	AC or DC	None	Carbon arc cutting
E6027	All	AC or DC	None	Carbon arc cutting
E6028	All	AC or DC	None	Carbon arc cutting
E6029	All	AC or DC	None	Carbon arc cutting
E6030	All	AC or DC	None	Carbon arc cutting
E6031	All	AC or DC	None	Carbon arc cutting
E6032	All	AC or DC	None	Carbon arc cutting
E6033	All	AC or DC	None	Carbon arc cutting
E6034	All	AC or DC	None	Carbon arc cutting
E6035	All	AC or DC	None	Carbon arc cutting
E6036	All	AC or DC	None	Carbon arc cutting
E6037	All	AC or DC	None	Carbon arc cutting
E6038	All	AC or DC	None	Carbon arc cutting
E6039	All	AC or DC	None	Carbon arc cutting
E6040	All	AC or DC	None	Carbon arc cutting
E6041	All	AC or DC	None	Carbon arc cutting
E6042	All	AC or DC	None	Carbon arc cutting
E6043	All	AC or DC	None	Carbon arc cutting
E6044	All	AC or DC	None	Carbon arc cutting
E6045	All	AC or DC	None	Carbon arc cutting
E6046	All	AC or DC	None	Carbon arc cutting
E6047	All	AC or DC	None	Carbon arc cutting
E6048	All	AC or DC	None	Carbon arc cutting
E6049	All	AC or DC	None	Carbon arc cutting
E6050	All	AC or DC	None	Carbon arc cutting
E6051	All	AC or DC	None	Carbon arc cutting
E6052	All	AC or DC	None	Carbon arc cutting
E6053	All	AC or DC	None	Carbon arc cutting
E6054	All	AC or DC	None	Carbon arc cutting
E6055	All	AC or DC	None	Carbon arc cutting
E6056	All	AC or DC	None	Carbon arc cutting
E6057	All	AC or DC	None	Carbon arc cutting
E6058	All	AC or DC	None	Carbon arc cutting
E6059	All	AC or DC	None	Carbon arc cutting
E6060	All	AC or DC	None	Carbon arc cutting
E6061	All	AC or DC	None	Carbon arc cutting
E6062	All	AC or DC	None	Carbon arc cutting
E6063	All	AC or DC	None	Carbon arc cutting
E6064	All	AC or DC	None	Carbon arc cutting
E6065	All	AC or DC	None	Carbon arc cutting
E6066	All	AC or DC	None	Carbon arc cutting
E6067	All	AC or DC	None	Carbon arc cutting
E6068	All	AC or DC	None	Carbon arc cutting
E6069	All	AC or DC	None	Carbon arc cutting
E6070	All	AC or DC	None	Carbon arc cutting
E6071	All	AC or DC	None	Carbon arc cutting
E6072	All	AC or DC	None	Carbon arc cutting
E6073	All	AC or DC	None	Carbon arc cutting
E6074	All	AC or DC	None	Carbon arc cutting
E6075	All	AC or DC	None	Carbon arc cutting
E6076	All	AC or DC	None	Carbon arc cutting
E6077	All	AC or DC	None	Carbon arc cutting
E6078	All	AC or DC	None	Carbon arc cutting
E6079	All	AC or DC	None	Carbon arc cutting
E6080	All	AC or DC	None	Carbon arc cutting
E6081	All	AC or DC	None	Carbon arc cutting
E6082	All	AC or DC	None	Carbon arc cutting
E6083	All	AC or DC	None	Carbon arc cutting
E6084	All	AC or DC	None	Carbon arc cutting
E6085	All	AC or DC	None	Carbon arc cutting
E6086	All	AC or DC	None	Carbon arc cutting
E6087	All	AC or DC	None	Carbon arc cutting
E6088	All	AC or DC	None	Carbon arc cutting
E6089	All	AC or DC	None	Carbon arc cutting
E6090	All	AC or DC	None	Carbon arc cutting
E6091	All	AC or DC	None	Carbon arc cutting
E6092	All	AC or DC	None	Carbon arc cutting
E6093	All	AC or DC	None	Carbon arc cutting
E6094	All	AC or DC	None	Carbon arc cutting
E6095	All	AC or DC	None	Carbon arc cutting
E6096	All	AC or DC	None	Carbon arc cutting
E6097	All	AC or DC	None	Carbon arc cutting
E6098	All	AC or DC	None	Carbon arc cutting
E6099	All	AC or DC	None	Carbon arc cutting
E6100	All	AC or DC	None	Carbon arc cutting

Slide 9: Weld Position Chart

The advantages seen in the SMAW process are apparent in the cost savings, versatility and portability of the SMAW process.

The lack of requiring external shielding gas eliminates the hazard of gas canister storage and transportation seen in other processes. Gas is also very expensive, so this process is cost effective.

SMAW is versatile in its material compatibility and can weld most metal types. While the slag can be inconvenient, the electrode itself provides a very stable arc when manipulated correctly.

Most errors we will encounter as a class will be in the welder's electrode manipulation.



Slide 10: Advantages of the SMAW Process

Power Sources may be generator, transformer-type, or inverter.

- Power sources can be identified by primary and secondary ratings on the nameplate.



The primary section (input power) shows:

1. Primary voltage
2. Amperage draw
3. Cycles per second (Hertz)
4. Number of primary phases (single or three phases).

The secondary section (output power) shows:

1. Welding voltage
2. Welding amperage
3. Duty cycle
4. Maximum open circuit voltage.

At the Local 104 training facilities we have CC-CV power sources, or constant current-constant voltage power sources.

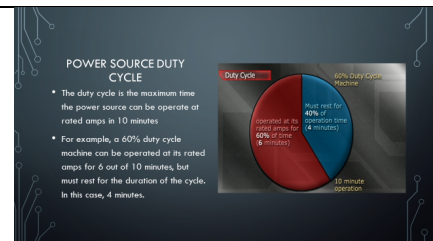
- CC-CV Power Sources will make internal adjustment to give the user a constant stream of current, even if the operator's arc length changes during welding.
- Power Sources have positive and negative lead connections, which determine the polarity when welding.

Slide 11: Locate the Power source

The duty cycle is the maximum time the power source can be operate at rated amps in 10 minutes

- For example, a 60% duty cycle machine can be operated at its rated amps for 6 out of 10 minutes, but must rest for the duration of the cycle. In this case, 4 minutes.
- If the welding machine is rated at 300 amps and 60% duty cycle, you can operate at 300 amps for 6 out of 10 minutes, but must rest for the duration of the cycle in this case, 4 minutes.
- If you operate the same machine at 230 amps, it has a 100% duty cycle.

You need to consult your owner's operation manual for the duty cycle at the amperage you are using.



Slide 12: Power Duty Cycle

The length of the welding cables and the amperage used in the arc, will determine what size cable needed.

- Using a cable too small for the amperage and/or the distance from the power supply (including length of welding lead and ground lead) could cause the cable to overheat and damage the cable or power supply.
- A cable that is too small will create added resistance in the welding circuit and cause overheating which can affect your weld quality.

The length of the cables is the total length of the welding circuit. That includes the electrode lead and the ground lead.

- For example, let's say you are welding at 200 amps and working 90 feet from the welding machine. The length of the circuit would be 90 feet out for the electrode lead and 90 feet back for the ground lead, a total of 180 feet.

The work lead is attached to the work-piece by a spring loaded ground clamp or a screw-type clamp.

- The best way to attach the cable to the ground clamp is by a mechanical connection.
- Soldering these connections is not recommended because solder doesn't conduct current as well and solder could melt if the welding cable overheats.

The electrode lead is fastened to an electrode holder, which is the device that holds the electrode during welding. The electrode lead and holder are commonly referred to as the stinger.

Welding cable doesn't wear out from carrying current but it does wear out when it is subjected to physical abuse.

- Be sure it doesn't cross areas where it may be run over by forklifts or trucks.
- Likewise setting heavy steel plates on the cables can crush the wires inside.

SMAW WELDING CABLE

- Using the proper type and size welding cable is important
- Using a cable too small for the amperage and/or distance from the power supply could cause the cable to overheat and damage the cable or power supply.
- Amperage is the measure of the rate of current flow in an electrical circuit. This is also referred to as the energy that does the work in an arc.

Cable Size	Length (ft)	Voltage (V)	Current (A)	Resistance (ohms)	Power (W)
1/2"	10	10	10	1.0	100
1/2"	20	10	10	2.0	200
1/2"	30	10	10	3.0	300
1/2"	40	10	10	4.0	400
1/2"	50	10	10	5.0	500
1/2"	60	10	10	6.0	600
1/2"	70	10	10	7.0	700
1/2"	80	10	10	8.0	800
1/2"	90	10	10	9.0	900
1/2"	100	10	10	10.0	1000
1/2"	110	10	10	11.0	1100
1/2"	120	10	10	12.0	1200
1/2"	130	10	10	13.0	1300
1/2"	140	10	10	14.0	1400
1/2"	150	10	10	15.0	1500
1/2"	160	10	10	16.0	1600
1/2"	170	10	10	17.0	1700
1/2"	180	10	10	18.0	1800
1/2"	190	10	10	19.0	1900
1/2"	200	10	10	20.0	2000
1/2"	210	10	10	21.0	2100
1/2"	220	10	10	22.0	2200
1/2"	230	10	10	23.0	2300
1/2"	240	10	10	24.0	2400
1/2"	250	10	10	25.0	2500
1/2"	260	10	10	26.0	2600
1/2"	270	10	10	27.0	2700
1/2"	280	10	10	28.0	2800
1/2"	290	10	10	29.0	2900
1/2"	300	10	10	30.0	3000
1/2"	310	10	10	31.0	3100
1/2"	320	10	10	32.0	3200
1/2"	330	10	10	33.0	3300
1/2"	340	10	10	34.0	3400
1/2"	350	10	10	35.0	3500
1/2"	360	10	10	36.0	3600
1/2"	370	10	10	37.0	3700
1/2"	380	10	10	38.0	3800
1/2"	390	10	10	39.0	3900
1/2"	400	10	10	40.0	4000
1/2"	410	10	10	41.0	4100
1/2"	420	10	10	42.0	4200
1/2"	430	10	10	43.0	4300
1/2"	440	10	10	44.0	4400
1/2"	450	10	10	45.0	4500
1/2"	460	10	10	46.0	4600
1/2"	470	10	10	47.0	4700
1/2"	480	10	10	48.0	4800
1/2"	490	10	10	49.0	4900
1/2"	500	10	10	50.0	5000
1/2"	510	10	10	51.0	5100
1/2"	520	10	10	52.0	5200
1/2"	530	10	10	53.0	5300
1/2"	540	10	10	54.0	5400
1/2"	550	10	10	55.0	5500
1/2"	560	10	10	56.0	5600
1/2"	570	10	10	57.0	5700
1/2"	580	10	10	58.0	5800
1/2"	590	10	10	59.0	5900
1/2"	600	10	10	60.0	6000
1/2"	610	10	10	61.0	6100
1/2"	620	10	10	62.0	6200
1/2"	630	10	10	63.0	6300
1/2"	640	10	10	64.0	6400
1/2"	650	10	10	65.0	6500
1/2"	660	10	10	66.0	6600
1/2"	670	10	10	67.0	6700
1/2"	680	10	10	68.0	6800
1/2"	690	10	10	69.0	6900
1/2"	700	10	10	70.0	7000
1/2"	710	10	10	71.0	7100
1/2"	720	10	10	72.0	7200
1/2"	730	10	10	73.0	7300
1/2"	740	10	10	74.0	7400
1/2"	750	10	10	75.0	7500
1/2"	760	10	10	76.0	7600
1/2"	770	10	10	77.0	7700
1/2"	780	10	10	78.0	7800
1/2"	790	10	10	79.0	7900
1/2"	800	10	10	80.0	8000
1/2"	810	10	10	81.0	8100
1/2"	820	10	10	82.0	8200
1/2"	830	10	10	83.0	8300
1/2"	840	10	10	84.0	8400
1/2"	850	10	10	85.0	8500
1/2"	860	10	10	86.0	8600
1/2"	870	10	10	87.0	8700
1/2"	880	10	10	88.0	8800
1/2"	890	10	10	89.0	8900
1/2"	900	10	10	90.0	9000
1/2"	910	10	10	91.0	9100
1/2"	920	10	10	92.0	9200
1/2"	930	10	10	93.0	9300
1/2"	940	10	10	94.0	9400
1/2"	950	10	10	95.0	9500
1/2"	960	10	10	96.0	9600
1/2"	970	10	10	97.0	9700
1/2"	980	10	10	98.0	9800
1/2"	990	10	10	99.0	9900
1/2"	1000	10	10	100.0	10000

Slide 13: SMAW Welding Cable

There are three types of welding voltage:

- Open circuit voltage: Measured at the output terminals of the power source when it is energized, but no welding is being done
- Load voltage: Measured at the output terminals of the power source during welding
- Arc voltage: Measured at the welding arc

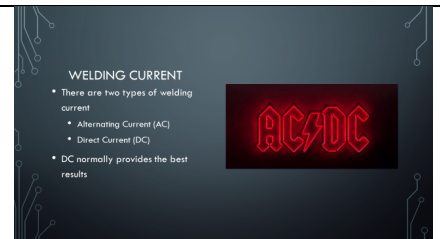


Slide 14: Welding Voltage

There are two types of welding currents:

- Alternating Current (AC)
- Direct Current (DC)

DC provides the best results when welding with the SMAW process.



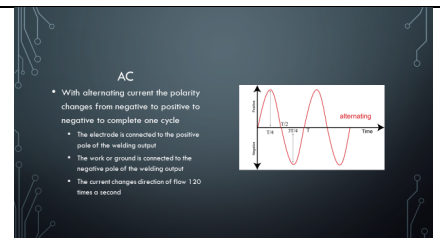
Slide 15: Welding Current

With Alternating Current (AC), the polarity changes from negative to positive, to negative to positive.

The electrode is connected to the positive pole (+) (usually labeled electrode) of the welding output.

The work or ground is connected to the negative pole (-) (usually labeled work) of the welding output.

The current changes direction of flow 120 times a second (this is 60 complete cycles per second).



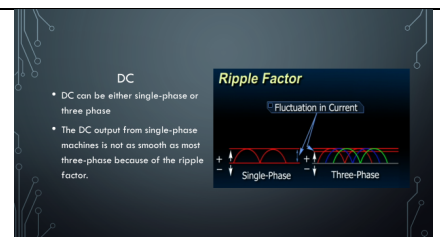
Slide 16: AC

Direct current or DC power can pull from a single phase power source or 3 phase power source.

Note to instructor: The image on the presentation shows the waves of power in single and 3 phase power.

For single-phase DC, there is a point at which there is no current.

With three-phase DC, there are three separate currents at equal time intervals, 120° apart, thus, there is never a current outage.



Slide 17: DC

- When one current drops off, a second current begins; when the second current drops off, the third current begins and the cycle continues, providing a much smoother arc.

There are two polarities (direction of current flow) of direct current:

1. DCEN - Direct Current Electrode Negative (Also referred to as straight polarity)
2. DCEP - Direct Current Electrode Positive (Also referred to as reverse polarity).

DCEP

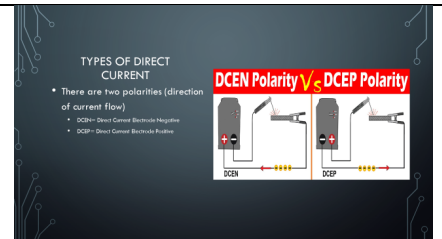
With direct current electrode positive, the electrode is connected to the positive pole (+) of the welding output.

- The work or ground is connected to the negative pole (-) of the welding output.
- The current flows from the base metal to the electrode providing deeper penetration.
- The penetration increases because the positive pole contains 70% of the heat, and the superheated filler metal impacts the base metal with tremendous speed driving it into the molten weld pool. This is contrasted by the negative pole which contains only 30% of the heat.

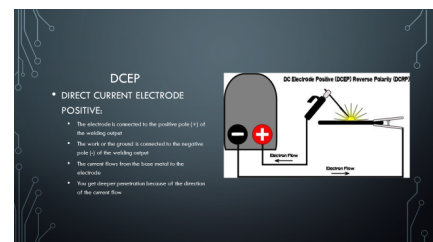
DCEN

- With direct current electrode negative, the electrode is connected to the negative pole (-) of the welding output.
- The work or ground is connected to the positive pole (+) of the welding output.
- The current flows from the electrode to the base metal providing shallower penetration because of the direction of the current flow.

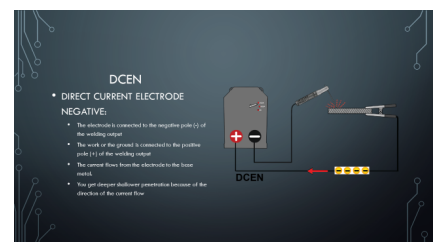
Note to instructor: Provide demonstration of changing polarities on the welding power source. Make sure to mention to the students that the first process practiced in the shop will be Direct Current Electrode Positive (DCEP).



Slide 18: Types of Direct Current



Slide 19: DCEP

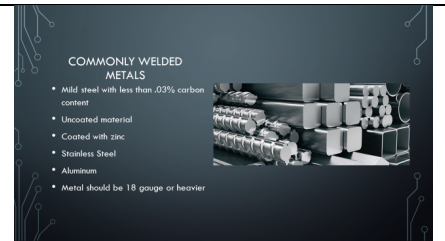


Slide 20:DCEN

Commonly Welded Metals

SMAW is also considered to be versatile because it can successfully weld:

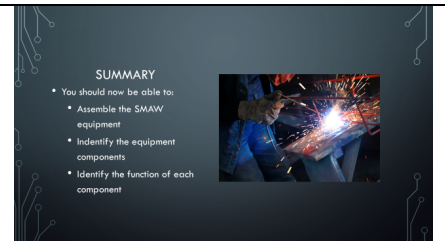
1. Mild steel with less than .030% carbon content
2. Uncoated material
3. Coated with zinc and other material
4. Stainless steel
5. Aluminum
6. Metal should be 18 gauge or heavier.



Slide 21: Commonly welded Metals

The concepts which should be fully understood before moving into the DASH principle are.

1. Assemble the Shielded Metal Arc Welding (SMAW) equipment
2. Identify the equipment components by name
 - Electrode holder
 - Leads (Ground and work)
 - Ground clamp
 - Electrode
 - Power source
3. Identify the function of each component.
4. Identify electrodes by their classification
 - Mention the AWS electrode classification for the SMAW electrodes is in the file section of Total Track and review.



Slide 22: Summary

Application:

Following the presentation, students will be directed to read module 2/Lesson 3 of the Iti Welding Student manual Volume I “Set Up for Shielded Metal Arc Welding Operations” pages #89-99 of the Ereader. Students will be given time to read and will complete the following assignments on Total Track:

Quiz 13-02 Introduction to SMAW

Quiz 13-03 Electrodes, duty cycle and currents

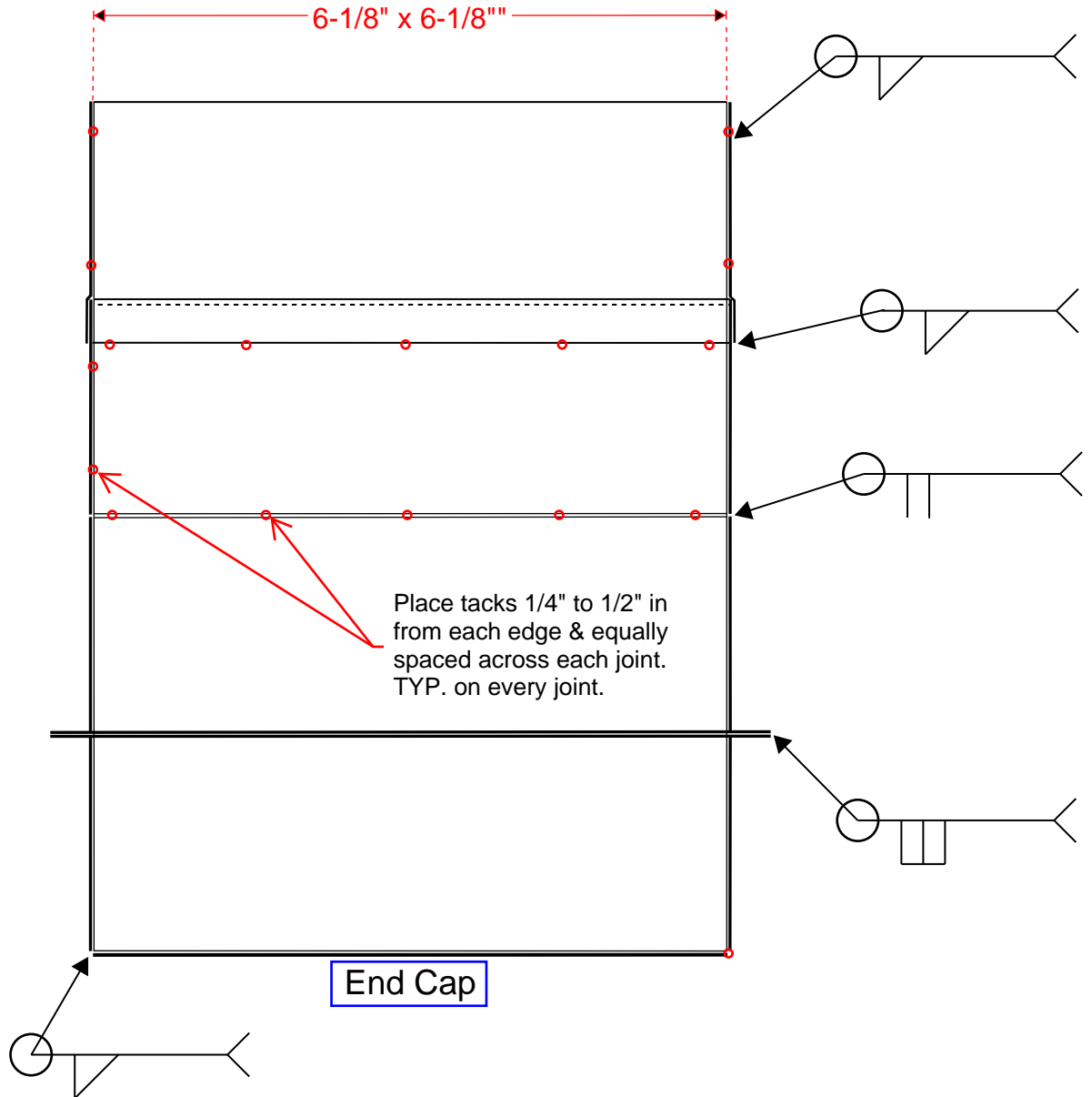
Students will use equipment setup techniques discussed in the lesson to guide them into the SMAW DASH principles of the next lesson. Completing this module, apprentices will be able to setup the welding machine for the SMAW process, and select the proper electrode to begin welding.

Summary:

SMAW is an extremely versatile and cost effective welding process which accounts for 60% of the worlds welding to this day. Potentially windy environmental conditions and the various positions a sheet metal worker will be exposed to, may make SMAW an ideal candidate to complete the task on a job. When welding duct stands or a package unit on the roof, and wind is impacting arc stability, SMAW will get the job done.

Remember that proper setup and electrode selection are very important parts of the SMAW process. Always follow proper safety procedures to prevent harming yourself and others around you. Be able to locate all available information concerning the power source that you are using, such as duty cycle, amperage and voltage capacities, so you don't overload the welding power source. Also, remember that loose or improper connections will greatly affect your welds.

16ga. GMAW Grease Tack Welded Duct Final



S. FAIN
980185

16ga. Carbon Steel Grease Duct is made of 16 pcs. 2"x6" weld coupons with 1/2" flanges. Welded end cap on one end. NO WELDING, fully tack welded and prepped for welding.

No Grinding after tacking, wire brush only.

JOB NO. 867-5309

DATE: 12/21/2021

BY: S.F.

SHEET # 104

(APSM 122) DLT Unit 3 Test Procedures Lesson Plan

Title: DLT Unit 3 Test Procedures

Instructor: Chris Coatsworth

Time Required: Day 3, 1-1/2hrs

Performance Objective:

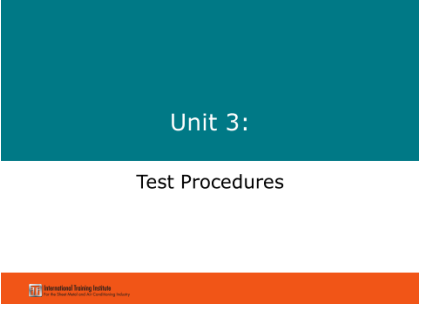
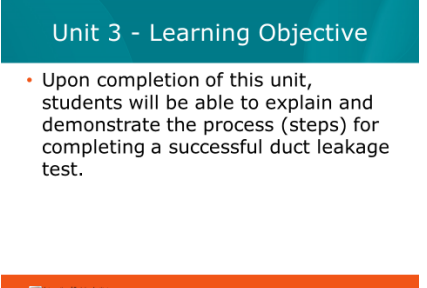
- Upon completion of this unit, students will be able to explain and demonstrate the process (steps) for completing a successful duct leakage test.

Equipment/Resources Needed:

- Computer
- Projector/Monitor
- ITI DLT PPT Unit3 Test Procedures_REV01- Power Point
- DLT Test Kit

Introduction: Performing the Air Duct Leakage Testing is the essence of DLT. It is important that you know your testing equipment and how to perform DLT with confidence. Remember, most of the time there will be a witness to the testing. One false reading can remove all confidence that the witness has in you.

Presentation:

What you say	What you show
1. Unit 3: Test Procedures	 A presentation slide with a teal header containing the text "Unit 3:" and a white body containing the text "Test Procedures". At the bottom, there is an orange footer with the ITI logo and the text "ITI Duct Leakage Testing".
2. Unit 3 - Learning Objective <ul style="list-style-type: none">• Upon completion of this unit, students will be able to explain and demonstrate the process (steps) for completing a successful duct leakage test.	 A presentation slide with a teal header containing the text "Unit 3 - Learning Objective" and a white body containing a bulleted list: "• Upon completion of this unit, students will be able to explain and demonstrate the process (steps) for completing a successful duct leakage test." At the bottom, there is an orange footer with the ITI logo, the text "ITI Duct Leakage Testing", and "Unit 3 • 2".

3. Test Procedures

- Note that the test procedures described here are based on a specific purchased test kit. Minor changes may need to be made for other test kits.

It is important to read the manufacturer's manual for the test kit that you will be using on a jobsite.

- The duct leakage test process is to pressurize the duct section to be tested to the specified test pressure.

If you can not achieve the specified test pressure than the test fails. Your final duct pressure reading must be at the specified test pressure or slightly higher. If a test requires a duct pressure of +4.0" WG then a reading of 3.99" WG is unacceptable.

Test Procedures

- Note that the test procedures described here are based on a specific purchased test kit. Minor changes may need to be made for other test kits.
- The duct leakage test process is to pressurize the duct section to be tested to the specified test pressure.

4. Test Procedures, Cont.

- The ΔP is measured across the orifice plate in a specially designed **orifice tube**.

Keep a copy of the orifice tube/plate's calibration chart with you when testing. The witness and your self will need it to determine the allowable leakage rate.

- The SP (static pressure) is also measured in the duct that is being tested.

Make sure you are using the proper manometer for the job. Some projects will specify which type of manometers are to be used. If using digital manometers, make sure you have extra batteries on hand. It is a good idea to have the calibration certificates for the manometers with you. Sometimes witnesses will want to see them.

Test Procedures, Cont.

- The ΔP is measured across the orifice plate in a specially designed **orifice tube**.
- The SP (static pressure) is also measured in the duct that is being tested.

5. Contents of a Basic Test Kit

- A basic **test kit for leak testing** (Fig. 9) consists of the following:
 - A test fan
 - Two manometers or magnehelics with tubing
 - An orifice tube with a pressure tap on each side of the orifice plate (Fig. 10)

Newer test kits will often have multiple orifice plates at various sizes. This allows for a wider range of test sections from large to small.

- A calibration chart for the orifice tube

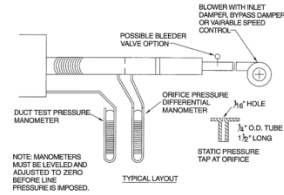
Contents of a Basic Test Kit

- A basic **test kit for leak testing** (Fig. 9) consists of the following:
 - A test fan
 - Two manometers or magnehelics with tubing
 - An orifice tube with a pressure tap on each side of the orifice plate (Fig. 10)
 - A calibration chart for the orifice tube

6. Testing To A Positive Pressure

This diagram shows a DLT test kit that is set up to produce a positive pressure within the duct section. It contains a blower, orifice plate, and two manometers.

Testing To A Positive Pressure



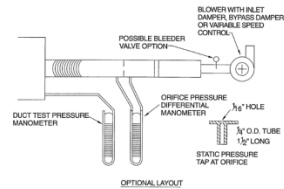
ITT Duct Leakage Testing Unit 3 • 6

- Show your DLT kit to the class. Point out all of the parts and explain/demonstrate how it is put together.

7. Testing To A Negative Pressure

This diagram shows a DLT test kit that is set up to create a negative static pressure within the duct section. The actual leakage rate will be the same if you are testing it under a positive or negative pressure. Often, the DLT specs will require duct work that is to operate under a negative pressure to be tested under a negative pressure. In this diagram the high pressure port of the orifice delta P is closest to the duct section and the low pressure port is closest to the blower.

Testing To A Negative Pressure



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8. Sample Calibration Chart

This is an example of what some calibration charts look like. This is very simple. You just locate the orifice tube delta P on the chart that you measured and look at the CFM value. Often, there is also a formula for which the chart is based off of.

Sample Calibration Chart

SAMPLE CALIBRATION CHART TABLE BELOW FOR EXAMPLE ONLY – USE YOUR CHART

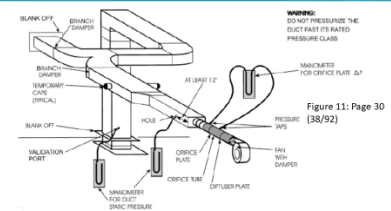
ORIFICE TUBE Gauge Reading (INCH)	Leakage Rate (CFM)	ORIFICE TUBE Gauge Reading (INCH)	Leakage Rate (CFM)	ORIFICE TUBE Gauge Reading (INCH)	Leakage Rate (CFM)
0.0	0.0	1.7	174.3	1.4	145.3
0.1	20.9	1.8	179.2	1.5	150.2
0.2	41.8	1.9	184.1	1.6	155.1
0.3	62.7	2.0	189.0	1.7	160.0
0.4	83.6	2.1	193.9	1.8	164.9
0.5	104.5	2.2	198.8	1.9	169.8
0.6	125.4	2.3	203.7	2.0	174.7
0.7	146.3	2.4	208.6	2.1	179.6
0.8	167.2	2.5	213.5	2.2	184.5
0.9	188.1	2.6	218.4	2.3	189.4
1.0	209.0	2.7	223.3	2.4	194.3
1.1	229.9	2.8	228.2	2.5	199.2
1.2	250.8	2.9	233.1	2.6	204.1
1.3	271.7	3.0	238.0	2.7	209.0
1.4	292.6	3.1	242.9	2.8	213.9
1.5	313.5	3.2	247.8	2.9	218.8
1.6	334.4	3.3	252.7	3.0	223.7

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9. Leak Testing Set-Up

This diagram also shows an Air Duct Leakage Test set-up. Notice that there is a third manometer shown at the other end of the duct section. This is to verify that there are no other blank offs in the middle of the duct section. The static pressure should match at both ends of the duct section.

Leak Testing Set-Up



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10. Leak Testing Set-Up: Step 1

- Step 1: Refer to test specifications

According to SMACNA-HVAC Air Duct Leakage Manual, “A properly written leakage testing specification contains the following:”

- Which portions or systems require testing. (All is not usually practical option unless cost is not a concern)



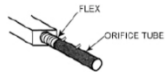
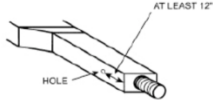

Leak Testing Set-Up: Step 1

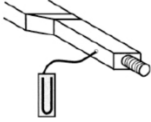

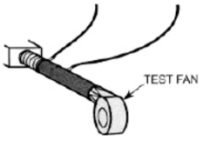
- Step 1: Refer to test specifications

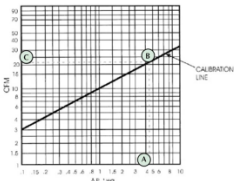
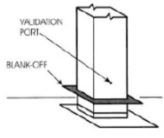
According to SMACNA-HVAC Air Duct Leakage Manual, “A properly written leakage testing specification contains the following:”

- Which portions or systems require testing.
- Test static pressure of the system.
- The leakage class must be specified, arbitrary values must be avoided.

ITT Duct Leakage Testing Unit 3 • 10

<ul style="list-style-type: none"> • Test static pressure of the system (not to exceed the construction static pressure class of the ductwork) • The leakage class must be specified, arbitrary values must be avoided. Use values that coincide with the type, construction, and operating pressure of the ductwork. <p>If any of this information is missing, an RFI must be written ASAP.</p>	
<p>11. Leak Testing Set-Up: Step 2</p> <ul style="list-style-type: none"> • Step 2: Seal off all duct openings <p>Duct openings may be sealed off with end caps or plastic wrap that is held on by duct tape. This will depend on the test pressure.</p>	<p>Leak Testing Set-Up: Step 2</p> <ul style="list-style-type: none"> • Step 2: Seal off all duct openings   <p>ITT Technical Training Institute ITI Duct Leakage Testing Unit 3 • 11</p>
<p>12. Leak Testing Set-Up: Step 3</p> <ul style="list-style-type: none"> • Step 3: Connect the outlet of the orifice tube to the opening of the duct system <p>Use duct tape or metal clamps to attach the test outlet to the ductwork.</p>	<p>Leak Testing Set-Up: Step 3</p> <ul style="list-style-type: none"> • Step 3: Connect the outlet of the orifice tube to the opening of the duct system  <p>Fig. 12: Connections orifice tube to duct system</p> <p>ITT Technical Training Institute ITI Duct Leakage Testing Unit 3 • 12</p>
<p>13. Leak Testing Set-Up: Step 4</p> <ul style="list-style-type: none"> • Step 4: Drill a hole in the duct section <p>Notice that the hole needs to be at least 12” downstream from where the test connection is located. The hole needs to be approximately 3/8”.</p>	<p>Leak Testing Set-Up: Step 4</p> <ul style="list-style-type: none"> • Step 4: Drill a hole in the duct section  <p>Fig. 13: Validation port</p> <p>ITT Technical Training Institute ITI Duct Leakage Testing Unit 3 • 13</p>
<p>14. Leak Testing Set-Up: Step 5</p> <ul style="list-style-type: none"> • Step 5: Set both manometers to zero (if applicable). <p>U-tube manometers, vertical/inclined manometers, Magnehelic gauges, and some digital manometers must be zeroed. Some instruments will automatically zero themselves.</p>	<p>Leak Testing Set-Up: Step 5</p> <ul style="list-style-type: none"> • Step 5: Set both manometers to zero (if applicable).  <p>ITT Technical Training Institute ITI Duct Leakage Testing Unit 3 • 14</p>

<p>15. Leak Testing Set-Up: Step 6</p> <ul style="list-style-type: none"> Step 6: Connect tubing to manometer and pressure tap. <p>Keep in mind if the duct is going to be tested under a positive pressure or a negative pressure. Certain manometers will need to have the hose connected to the low side if measuring a negative pressure.</p>	<p>Leak Testing Set-Up: Step 6</p> <ul style="list-style-type: none"> Step 6: Connect tubing to manometer and pressure tap.  <p>Fig. 14: Connecting manometer to tubing</p> <p>Download Training Software ITI Duct Leakage Testing Unit 3 • 15</p>
<p>16. Leak Testing Set-Up: Step 7</p> <ul style="list-style-type: none"> Step 7: Use tubing to connect other manometer. <p>Keep in mind the direction of the airflow. If tested under a positive pressure, the high port is closest to the blower. If under a negative pressure, the high port is furthest from the blower.</p>	<p>Leak Testing Set-Up: Step 7</p> <ul style="list-style-type: none"> Step 7: Use tubing to connect other manometer.  <p>Fig. 15: Connecting manometer to two orifice tube pressure taps</p> <p>Download Training Software ITI Duct Leakage Testing Unit 3 • 16</p>
<p>17. Leak Testing Set-Up: Step 8</p> <ul style="list-style-type: none"> Step 8: Connect test fan outlet to inlet side of orifice tube. Cover fan inlet opening. CAUTION: If the inlet is not covered, the sudden pressure when the fan starts can blowout the manometer fluid (see Fig. 16). 	<p>Leak Testing Set-Up: Step 8</p> <ul style="list-style-type: none"> Step 8: Connect test fan outlet to inlet side of orifice tube. Cover fan inlet opening. CAUTION: If the inlet is not covered, the sudden pressure when the fan starts can blowout the manometer fluid (see Fig. 16). <p>Download Training Software ITI Duct Leakage Testing Unit 3 • 17</p>
<p>18. Leak Testing Set-Up: Step 8</p> <p>This diagram shows the test blower set up for a positive pressure test.</p>	<p>Leak Testing Set-Up: Step 8</p>  <p>Fig. 16: Connect test fan outlet to orifice tube</p> <p>Download Training Software ITI Duct Leakage Testing Unit 3 • 18</p>
<p>19. Leak Testing Set-Up: Step 9</p> <ul style="list-style-type: none"> Step 9: Start fan on low speed and gradually increase. Look for change in manometer connected to duct. 	<p>Leak Testing Set-Up: Step 9</p> <ul style="list-style-type: none"> Step 9: Start fan on low speed and gradually increase. Look for change in manometer connected to duct. <p>Download Training Software ITI Duct Leakage Testing Unit 3 • 19</p>
<p>20. Leak Testing Set-Up: Step 10</p> <ul style="list-style-type: none"> Step 10: Determine the ΔP on the manometer connected on both sides of orifice plate. Differential pressure can be measured with various instruments: <ul style="list-style-type: none"> Digital or electronic manometer U-tube manometer Inclined manometer 	<p>Leak Testing Set-Up: Step 10</p> <ul style="list-style-type: none"> Step 10: Determine the ΔP on the manometer connected on both sides of orifice plate. Differential pressure can be measured with various instruments: <ul style="list-style-type: none"> Digital or electronic manometer U-tube manometer Inclined manometer Magnehelic gauge <p>Download Training Software ITI Duct Leakage Testing Unit 3 • 15</p>

<p>– Magnehelic gauge</p>	
<p>21. Leak Testing Set-Up: Step 11</p> <ul style="list-style-type: none"> Step 11: Find leakage rate in CFM on calibration chart. <p>The chart shown here is a different calibration chart. This example is out of the book.</p>	<p>Leak Testing Set-Up: Step 11</p> <ul style="list-style-type: none"> Step 11: Find leakage rate in CFM on calibration chart.  <p><i>Fig. 18: A calibration chart is used only for a specific orifice tube.</i></p> <p>IBT Duct Leakage Testing Unit 3 • 21</p>
<p>22. Leak Testing Set-Up: Step 12</p> <ul style="list-style-type: none"> Step 12: Finish recording test data on report form The calibration chart applies only to the specific orifice tube. 	<p>Leak Testing Set-Up: Step 12</p> <ul style="list-style-type: none"> Step 12: Finish recording test data on report form The calibration chart applies only to the specific orifice tube. <p>IBT Duct Leakage Testing Unit 3 • 17</p>
<p>23. Leak Testing Set-Up: Step 13</p> <ul style="list-style-type: none"> Step 13: Seal all test penetrations and remove caps and blank-offs The technician may choose to monitor the pressure at the far end of the section of the duct being tested to verify that no dampers or other obstructions are impeding the airflow. 	<p>Leak Testing Set-Up: Step 13</p> <ul style="list-style-type: none"> Step 13: Seal all test penetrations and remove caps and blank-offs The technician may choose to monitor the pressure at the far end of the section of the duct being tested to verify that no dampers or other obstructions are impeding the airflow. <p>IBT Duct Leakage Testing Unit 3 • 18</p>
<p>24. Leak Testing Set-Up: Step 13, Cont.</p> <ul style="list-style-type: none"> For example, for the test section shown on page 34, a validation port could be made at the base of the duct (Fig. 19). 	<p>Leak Testing Set-Up: Step 13, Cont.</p>  <p><i>Fig. 19: To be sure that nothing impedes the airflow, a validation port may be added at the far end of the test section.</i></p> <p>IBT Duct Leakage Testing Unit 3 • 24</p>
<p>25. Summary</p> <ul style="list-style-type: none"> You should now be able to explain and demonstrate the process (steps) for completing a successful duct leakage test. 	<p>Summary</p> <ul style="list-style-type: none"> You should now be able to explain and demonstrate the process (steps) for completing a successful duct leakage test. <p>IBT Duct Leakage Testing Unit 3 • 25</p>

Application: Setting up the DLT machine is performed for every Air Duct Leakage Test.

Summary: You now know the steps for setting up an Air Duct Leakage Test Kit. Remember, that there are different kits so some things may be a little different than what was demonstrated here today.

Program Change Request

New Program Proposal

Date Submitted: 04/09/24 12:52 pm

Viewing: **Pre-STEM, Certificate of Achievement**

Last edit: 04/11/24 1:06 pm

Changes proposed by: Sarah Parikh (20087149)

Basic Information

Faculty Author(s)	<table><thead><tr><th>Users</th></tr></thead><tbody><tr><td>Sarah Parikh</td></tr></tbody></table>	Users	Sarah Parikh
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		
Distinct curriculum sheet?	No		

In Workflow

1. **1PS Curriculum Rep**
2. **Curriculum Coordinator**
3. College Curriculum Committee Chair
4. Authors
5. 1PS Curriculum Rep
6. Curriculum Coordinator
7. College Curriculum Committee Chair
8. BACCC
9. FHDA Board of Trustees

Approval Path

1. 04/09/24 2:33 pm
Sarah Parikh (parikhsarah):
Approved for 1PS Curriculum Rep

New Degree or Certificate Proposal

Which academic departments will be involved in the creation of this new degree/certificate? Are any new departments being created?

The Engineering Department will create the certificate.

Does De Anza offer a similar degree or certificate?

No.

What is the educational need for this new degree/certificate?

This certificate will bridge the gap between the Semiconductor Process Technician Certificate of Achievement and the Semiconductor Engineering AS. The Semiconductor Process Technician Certificate of Achievement starts at a level of mathematics that prepares students well for the workforce, but does not directly prepare them for the level of math that the Semiconductor Engineering AS begins at. The idea behind the creation of the Semiconductor apprenticeship program is to allow apprentices to continue to pursue education while working and this Pre-STEM Certificate of Achievement will allow them to continue to ladder up in their academic and career pathway.

How does the degree/certificate align with Foothill's Strategic Vision for Equity?

This certificate addresses the Progress and Completion areas of the Foothill's Strategic Vision for Equity. Without this certificate, students from less-well-prepared academic backgrounds will not have the systems in place to support their continued academic and career progress.

Comments and other relevant information for discussion:

Reviewer

Comments

Program Change Request

New Program Proposal

Date Submitted: 04/02/24 1:51 pm

Viewing: **Business and Marketing, Certificate of Achievement**

Last edit: 04/11/24 1:25 pm

Changes proposed by: Laurence Lew (10949943)

Basic Information

Faculty Author(s)	<table><thead><tr><th>Users</th></tr></thead><tbody><tr><td>Laurence Lew</td></tr></tbody></table>	Users	Laurence Lew
Users			
Laurence Lew			
Department	Business		
Division	Business and Social Sciences		
Title of Degree/ Certificate	Business and Marketing		
Type of Award	Certificate of Achievement		
Workforce/CTE Program:	Yes		
Effective Catalog Edition:	2024-2025		
Distinct curriculum sheet?	No		

In Workflow

1. 1SS Curriculum Rep
2. Curriculum Coordinator
3. College Curriculum Committee Chair
4. Authors
5. 1SS Curriculum Rep
6. Curriculum Coordinator
7. College Curriculum Committee Chair
8. BACCC
9. FHDA Board of Trustees

Approval Path

1. 04/10/24 6:51 am
Angelica Dupree
(dupreeangelica):
Approved for 1SS
Curriculum Rep

New Degree or Certificate Proposal

Which academic departments will be involved in the creation of this new degree/certificate? Are any new departments being created?

This certificate will be under the Business Department. There are no new departments being created.

Does De Anza offer a similar degree or certificate?

No

What is the educational need for this new degree/certificate?

The Certificate of Achievement in Business and Marketing at Foothill College addresses the educational need for practical training in fundamental business and marketing principles, catering to the growing workforce demand in these fields. It offers a comprehensive, accessible, and cost-effective pathway for individuals aiming to enhance their employability and advance in their careers within a rapidly expanding market.

How does the degree/certificate align with Foothill's Strategic Vision for Equity?

The Certificate of Achievement in Business and Marketing at Foothill College supports the institution's equity vision by offering accessible, comprehensive training that aims to dismantle structural barriers to success, making quality education in high-demand fields available to all students, irrespective of race or background.

Comments and other relevant information for discussion:

Reviewer
Comments

Spanish-Advanced, Certificate of Achievement

Basic Information

Faculty Author(s)

Users
Julio Rivera-Montanez Patricia Crespo-Martin

Department

Spanish

Division

Language Arts

Title of Degree/Certificate

Spanish-Advanced

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 Spanish-Advanced will provide students with a working tool that will make them more attractive to prospective employers. Possession of this certificate can also guarantee employment advancement, salary increments, and more attractive job qualifications.

Program Learning Outcomes

- Students will be able to conduct a conversation in Spanish with a minimum of grammatical errors in the present, past, and future, and with minimal pronunciation errors.
- Students will be able to express verbal and written opinions about a wide variety of topics using the subjunctive, both past and present, and the conditional tense.
- Students will be able to demonstrate a solid understanding of the subtleties and idiosyncrasies of Spanish-speaking cultures by analyzing and comparing them.

Catalog Description

The Certificate of Achievement in Spanish-Advanced is designed to enhance the student's knowledge of Spanish. It provides a broader view of the Spanish-speaking world and a deeper knowledge of practical structures. It will open employment opportunities for local students because of the large number of Bay Area companies looking for bilingual students. For students planning to continue their undergraduate or graduate education in business, education, or law, this certificate will complement their studies. From a cultural standpoint, Spanish study is valuable in California, with its rich diversity of cultural traditions represented by many Spanish-speaking immigrants from all over the Hispanic World.

Program Requirements

Core Course Units: 15

Code	Course List Title	Units
<u>SPAN F004.</u>	INTERMEDIATE SPANISH I	5
<u>SPAN F005.</u>	INTERMEDIATE SPANISH II	5
<u>SPAN F006.</u>	INTERMEDIATE SPANISH III	5

Total Units: 15

Proposed Sequence

Term	Units
Year 1, Fall	5
Year 1, Winter	5
Year 1, Spring	5

Master Planning

This certificate empowers students to achieve their goals as members of the workforce, and will give them a competitive advantage, because Spanish is the most commonly used second language used in California. If students wish to continue their education, this certificate is stackable towards a degree. Finally, students will gain cultural competence to become better global citizens.

Enrollment and Completer Projections

We anticipate that for the first few years the numbers will remain flat, since most students in Spanish opt for a degree in Spanish; however, this certificate will appeal to students who are not interested in a degree but a certificate to appear in their resume and, eventually, as this certificate becomes known, the numbers will go up.

Historical Enrollment Data

Course #	Course Title	Y1 - Annual Sections	Y1 - Annual Enrollment	Y2 - Annual Sections	Y2 - Annual Enrollment
SPAN 4	Intermediate Spanish I	4	89	3	58
SPAN 5	Intermediate Spanish II	2	21	3	36
SPAN 6	Intermediate Spanish III	2	8	3	14

Place of Program in Curriculum/Similar Programs

Foothill College already offers a Spanish AA degree and AA-T degree. This certificate is stackable toward those degrees.

Similar Programs at Other Colleges in Service Area

This certificate is similar to other language certificates offered by De Anza College, such as Spanish and Mandarin.

Additional Information Required for State Submission:

TOP Code: 1105.00 - Spanish

CIP Code: 16.0905 - Spanish Languages and Literatures

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

Gainful Employment: Yes

Distance Education: 100%

Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: San Jose State University
2022-2023 General Catalog, Semester

From: Foothill College
2022-2023 General Catalog, Quarter

Spanish, B.A.

STAR ACT (SB 1440)

The World Languages & Literatures department accepts the [AA-T in Spanish, Global Studies, or Social Justice Studies](#) for transfer into this major. We recommend transfer students complete the following courses, which are required for this major at SJSU, as part of their AA-T. Students should take courses which clear the American Institutions requirement and second course in English composition as part of their CSU GE or IGETC requirements for the AA-T degree (doing so will increase greater choice in the 60 units of SJSU course work to be taken after transfer).

IMPORTANT TRANSFER INFORMATION

Admission to San José State is competitive in all majors. SJSU continues to have more qualified applicants than available new student spaces. Because of this, SJSU is an impacted campus with impacted programs. For the most current information regarding admission impactation at SJSU please visit our website [Admissions Impaction](#).

Prior to transferring to San José State University all transfers must earn at least 60 transferable semester units (90 quarter), including the CSU four basic skill courses required for CSU admission eligibility (except majors which have an approved CSU GE A3 waiver). Within those 60 semester/90 quarter units, students are strongly encouraged to complete the following:

- 1. Lower Division Major Course Requirements (especially for STEM Majors):** Complete as many of the lower division courses required for the major as possible. Many of these courses may be double counted as part of the CSU GE-Breadth 39 semester unit requirements. The lower division major courses for this major are shown below.
- 2. General Education (GE) Requirements:** Complete all the CSU GE Breadth requirements at the community college (39 semester units/58 quarter units). The approved courses for each area can be found at [ASSIST.org](#) under the link "CSU GE-Breadth Certification Courses" for your college. Many of these courses may be double counted to meet the major requirements shown below, so choose your courses wisely. Some SJSU majors which meet GE requirements within the majors are noted on the [Exceptions for University Graduation Requirements](#) page in our catalog. Please see your college counselor/advisor to review your general education in order to receive FULL OR PARTIAL CERTIFICATION PRIOR TO TRANSFER to San José State University.
- 3. Second Course in English Composition highly recommended:** All students are strongly encouraged to complete a second English composition course as part of their lower division GE prior to transferring to SJSU (either to meet CSU GE Area A3 or C2). Complete this course with a grade of "C-" or better for the greatest success in passing the 100W course at SJSU.
The Writing Skills Test (WST) has been temporarily suspended. The "traditional" WST was an in-person, timed essay exam and has been suspended since March 2020. As a replacement, students now complete an online exercise to fulfill their WST requirement, called the [WST-DSP \(Directed Self-Placement\)](#).
- 4. American Institutions Requirement (US 1, US 2, and US 3 must be completed):** This requirement is normally two courses and can be taken as part of your CSU GE-Breadth 39 semester unit requirements (GE Area D and sometimes Area C). The approved courses can be found at [ASSIST.org](#) under the link "CSU US History, Constitution, and American Ideals Courses" for your college.
- 5. Graduation Requirement - Physical Education (PE):** All undergraduate students who matriculate at SJSU are required to complete two units of physical education from Kinesiology/Dance activity courses, unless the major program has an approved PE waiver. Majors which have approved PE waivers are noted on the ["Exceptions for University Graduation Requirements"](#) page in our catalog.

FOREIGN LANGUAGE REQUIREMENT:

Spanish Majors must also take one year of a second world language, ancient or modern, or the equivalent. Have your counselor check with the SJSU Department of World Languages and Literatures for approval of second language.

SECOND COURSE IN ENGLISH COMPOSITION:

ENGL 1B - Argument and Analysis (3.00)



ENGL 1B - Composition, Critical Reading & Thinking Through Literature (5.00)

--- Or ---

ENGL 1BH - Honors Composition, Critical Reading, & Thinking Through Literature (5.00)

--- Or ---

ENGL 2 - Critical Thinking and Writing (3.00)



ENGL 1B - Composition, Critical Reading & Thinking Through Literature (5.00)

--- Or ---

ENGL 1BH - Honors Composition, Critical Reading, & Thinking Through Literature (5.00)

--- Or ---

ENGL 1C - ARGUMENTATIVE WRITING & CRITICAL THINKING (5.00)

--- Or ---

ENGL 1CH - HONORS ARGUMENTATIVE WRITING & CRITICAL THINKING (5.00)

--- Or ---

PHIL 1 - Critical Thinking & Writing (5.00)

PREPARATION FOR THE MAJOR AND REQUIREMENTS FOR THE MINOR

SPAN 25A - Intermediate Spanish (4.00)



SPAN 4 - Intermediate Spanish I (5.00)

--- And ---

SPAN 5 - Intermediate Spanish II (5.00)

- Complete entire sequence at same institution prior to transfer

SPAN 25B - Intermediate Spanish (4.00)



SPAN 5 - Intermediate Spanish II (5.00)

--- And ---

SPAN 6 - Intermediate Spanish III (5.00)

- Complete entire sequence at same institution prior to transfer

--- Or ---

SPAN 20A - Spanish for Heritage Speakers I (4.00)



No Course Articulated

SPAN 20B - Spanish for Heritage Speakers II (4.00)



No Course Articulated

PREPARATION FOR THE MINOR AND PREREQUISITES FOR THE LOWER DIVISION MAJOR:

SPAN 1A - Elementary Spanish (4.00)



SPAN 1 - Elementary Spanish I (5.00)

--- And ---

SPAN 2 - Elementary Spanish II (5.00)

- Complete entire sequence at same institution prior to transfer

SPAN 1B - Elementary Spanish (4.00)



SPAN 2 - Elementary Spanish II (5.00)

--- And ---

SPAN 3 - Elementary Spanish III (5.00)

- Complete entire sequence at same institution prior to transfer

FOREIGN LANGUAGE REQUIREMENT

Consult an adviser

One additional year of a modern foreign language



No Course Articulated

END OF AGREEMENT

General Education Review Request

AREA VI - UNITED STATES CULTURES & COMMUNITIES

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 VI -United States Cultures & Communities:

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

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

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

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

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

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

Course Number & Title: 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:

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

Matching course component(s):

Over their entire program, Steamfitter Pipefitter Technology students discuss, analyze, and critically engage in understanding how the trades generally, and unions specifically, increase the economic and social opportunities of historically marginalized groups.

APPT 141 Year 1 Semester 1 Union Heritage

The Union Heritage class discusses the history and importance of unions and the labor movement and how they helped address discrimination against systemically oppressed people from lower- and working-class and BIPOC groups. Students learn applied examples of this, such as how the Industrial Workers of the World (IWW) union wanted to abolish capitalism because of its systemic and negative effects on BIPOC people, women, children, and families.

APPT139A Year 5 Semester 5 Industrial Installations

Students in The Process Piping/Industrial Installation class are required to research and write a paper on Superfund (significantly polluted and hazardous areas with extensive soil and groundwater contamination) sites in the bay area, and their effects on the environment and policy making locally and nationwide. Students learn there are hundreds of Superfund sites in the state of California and dozens in Santa Clara County. This includes discussion of environmental racism (as environmental hazards and codes, or lack of them, disproportionately impact environments where BIPOC and other marginalized groups people live based on available resources), the disposal of toxic materials in American culture and history, and the importance of industry standards, code creation and enforcement. One example from this class is an examination of the Superfund Fairchild Semi-Conductor, Raytheon, and Intel sites. Students do an in-depth report on chemicals released at the sites, the status of the sites today, how monitoring is done, evident health hazards, local jurisdictions of the site and hazard mitigation for the future. In preparation for their projects, students learn things like that there are approximately 250,000 people in the county that live within a 15-mile radius of these sites (Fairchild / Raytheon and Intel-Mountain View are on the Superfund National Priorities List (NPL). All three sites are in the Middlefield-Ellis-Whisman (MEW) study area) and how this affects local populations by age, gender, social class, racial and ethnic group.

APPT 146 Year 3 Semester 2 Module 14-Steam Theory

Examples of demonstrated knowledge of and sensitivity to at least one US group/category from the above course are where students research case studies of disasters such as The Sultana Disaster of 1865, and the Grover Shoe Factory Disaster in Brockton, Massachusetts on March 10, 1905.

APPT 143B Year 2 semester 2 Module 12 OSHA 30 - Students become more aware and sensitized to specific cultural and economic encounters in American history in relation to the trades and steamfitting as applied examples through research and learning about case studies. Case studies consider how historical, cultural, and economic discrimination have resulted in foreign-born and Hispanic workers having suffered disproportionately higher fatality rates due to injuries in industrial accidents in America.

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

Matching course component(s):

Steamfitter Pipefitter Technology Program students not only receive implicit bias training in specific modules in their program, they also have this training reinforced through onsite job training, where real-

General Education Review Request

AREA VI - UNITED STATES CULTURES & COMMUNITIES

world expectations require students to both understand and navigate the power dynamics of the actual world.

APPT 141 Year 1 Semester 1 Union Heritage

The Union Heritage class discusses the history and importance of unions and the labor movement and how they helped address discrimination against systemically oppressed people from lower- and working-class and BIPOC groups. Students learn applied examples of this, such as how the Industrial Workers of the World (IWW) union wanted to abolish capitalism because of its systemic and negative effects on BIPOC people, women, children, and families.

APPT 134B Industrial Safety Year 2 Module 12-The Triangle Shirtwaist Factory fire in the Greenwich Village area of New York City.

Students learn about case studies such as the Triangle Shirtwaist Factory fire. The fire is the deadliest industrial disaster in the history of New York city, and one of the deadliest in U.S. history. It caused the deaths of 146 garment workers - who died from the fire, smoke inhalation, falling, or jumping to their deaths (the factory was located on the 8th, 9th, and 10th stories of the Asch building, built in 1901). A common employment practice at the time to prevent workers from taking unauthorized breaks and to reduce theft was for factory owners and managers to lock the doors to the stairwells and exits. As a result, many of the workers could not escape from the burning building and jumped from the high windows. There were no sprinklers in the building. Most of the victims were recently arrived Italian or Jewish immigrant women and young girls who were forced to work in unsafe conditions because they had no other option to survive. Students learn about the causes, consequences, and legacy of the disaster and how it affected immigrant women and girls disproportionately. The building is a National Historic Landmark and is a New York City landmark. The fire led to legislation requiring improved factory and industrial safety standards and helped create the International Ladies' Garment Workers' Union (ILGWU), which fought for better working conditions for sweatshop workers. The ILGWU was one of the first US unions to have a primarily female membership, and a central figure in American labor history in the 1920s and 1930s. It is the precursor to the Union of Needle trades, Industrial and Textile Employees (UNITE) which merged with the Hotel Employees and Restaurant Employees Union (HERE) to create the current union, UNITE HERE (which today has over 300,000 members).

APPT139A Year 5 Semester 5 Industrial Installations

Students learn about large scale geopolitical factors that interact to shape industrial work in the US and globally. One example used in this class is the US "Creating Helpful Incentives to Produce Semiconductors" (CHIPS) Act of 2022. The act is an industrial policy put in place due to an Artificial Intelligence (AI) Cold War between the US and China, as artificial intelligence technology relies on semiconductors that are largely produced in China amidst a global semiconductor shortage. Students learn to see the bigger picture of industrial work in the example of how the CHIPS essentially places embargos on Chinese equipment and overseas manufacturing and has a high level of geopolitical significance. The act provides billions of dollars of subsidies and tax credits to chip makers with operations in the United States that conduct research, build facilities, and train new workers. As applied examples, students specifically research CHIPS act industrial facilities in Austin and Phoenix and examine the interaction between politics, geographic regions, cultures and industries as inter-related cultural factors there.

Students in The Process Piping/Industrial Installation class are required to research and write a paper on Superfund (significantly polluted and hazardous areas with extensive soil and groundwater contamination) sites in the bay area, and their effects on the environment and policy making locally and nationwide. Students learn there are hundreds of Superfund sites in the state of California and dozens in Santa Clara County. This includes discussion of environmental racism (as environmental hazards and codes, or lack of them, disproportionately impact environments where BIPOC and other marginalized groups people live based on available resources), the disposal of toxic materials in American culture and history, and the importance of industry standards, code creation and enforcement.

APPT 146 Year 3 Semester 2 Module 14-Steam Theory

Examples of demonstrated knowledge of and sensitivity to at least one US group/category from the above course are where students research case studies of disasters such as The Sultana Disaster of 1865, and the

General Education Review Request

AREA VI - UNITED STATES CULTURES & COMMUNITIES

Grover Shoe Factory Disaster in Brockton, Massachusetts on March 10, 1905. The Grover Shoe Factory Disaster was an industrial/boiler explosion, that caused a building collapse that leveled the factory and a fire that killed 58 people and injured 150. The four-story wooden building collapsed and burst into flames, trapping and incinerating workers in the wreckage.

Students learn how and why these disasters such as these happened and how they lead to the establishment of industrial safety measures such as the Boiler Testing Code in 1884, and the creation of the American Society of Mechanical Engineers (ASME). Students use these case studies to understand the extreme danger and loss from deadly disasters that took the lives of countless working-class people and thrust their families and communities into poverty and despair. Students learn about the gravity and utmost importance of stringent industrial safety laws and a national code governing the safe operation of steam boilers to protect and preserve all peoples' lives and communities.

APPT 141 Year 1 Semester 1 Union Heritage

The Wobblies (Industrial workers of the world) wanted to abolish capitalism. Inequalities of classes. Many Labor Acts due to inequalities of classes.

The Union Heritage class discusses the history and importance of unions and the labor movement and how they helped address discrimination against systemically oppressed people from lower- and working-class and BIPOC groups. Students learn applied examples of this, such as how the Industrial Workers of the World (IWW) union wanted to abolish capitalism because of its systemic and negative effects on BIPOC people, women, children, and families.

Prevention of Harassment training

All State Apprenticeship Programs, including the Steamfitter Pipefitter Technology Program students, must have policies and training in place on the prevention of harassment, including sexual and other forms of harassment, bias, bystander responsibilities, laws and rights, and procedures. All students take this training and are assessed on it.

Students learn about implicit bias and how bias affects the rights, responsibilities, and opportunities of various community members thereby demonstrating understanding of the interaction of marginalized people in groups.

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

Matching course component(s):

APPT 141 Year 1 Semester 1 Union Heritage

The Union Heritage class discusses the history and importance of unions and the labor movement and how they helped address discrimination against systemically oppressed people from lower- and working-class and BIPOC groups. Students learn applied examples of this, such as how the Industrial Workers of the World (IWW) union wanted to abolish capitalism because of its systemic and negative effects on BIPOC people, women, children, and families.

The study of our union's cultural traditions and "standards of excellence."

APPT 141 Year 1 Semester 1 Union Heritage

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APPT139A Year 5 Semester 5 Industrial Installations

Students in The Process Piping/Industrial Installation class are required to research and write a paper on Superfund (significantly polluted and hazardous areas with extensive soil and groundwater contamination)

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

sites in the bay area, and their effects on the environment and policy making locally and nationwide. Students learn there are hundreds of Superfund sites in the state of California and dozens in Santa Clara County. This includes discussion of environmental racism (as environmental hazards and codes, or lack of them, disproportionately impact environments where BIPOC and other marginalized groups people live based on available resources), the disposal of toxic materials in American culture and history, and the importance of industry standards, code creation and enforcement. One example from this class is an examination of the Superfund Fairchild Semi-Conductor, Raytheon, and Intel sites. Students do an in-depth report on chemicals released at the sites, the status of the sites today, how monitoring is done, evident health hazards, local jurisdictions of the site and hazard mitigation for the future. In preparation for their projects, students learn things like that there are approximately 250,000 people in the county that live within a 15-mile radius of these sites (Fairchild / Raytheon and Intel-Mountain View are on the Superfund National Priorities List (NPL). All three sites are in the Middlefield-Ellis-Whisman (MEW) study area) and how this affects local populations by age, gender, social class, racial and ethnic group.

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

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

Matching course component(s):

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 about case studies such as the Triangle Shirtwaist Factory fire.

APPT139A Year 5 Semester 5 Industrial Installations

Students learn about large scale geopolitical factors that interact to shape industrial work in the US and globally. One example used in this class is the US “Creating Helpful Incentives to Produce Semiconductors” (CHIPS) Act of 2022.

APPT 141 Year 1 Semester 1 Union Heritage

The Union Heritage class discusses the history and importance of unions and the labor movement and how they helped address discrimination against systemically oppressed people from lower- and working-class and BIPOC groups. Students learn applied examples of this, such as how the Industrial Workers of the World (IWW) union wanted to abolish capitalism because of its systemic and negative effects on BIPOC people, women, children, and families.

The Study of the union’s cultural traditions and “standards of excellence.”

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

Matching course component(s):

APPT 143B Year 2 semester 2 Module 12

OSHA 30-The study of foreign-born workers unproportionally Hispanic fatalities injured in America.

APPT 141 Year 1 Semester 1 Union Heritage

The Union Heritage class discusses the history and importance of unions and the labor movement and how they helped address discrimination against systemically oppressed people from lower- and working-class and BIPOC groups. Students learn applied examples of this, such as how the Industrial Workers of the World (IWW) union wanted to abolish capitalism because of its systemic and negative effects on BIPOC people, women, children, and families.

The study of the union’s cultural traditions and “standards of excellence.”

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

Matching course component(s):

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

APPT139A Year 5 Semester 5 Industrial Installations

Chip Act Embargos on Chinese equipment Overseas manufacturing Geo Political significance. Students in The Process Piping/Industrial installation class are required to research Superfund sites in the bay area and their effect on the environment and policy making locally and nationwide.

APPT 143B Year 2 semester 2 Module 12 OSHA 30-The study of foreign born workers unproportionally Hispanic fatalities injured in America.

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

Matching course component(s):

APPT 141 Year 1 Semester 1 Union Heritage

The Union Heritage class discusses the history and importance of unions and the labor movement and how they helped address discrimination against systemically oppressed people from lower- and working-class and BIPOC groups. Students learn applied examples of this, such as how the Industrial Workers of the World (IWW) union wanted to abolish capitalism because of its systemic and negative effects on BIPOC people, women, children, and families.

The Study of our union’s cultural traditions and “standards of excellence.”

Prevention of Harassment training

All State Apprenticeship Programs, including the Steamfitter Pipefitter Technology Program students, must have policies and training in place on the prevention of harassment, including sexual and other forms of harassment, bias, bystander responsibilities, laws and rights, and procedures. All students take this training and are assessed on it.

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

Matching course component(s):

APPT139A Year 5 Semester 5 Industrial Installations

Students learn about large scale geopolitical factors that interact to shape industrial work in the US and globally. One example used in this class is the US “Creating Helpful Incentives to Produce Semiconductors” (CHIPS) Act of 2022. The act is an industrial policy put in place due to an Artificial Intelligence (AI) Cold War between the US and China, as artificial intelligence technology relies on semiconductors that are largely produced in China amidst a global semiconductor shortage. Students learn to see the bigger picture of industrial work in the example of how the CHIPS essentially places embargos on Chinese equipment and overseas manufacturing and has a high level of geopolitical significance. As applied examples, students specifically research CHIPS act industrial facilities in Austin and Phoenix and examine the interaction between politics, geographic regions, cultures and industries as inter-related cultural factors there.

Union Heritage

Prevention of Harassment training

All State Apprenticeship Programs, including the Steamfitter Pipefitter Technology Program students, must have policies and training in place on the prevention of harassment, including sexual and other forms of harassment, bias, bystander responsibilities, laws and rights, and procedures. All students take this training and are assessed on it.

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 about case studies such as the Triangle Shirtwaist Factory fire.

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

Matching course component(s):

APPT139A Year 5 Semester 5 Industrial Installations

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Students learn about large scale geopolitical factors that interact to shape industrial work in the US and globally. One example used in this class is the US “Creating Helpful Incentives to Produce Semiconductors” (CHIPS) Act of 2022.

APPT 141 Year 1 Semester 1 Union Heritage

The Union Heritage class discusses the history and importance of unions and the labor movement and how they helped address discrimination against systemically oppressed people from lower- and working-class and BIPOC groups. Students learn applied examples of this, such as how the Industrial Workers of the World (IWW) union wanted to abolish capitalism because of its systemic and negative effects on BIPOC people, women, children, and families.

The Study of our union’s cultural traditions and “standards of excellence.”

Prevention of Harassment training

All State Apprenticeship Programs, including the Steamfitter Pipefitter Technology Program students, must have policies and training in place on the prevention of harassment, including sexual and other forms of harassment, bias, bystander responsibilities, laws and rights, and procedures. All students take this training and are assessed on it.

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

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 applications.

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

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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 Pipefitter Technology Program meet standard B4 in many 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 and responsibility by learning about large scale geopolitical factors that interact to shape industrial work in the US and globally. One example used in this class is the US "Creating Helpful Incentives to Produce Semiconductors" (CHIPS) Act of 2022. As applied examples, students specifically research CHIPS act industrial facilities in Austin and Phoenix and examine the interaction between politics, geographic regions, cultures and industries as inter-related cultural factors there.

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.

APPT 146 Year 3 Semester 2 Module 14-Steam Theory

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

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 information competency - including digital literacy - throughout the program.

Pipefitter Program courses demonstrating Standard *B5* skills include but are not limited to:

APPT 144A Year 2 Module 2 Related 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.

APPT 134B Industrial Safety Year 2 semester 2 Module 12 OSHA 30

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Requesting Faculty: PATRICIA GIBBS Date: 4/4/2024

Division Curr Rep: Tim Myres Date: 4/9/24

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