

Institutional Program Review—2018-2019
Program Efficacy Phase: Instruction
DUE: Monday, March 18, 2019 by NOON

Purpose of Institutional Program Review: Welcome to the Program Efficacy phase of the San Bernardino Valley College Program Review process. Program Review is a systematic process for evaluating programs and services annually. The major goal of the Program Review Committee is to evaluate the effectiveness of programs and to make informed decisions about budget and other campus priorities.

For regular programmatic assessment on campus, the Program Review Committee examines and evaluates the resource needs and effectiveness of all instructional and service areas. These review processes occur on one-, two-, and four-year cycles as determined by the District, College, and other regulatory agencies. Program review is conducted by authorization of the SBVC Academic Senate.

The purpose of Program Review is to:

- Provide a full examination of how effectively programs and services are meeting departmental, divisional, and institutional goals
- Aid in short-range planning and decision-making
- Improve performance, services, and programs
- Contribute to long-range planning
- Contribute information and recommendations to other college processes, as appropriate
- Serve as the campus' conduit for decision-making by forwarding information to appropriate committees

Our Program Review process includes an annual campus-wide needs assessment each fall and an in-depth efficacy review of each program on a four-year cycle. All programs are now required to update their Educational Master Plan (EMP) narrative each fall. In addition, CTE programs have a mid-cycle update (2 years after full efficacy) in order to comply with Title 5 regulations.

Committee members are available to meet with you to carefully review and discuss your Program Efficacy document. You will receive detailed feedback regarding the degree to which your program is perceived to meet institutional goals. The rubric that the team will use to evaluate your program is embedded in the form. As you are writing your program evaluation, feel free to contact the efficacy team assigned to review your document or your division representatives for feedback and input.

Draft forms should be written early so that your review team can work with you at the **small-group workshops:**
Friday, February 22 from 9:30 to 11:00 a.m. in NH-222
Friday, March 1 from 9:30 to 11:00 a.m. in B-204

Final documents are due to the Committee co-chairs (Paula Ferri-Milligan at pferri@sbccd.cc.ca.us and Wallace Johnson at wjohnson@sbccd.cc.ca.us) by **NOON on Monday, March 18, 2019.**

SUBMISSION FORMAT:

- 1) Use this current efficacy form and attach as a MICROSOFT WORD DOCUMENT (do NOT convert to PDF)**
- 2) Do NOT change the file name**

It is the writer's responsibility to be sure the Committee receives the forms on time.

The efficacy process now incorporates the EMP sheet and SLO/SAO documentation, which you will need to insert. We have inserted the dialogue from the committee where your last efficacy document did not meet the rubric, the curriculum report (if applicable), and the SBVC demographic data. **If you have questions regarding the SBVC demographic data, contact Christie Gabriel, Research Analyst, at cgabriel@sbccd.cc.ca.us by February 25. If you have additional data requests, those requests must be submitted to Christie Gabriel by February 8.** Following is the link to Program Review Efficacy Resources, which will be useful as you complete your efficacy report:

<https://www.valleycollege.edu/about-sbvc/campus-committees/academic-senate/program-review/17-efficacy.php>

Program Efficacy

2018 – 2019

Program Being Evaluated

Architecture

Name of Division

Science

Name of Person Preparing this Report

Sheri Lillard & Judy Jorgensen

Extension

8646

Names of Department Members Consulted

Michael Anton, Francisco Martinez, Remedios Domagas-Fernandez, Amy Avelar (current Dept. Chair)

Names of Reviewers

Joel Lamore, Keynasia Buffong, Melissa King

Work Flow	Date Submitted
Initial meeting with department	e-mail communication
Meeting with Program Review Team	e-mail communication
Report submitted to Program Review co-chair(s) & Dean	by NOON on March 18

Staffing

List the number of full and part-time employees in your area.

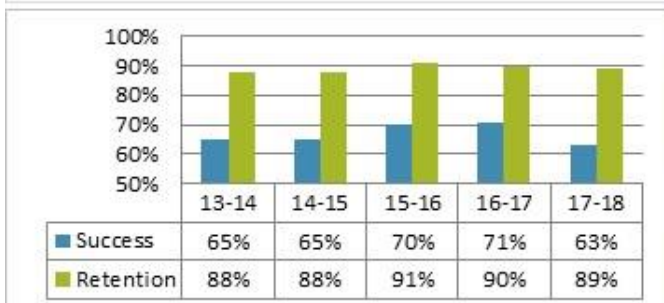
Classification	Number Full-Time	Number Part-time, Contract	Number adjunct, short-term, hourly
Managers	1		
Faculty	1	4	
Classified Staff	0		
Total	2	4	0

Description: (Provide an updated overview of your program/area. 225 Words Max)

The Architecture, Environmental Design, and Drafting Program serves a variety of students through instructional course offerings. The Architectural History courses serve both as major's preparation and as general education courses. The Architectural Design sequence serves as major's preparation for transfer students to a variety of architectural related fields, including Landscape Architecture, City and Regional Planning, Urban Planning, Architectural Engineering and Construction Management. The Drafting classes serve career and technical education students as well as support major's preparation.



	13-14	14-15	15-16	16-17	17-18
Duplicated Enrollment	283	239	221	268	251
FTEF	4.20	2.94	3.21	4.17	4.25
WSCH per FTEF	312	342	287	309	277



	13-14	14-15	15-16	16-17	17-18
Sections	15	11	12	14	16
% of online enrollment	13%	27%	33%	29%	25%
Degrees awarded	1	0	0	0	0
Certificates awarded	1	0	0	0	0

Assessment: (Provide an analysis based on the data provided. As you do so, address each of the tables/charts. 225 Words Max)
 FTES generation of the program grew significantly until the college was forced to scale back instructional offerings. The program has not yet fully recovered. FTES have improved by 28% (16-17 and 17-18) compared to the low point of 14-15 and 15-16), which indicates an increasing demand for the program. However, enrollment compared to last year is down about 9%. Retention has remained fairly consistent over the years, at near 90%. However, success decreased sharply last year, dropping from 71% to 63%. We suspect that the transition from Blackboard to Canvas is mostly responsible. Canvas has been a much more demanding system with greater limitations than Blackboard. MANY of the quiz and activities that functioned well in Blackboard had to be redesigned and are limiting the variety of learning styles that we may appeal to. Degrees and certificates awarded have stagnated recently, likely owing to courses not being offered on a consistent rotation. We have established a 2-year cycle to ensure that all Architecture courses are offered, in order to facilitate degree and certificate completion. We expect to see the results of this implementation within a year or two. The majority of our transfer students are being accepted without the AA in Architecture into primarily Architecture but also Urban Planning programs.

Progress from Last Year's Action Plan: (Provide an update on the progress made from last year's Action Plan. 225 Words Max)

Revise curriculum. Significant effort has gone into developing new courses to specifically align with Cal Poly's courses/course outlines, in order to strengthen articulation. New courses have been launched and will continue to undergo the curriculum review process during this semester.

Implement 2-year rotation for course offerings. We have established this rotation, based on our existing courses.

Secure adequate funding. Needs Assessment for CAD software, classroom/lab supplies, and field trips. In progress this semester for the current Needs cycle.

SAOs/SLOs/PLOs: (Summarize how the assessment of SAOs, PLOs and/or any SLOs that shows significant effect has influenced your goals. 200 Words Max)

- PLO success is > 80%, according to mapping to the grid, which indicates that the course SLOs and PLOs are in good alignment, and relevant to the curriculum.
- SLO data and reflections for Arch 100/101 show > 90% of students meet the assessment, based on a series of exercises/projects.
- SLO data and reflections for Arch 145/145 (history courses) show > 89% meet the assessment. These courses are offered in both online and face-to-face format. We will look to disaggregate the data to see if there is an effect based on course format.

Departmental/Program Goals: (Goals should be specific, measurable, linked to your data analysis, and reflected in the Action Plan section). Tie goals to the college.

- **Increase Access.** Continue to build and maintain partnerships with organizations and K-12 systems. Continue to promote courses in Architectural History and Design to high-school students.
- **Improve Student Success.**
 - Finalize redesign of curriculum to strengthen articulation with Cal Poly.
 - Increase numbers of degrees and/or certificates awarded.
 - Secure adequate budget/funding to meet Program needs for technology, supplies, and field trips.
- **Provide Exceptional Facilities.** Complete at least two additional areas of the designs in the Physical Sciences building alcoves and project displays on campus and at events.

Challenges & Opportunities: (Challenges and opportunities should be reflected in the Action Plan. 200 words maximum).

Articulation with transfer institutions. Most universities currently award credit only by portfolio review for transfer students. We have achieved articulation with private universities and an agreement with Cal Poly Pomona for the architectural history classes. The architectural history classes and ARCH 120 are now UC transferable. Cal Poly has actually increased the number of our students accepted based on their monitoring of our transfer student success. New curriculum has just been launched, with the goal of achieving stronger articulation with Cal Poly, and an increase in number of degrees/certificates awarded.

Facilities. The physical layout of the lab is geared toward traditional lecture delivery and limits group learning and collaborative projects. The room design has never been optimal for architectural design, and should be modified to support maximum student success.

Funding. Consistent funding/department budget continues to be inadequate, and is nowhere near what is needed for routine supplies in the laboratory. Our technology for CAD classes is outdated and must be replaced. Campus projects initiated by Architecture students are a great means of promoting the SBVC Campus with elementary students and the community; however, resources are necessary to continue this work.

Action Steps	Department Goal	Necessary Resources to Complete	Target Completion Date
Communicate with Outreach and/or Counseling to promote courses to HS students.	Increase access.	N/A	May 2019
Finalize curriculum revision. Establish and publicize 2-year rotation for courses offered. Request adequate budget/supplies, technology, and facilities redesign through Program Review.	Improve student success.	N/A	December 2019 May 2019 Fall 2019
Plan and implement two campus design projects.	Provide exceptional facilities.	Faculty time; supplies.	May 2019

Part I: Questions Related to Strategic Initiative: Increase Access

Goal: SBVC will improve the application, registration, and enrollment procedures for all students.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Demographics	The program <u>does not provide</u> an appropriate analysis regarding identified differences in the program's population compared to that of the general population.	The program <u>provides an analysis</u> of the demographic data and provides an interpretation in response to any identified variance. The program <u>discusses the plans or activities</u> that are in place to recruit and retain underserved populations as appropriate.	In addition to the meets criteria, the program's analysis and plan <u>demonstrates a need</u> for increased resources.
Pattern of Service	The program's pattern of service is <u>not related to the needs of students.</u>	The <u>program provides</u> evidence that the pattern of service or instruction meets student needs. The program <u>discusses the plans or activities</u> that are in place to meet a broad range of needs.	In addition to the meets criteria, the program <u>demonstrates that the pattern of service needs to be extended.</u>

Use the demographic data provided to describe how well you are providing access to your program by answering the questions below.

Demographics – 2015-16 to 2017-18 Academic Years		
Demographic Measure	Program: Architecture	Campus-wide
Asian	6.0%	4.8%
African-American	6.7%	12.4%
Hispanic	63.1%	65.3%
Native American	1.9%	0.2%
Pacific Islander	0.2%	0.2%
White	21.2%	13.2%
Unknown	0.9%	3.9%
Female	56.2%	57.5%
Male	43.8%	42.5%

Disability	1.7%	5.4%
Age 19 or Less	4.3%	22.5%
Age 20 to 24	44.0%	34.7%
Age 25 to 29	22.5%	17.7%
Age 30 to 34	11.2%	9.3%
Age 35 to 39	7.9%	5.5%
Age 40 to 49	3.6%	6.2%
Age 50+	5.6%	4.1%

Demographics:

Provide an **analysis** of how internal demographic data compare to the campus population. Alternatively, provide demographics relative to the program that are collected. If internal data is not collected, describe plans to implement collection of data.

Ethnicity. Most ethnicities in our Program are within 3 percentage points of the corresponding campus data. The demographics that vary outside of this range are White and African-American, with White students over-represented in Architecture (21.2% vs. 13.2% for campus) and African-American students under-represented (6.7% vs. 12.4% for campus). According to the National Council of Architectural Registration Boards (NCARB) in 2016, only 2% of newly licensed architects identified as African-American compared to 85% White, showing unfortunately, that the field itself suffers from a lack of ethnic diversity. Our Program’s disparity may be related to a larger trend, which is because there are so few African-American licensed architects, African-American high-school and college students don’t encounter same-race role models in this field, enabling them to see themselves ultimately in this occupation. By working with Counseling and other campus outreach activities to actively raise the visibility of Architecture and Environmental Design, we are hopeful that we will be able to increase the number of African-American students in our Program. (<https://www.ncarb.org/nbtn2017/demographics>)

Gender. Male and female participation in our program are both within 1.5 percentage points of the campus data. It is worth noting that the fields of Architecture and Environmental Design have been traditionally male-dominated. The Architecture program, having 56.2% female represents a desirable trend that we will seek to maintain. For example, we will continue to feature women architects in the course interview series, as well as in other areas and projects within our courses.

Disability. The percentage of disabled students in the Architecture program is about one-third that of the campus (1.7% vs. 5.4%, respectively), although because both percentages are small the disparity of roughly 4 percentage points appears magnified. However, it is not clear why this disparity exists. The program welcomes and has successfully served special-needs students. Students with mobility issues are accommodated with proper space at computer workstations whereas hearing-impaired students receive assistance from DSPS. It would be worthwhile for us to reach out to the DSPS office and counselors, to discuss with them opportunities within our program for the students that they serve.

Age. Most of the age ranges for students in the Architecture program are within 5 percentage points of the corresponding values for the campus, which is not considered a significant variance. Like the campus, the greatest percentage of our students fall into the 20 – 24 yrs range. Interestingly, Architecture has a total of 48.3% of its students as 24 yrs or younger, compared to the campus percentage of 57.2%. Most notable is that students 19 yrs or younger represent only 4.3% of our program compared to 22.5% campus-wide. The clear interpretation here is that students right out of high school (or still in high school) are not contemplating going into the field of Architecture. This observation presents a tremendous opportunity for us to develop a plan to establish regular and focused communication with the surrounding high schools. Our revised curriculum, slated to begin Fall 2020,

can be incorporated into pamphlets or other materials, and working with existing campus marketing and outreach efforts, shared with high school juniors and seniors over the next academic year. In addition, when high school students come to our campus for organized events, we need to become a consistent presence within the tours and activities, so that we can highlight what our program can offer in terms of short-term certificates as well as preparation for transfer.

Pattern of Service:

Describe how the pattern of service and/or instruction provided by your department serve the needs of the community. Include, as appropriate, hours of operation/pattern of scheduling, alternate delivery methods, weekend instruction/service.

The needs of the San Bernardino Valley College service area are great. Many students are challenged with financial, transportation, variable work schedules, and child care needs. The Architecture program meets these needs by offering courses in a variety of formats. Face-to-face courses are offered morning, afternoon, and evening throughout the week in 18-week, 14-week, and 8-week formats. We have also had success scheduling some courses in an all-day Friday or Saturday format, to further facilitate access for working students. Our history courses (ARCH 145 and 146) are routinely offered as online courses, and we hope to structure some hybrid options for other courses in the future.

Part II: Questions Related to Strategic Initiative: Promote Student Success

Goal: SBVC will increase course success, program success, access to employment, and transfer rates by enhancing student learning.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Data/Analysis demonstrating achievement of instructional or service success	Program <u>does not provide an adequate analysis</u> of the data provided with respect to relevant program data.	Program <u>provides an analysis</u> of the data which indicates progress on departmental goals.	In addition to the meets criteria, the program <u>uses the achievement data</u> in concrete planning and <u>demonstrates</u> that it is prepared for growth.
Service Area Outcomes and/or Student Learning Outcomes and/or Program Level Outcomes	Program <u>has not demonstrated</u> that it is continuously assessing Service Area Outcomes (SAOs) and/or Student Learning Outcomes (SLOs) and/or Program Level Outcomes (PLOs) based on the plans of the program since their last program efficacy. Evidence of data collection, evaluation, and reflection/feedback, and/or connection to area services is <u>missing or incomplete</u> .	Program <u>has demonstrated</u> that it has fully evaluated within a four-year cycle and is continuously assessing <u>all</u> Service Area Outcomes (SAOs) and/or Student Learning Outcomes (SLOs) and/or Program Level Outcomes (PLOs).	In addition to the meets criteria, the program <u>demonstrates that it has fully incorporated Service Area Outcomes (SAOs) and/or Student Learning Outcomes (SLOs) and/or Program Level Outcomes (PLOs) into its planning, made appropriate adjustments, and is prepared for growth.</u>

Student Success:

Provide an analysis of the data and narrative from the program’s EMP Summary and discuss what it reveals about your program. (Use data from the Charts that address Success & Retention and Degrees and Certificates Awarded”)

Our primary goal has been to update the Architecture and Environmental Design curriculum, with an emphasis on articulation and transfer, in order to facilitate student success. This has been a long and arduous process, and we are excited to report that we have made significant progress on this goal, as the courses, degree, and three new certificates were approved at Technical Review (March 4, 2019), and agendized for full committee approval on March 18, 2019. This substantive change in curriculum will go into effect Fall 2020, and we expect all of our data (enrollment, success, retention, and eventually degrees and certificates awarded) to improve considerably.

FTES in the Program have increased by 28% (2016 – 17 and 2017 – 18) compared to the low point in 2014 – 15 and 2015 – 16), however enrollment is down about 9% in 2017 – 18 compared to the previous year. In the current academic year (2018 – 19), we have offered courses required for the current degree that had not been scheduled in several years. Not having regular offerings of these courses is likely the

major reason that no degrees or certificates have been awarded in the past few years. Although we did structure a 2-year rotation of existing courses (mentioned in the EMP) to ensure that students would have access to the courses they needed, this 2-year rotation is no longer relevant now that we have completely redesigned the program. We have developed new 2-year pathways for our revised degree and three certificates, which will begin to be implemented in Fall 2020 (shown beginning on page 25). Although we are hopeful that enrollment and perhaps certificates/degrees awarded may increase a little this year, the major changes in numbers of degrees and certificates are expected to emerge within a year or two of our new curriculum becoming effective.

There are currently a number of existing ARCH courses that are out of date in Curricunet, but as mentioned, our approach this year was to completely restructure the curriculum and develop mostly new courses for the degree and three new certificates in order to achieve articulation, rather than continuing to try to update the existing courses. As such, the next academic year (2019 – 20) will be one of transition, as we only schedule courses with up-to-date curriculum (ARCH 100, 101, 145/H, 146/H, 200, and 220) and begin to prepare for the new courses, degree, and certificates effective Fall 2020. Because the development of the new courses was done with a careful eye on aligning blocks of topics in our curriculum with similar blocks at Cal Poly Pomona, we expect that we will achieve the desired extent of articulation. Most importantly, we are confident that the new arrangement of the curriculum, the updating of our degree requirements, and the introduction of the new certificates, will permit our students to more easily and more efficiently transfer to four-year institutions and secure employment in Architecture and related fields.

In evaluating retention and success data over the 5 years of this reporting period (2013 – 2018), retention has remained fairly consistent with an average of 89%, which is acceptable. Average success over this same period, averaged 67%, with much greater variation than that seen with retention. Success also experienced a sharp decline from 71% (2016 – 18) to 63% (2017 – 18). We believe that the transition from Blackboard to Canvas played a major role, as in many of the face-to-face courses, as well as obviously the online ones, the learning management system is used extensively. Canvas turns out to be a much more demanding system and has greater limitations than does Blackboard in the design, presentation, and use of many of the ARCH courses. Many of the quizzes and activities that were successful in Blackboard had to be redesigned and could not utilize the same variety of learning styles that were available in the past. Furthermore, our experience was that students had an adjustment period, getting used to the new software as well. We are hopeful that as our knowledge of Canvas expands, we are able to restore the same features of our online components that we had with Blackboard, and that the students' interaction with and navigation of Canvas improves as they become more accustomed to it.

During this next year of transition, we will actively direct new students to take ARCH 100 and 145 in Fall 2019, and ARCH 101 and 146 in Spring 2020. The history classes will remain in the new curriculum. ARCH 100 and 101 have been restructured. Students who take ARCH 100 and 101 will be able to petition to have these courses accepted, so as not to harm their progress. We believe that the new focused curriculum with the emphasis on articulation and transfer for the degree, and modern computer-based drawing and modeling for the certificates, forms a solid foundation for our students to succeed. Importantly, we have developed a work study course (ARCH 098) as part of the new curriculum that will provide an important link between the learning in the classroom and laboratory, and the expectations of working in the industry. Besides contributing to the skills that students acquire, this opportunity will increase the connections of our students and our program with local businesses.

We have also been successful in the goal of securing much needed funding for the Program in the most recent Needs Assessment cycle (Fall 2018). We were awarded funding to purchase a class set of software licenses needed for our computer-based drawing and modeling courses and projects, and this purchase of Rhino software is underway right now. The other two software programs required are available at no charge from the developer and we have the most current version in our lab. By the end of this semester, all of our software will be up to date, which will undoubtedly contribute to student success and relevance in their

training. We were also awarded an appropriate budget for this year, which will permit the purchase of supply kits, rather than the instructor spending out-of-pocket money to assist students. Having proper supplies in the lab is critical for the experiential portion of the ARCH laboratory, and we will continue to work to ensure that the budget becomes permanent.

Supplemental Data:

Provide any additional information, such as job market indicators, standards in the field or licensure rates that would help the committee to better understand how your program contributes to the success of your students.

The Bureau of Labor Statistics (2017 data) annual mean wage and employment opportunities for architects (excluding landscape architects):

California: \$97,440 (0.83 per thousand jobs)

Riverside-San Bernardino-Ontario: \$91,310 (0.35 per thousand jobs)

Los Angeles-Long Beach-Glendale \$98,300 (0.97 per thousand jobs: third highest metro area nationwide)

According to these data, employment in our immediate area is a little low; however, the Los Angeles area is the 3rd highest metro area, nationwide, and California has the highest state level of employment of architects. There are job opportunities in the broader area and the fields of Architecture, Environmental Design, and allied areas are meaningful educational and career paths. It is important that our students have access to updated technology, work study opportunities, efficient pathways for transfer, and out of class experiences (described in Campus Climate and Partnerships), so that they can be competitive seeking employment upon leaving Valley College or their transfer institution.

<https://www.bls.gov/ooh/architecture-and-engineering/architects.htm>

<https://www.bls.gov/oes/current/oes171011.htm#st>

(INSERT SLO and/or SAO and PLO DATA as appropriate FROM CURRENT REPORT. INSERT COURSE MAP IF AVAILABLE. Refer to prior reports as needed for the analysis.) (Contact Dr. Celia Huston, Co-Chair, Accreditation Committee, at chuston@valley.edu if you need assistance.) **NOTE: Do NOT include the summaries of the outcomes in this document.**

Student Learning Outcomes:

Course SLOs/SAOs. Demonstrate that your program is continuously assessing Course Student Learning Outcomes (SLOs) and/or Service Area Outcomes (SAOs). Include evidence of data collection, evaluation, and reflection/feedback, and describe how the SLOs/SAOs are being used to improve student learning (e.g., faculty discussions, SLO revisions, assessments, etc.). Generate reports from the Cloud as necessary. Include analysis of SLO/SAO Cloud reports and data from summary reports. This section is required for all programs.

The table on the next page shows the SLO course data collected since Fall 2015. Discussion about some disaggregated data follows.

Term	Course	SLO 1	SLO 2	SLO 3
Summer 2018	145	94.44 %	94.12 %	
	146	100.00 %	100.00 %	86.67 %
Fall 2018	100	93.33 %	93.33 %	80.00 %
	101	71.43 %	71.43 %	
	120	82.35%	82.35 %	
	145	100 %	100 %	
	146	Not reported	Not reported	Not reported
Spring 2018	250	87.50 %	87.50 %	
	270	100 %		
	100	100%	100%	100%
	101	Not reported		
	120	100 %.	100 %	
	145	Not reported	Not reported	
	146	Not reported	Not reported	
		Not reported	Not reported	
	200	80.00 %	80.00 %	80.00 %
	201	66.67%	66.67%	66.67 %
Summer 2017	145	94.44 %	94.12 %	
	146	100.00 %	100.00%	86.67 %
Fall 2017	100	Not reported		
	101	Not reported		
	120	Not reported		
	145	100 %	100 %	
	146	Not reported		
	220	60%	80%	60%
	221	50.00 %	50.00 %	50.00%
	100	100 %	100 %	90.91 %
Spring 2017	101	100%	90.91 %	
	120	Not Reported		
	145	95 %	100 %	
	146	84.00 %	83.33 %	100 %
	200	62.50 %	83.33 %	83.33 %
	220	50.00 %	50.00 %	50.00 %
	145	Not reported		
Summer 2016	146	Not reported		
	100	91.67 %	95.83%	91.67 %
Fall 2016	101	100.00%	100.00 %	
	120	93.33 %	86.67 %	
	145	96.43 %	74.19 %	
	146	90.70 %	83.72 %	83.72%
	100	100.00 %	94.12 %	100.00 %
Spring 2016	120	100.00%	100.00 %	
	145	93.33 %		
	146	Not reported		
	145	Not reported		
Summer 2015	145	Not reported		
Fall 2015	100	93.33 %	78.95 %	92.31 %
	101	100.00%	83.33 %	
	120	86.67 %	80.00 %	
	145	100.00%	88.24 %	
	146	89.47%	96.77 %	96.88 %

SLO Disaggregation.

Face-to-Face vs. Online.

ARCH Courses	Face-to-Face	Online
All Courses	89%	92%
ARCH 145	93%	94%
ARCH 146	92%	90%

ARCH 145 and 146 represent the only online offerings, and the data show the SLO success for those specific courses (face-to-face vs. online) is within 2 percentage points, which is acceptable. For all courses, the difference between these two formats is 3 percentage points. This shows that our online formats are equally effective as their face-to-face counterparts. Significant effort and planning have gone into the creation, maintenance, and improvement of the online courses over several years to result in a quality system. The recent transition from Blackboard to Canvas was turbulent, and required dozens of hours to convert and re-create course content and delivery (most course elements did not transfer smoothly to the new learning management system). While we experienced some challenges from this transition in the online environment, the SLOs that were evaluated seemed to maintain their historic levels of success.

Lower-Level vs. Upper-Level.

ARCH Courses	SLO Success	# Students Evaluated
All Courses	89%	418
100-level	92%	359
200/201	76%	40
220/221	54%	19

SLO success shows a decline going from 100-level courses (ARCH 100/101/120/145/146) to 200-level courses. Several factors may be contributing to this effect.

The number of students evaluated in the 200-level courses is substantially lower than in the 100-level courses. Lower enrollment meant the courses hadn't been offered as frequently as they should have been (because the classes couldn't fill). As such, some students experienced a large gap in time between the introductory and advanced courses (i.e., between ARCH 100/101 and ARCH 200/201, or between ARCH 120 and ARCH 220/221). As we know is often the case, when too much time elapses between sequential courses, students often struggle in the later course.

Compounding this problem, is that in order to offer the 200-level classes, we were directed to stack those with similar content as an attempt to achieve a higher fill rate, otherwise the classes could not be offered. For example, ARCH 200 and 201 were offered in a stacked format (same place, same time, same instructor), as were ARCH 220 and 221. Although great care was taken to ensure that the integrity of instruction was not compromised, in each case these were nonetheless two separate courses being offered at the same time. In other words, one instructor had to navigate two syllabi, two sets of students, two course outlines of record, and two sets of assignments in every class meeting. This was not only a strain on the instructor, but it is far from an optimal class environment, diluting the focus that an instructor owes to a particular class. The college prohibited the practice of "stacking" last year, so this particular problem is now resolved moving forward.

As mentioned in several places in this document, the 2019 – 2020 year will be one of transition for our course offerings, as the final year of our existing curriculum (new curriculum goes into effect Fall 2020). As such, ARCH 201 and 221 will not be offered, as they are currently not updated in Curricunet; only ARCH 200 and ARCH 220 are possible upper-level classes for next year. It will be interesting to compare SLO data for these classes in an unstacked format to previous years in a stacked format.

Moving forward, the most critical solution to this problem is to schedule the sequential courses in a predictable and advertised rotation. We have proposed 2-year pathways for our new courses, degree, and certificates (beginning on p. 25), which will be implemented in Fall 2020. In addition, we will hold departmental discussions over the next year, regarding SLO assessment methods for our new courses.

Program Level Outcomes:

If your program offers a degree or certificate, describe how the program level outcomes are being used to improve student learning at the program level (e.g., faculty discussions, SLO revisions, assessments, etc.). **Describe** how this set of data is being evaluated or is planned to be evaluated. Generate reports from the SLO Cloud as necessary. Include analysis of SLO Cloud reports and data from 4-year summary reports. If your program does not offer a degree or certificate, this section is optional (but encouraged).

Certificates.

The current certificate (Computer-Aided Drafting Technician) does not have PLOs, thus they have not been evaluated. The PLOs submitted for our new certificates are listed below. As we work to transition into the new curriculum over the next academic year, we will begin departmental discussions to determine the assessment tools to best measure and evaluate these PLOs beginning Fall 2020.

3D Modeling and Design Certificate *New Certificate*

1. Read and interpret blueprints, design documents, and project specifications to gain meaningful information.
2. Compare and contrast the conventional drawing types and views and explain the advantages of each.
3. Demonstrate the ability to mechanically construct a variety of basic drawings utilizing industry conventions of scale, scale, line, symbols, lettering and dimensioning techniques.
4. Demonstrate the ability to mechanically construct a variety of drawings utilizing three-dimensional modeling and design techniques.

Building Information Management (BIM) Certificate *New Certificate*

1. Read and interpret blueprints, design documents, and project specifications to gain meaningful information.
2. Compare and contrast the conventional drawing types and views and explain the advantages of each.
3. Demonstrate the ability to mechanically construct a variety of basic drawings utilizing industry conventions of scale, scale, line, symbols, lettering and dimensioning techniques.
4. Demonstrate the ability to mechanically construct a variety of drawings utilizing Building Information
5. Management and modeling techniques.

Building Information and 3D Modeling Certificate *New Certificate*

1. Read and interpret blueprints, design documents, and project specifications to gain meaningful information.
2. Compare and contrast the conventional drawing types and views and explain the advantages of each.

3. Demonstrate the ability to mechanically construct a variety of basic drawings utilizing industry conventions of scale, scale, line, symbols, lettering and dimensioning techniques.
4. Demonstrate the ability to mechanically construct a variety of drawings utilizing Building Information Management and modeling techniques.
5. Demonstrate the ability to mechanically construct a variety of drawings utilizing three-dimensional modeling and design techniques.

Degree.

Over the past 3 years, between 496 and 686 students have been assessed for the PLOs for the degree, with success ranging from 84.48% to 87.32%. Both indicators are acceptable, which indicate that students can successfully express their knowledge with verbal, written, and graphical techniques, develop and present two- and three-dimensional design solutions in projects, and relate various influences to architectural styles. These outcomes capture the core skills that students must possess as they transfer to upper-level courses at the 4-year institution, or move into the workforce. There are no plans to modify the PLOs over the next academic year.

For the new degree, we are retaining the existing PLOs, but adding one for students to demonstrate an awareness of relationships among allied fields. Upon exiting the program, students should be able to see the connections amongst the different but related fields of Architecture, Environmental Design, Urban Planning, and Computer-Based Design. By recognizing the cross-over skills, a wider range of job opportunities will likely be available as students move on to utilize their degree or certificate.

Even though our PLOs indicate successful achievement, we will engage in discussions to determine if the assessment methods should remain unchanged, or if the launching of the new curriculum affords an opportunity to modify and perhaps streamline these methods.

Part III: Questions Related to Strategic Initiative: Improve Communication, Culture &

Climate

Goal: SBVC will promote a collegial campus culture with open line of communication between all stakeholder groups on and off-campus.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Communication	The program <u>does not identify</u> data that demonstrates communication with college and community.	The program <u>identifies</u> data that demonstrates communication with college and community.	In addition to the meets criteria, the program <u>demonstrates</u> the ability to communicate more widely and effectively, <u>describes</u> plans for extending communication, and provides data or research that <u>demonstrates</u> the need for additional resources.
Culture & Climate	The program <u>does not identify</u> its impact on culture and climate or the plans are not supported by the data and information provided.	The program <u>identifies and describes</u> its impact on culture and climate. Program <u>addresses</u> how this impacts planning.	In addition to the meets criteria, the program provides data or research that <u>demonstrates</u> the need for additional resources.

Communication, Culture & Climate:

Describe how your program communicates its services, goals, and achievements to the campus and to the Community (outreach, events, website, campus emails, flyers, etc.).

The Architecture program demonstrates considerable communication with the campus and community, as summarized below.

Data demonstrating communication with campus and community	Outreach, events, emails, flyers, etc.	Services, goals, achievements
<p>CAMPUS Active participation on campus STEMPALOOZA</p>	<p>Outreach to High School and Middle School Students</p> <ul style="list-style-type: none"> • Fliers were distributed • 3-5 tables in various years • Student representatives 	<p>In excess of 500 students were reached in this annual one-day activity arranged by the STEM program on campus. Goal: participate in future events</p>
<p>CAMPUS Students actively evaluate aspects of the campus environment</p>	<p>Projects are selected and developed by students</p> <ul style="list-style-type: none"> • Blue Benches • Garden – developments • Wall designs in seating alcoves 	<p>Goal: to benefit overall campus. Continue: one development/yr Openly recognize the students or class participating</p>
<p>CAMPUS Starfish</p>	<p>Designed for student support and communications with a network of resources that can be implemented for this purpose. Enhances instructor student communications</p>	<p>Continue involvement and expand Architecture faculty has been recognized as an outstanding participant by the campus.</p>
<p>CAMPUS Canvas</p>	<p>Used with both online courses and traditional classroom settings this enhances</p> <ul style="list-style-type: none"> • Announcements • Providing student resources • Tracking student progress • Individual student reminders • Student awareness 	<p>Continue involvement and expand</p>
<p>COMMUNITY – Professional Active participation in American Institute of Architects Pasadena Foothill Chapter (AIAPF) – Competition</p>	<p>Students from the ARCH 101 course have actively participated over the last 5 years, such as the birdhouse competition celebrated in October recognizing Architecture Month. Our students have earned multiple awards each year.</p>	<p>Students are successful in competition with architects, other students, and community. They are able to communicate with active architects in the process. The goal is to continue participating in this event.</p>

Data demonstrating communication with campus and community	Outreach, events, emails, flyers, etc.	Services, goals, achievements
<p>COMMUNITY – Professional</p> <p>Active participation in American Institute of Architects Pasadena Foothill Chapter and AIAIC, Inland California Chapter</p>	<p>This is a competition with a student category for design entries. We have had students participate in competition with fourth and fifth year students and experienced some winners.</p>	<p>Continue to participate by entering and viewing the events.</p>
<p>COMMUNITY – Professional</p> <p>Mid Century Modernism Event Palm Springs October 3-day event February 10-day event</p>	<p>Students have been able to participate in a double decker bus tour and attend lectures and special exhibits free of cost.</p>	<p>Continue to participate. Expand opportunity to students who cannot afford their own transportation.</p>
<p>COMMUNITY – Professional</p> <p>Students attend monthly meetings of the AIA and CSI</p> <ul style="list-style-type: none"> • American Institute of Architecture Inland California Chapter (AIAIC) • Construction Specifications Institute (CSI) 	<p>AIAIC – Students attend professional continuing educational events and monthly meetings with presentations. SBVC also has a student representative to the AIAIC Board. Students are allowed to attend meetings free of cost.</p> <p>CSI – Students attend discussions and monthly meetings, and have assisted with displays and also had their own display tables.</p>	<p>Continue participation in monthly meetings, tours and events.</p>
<p>COMMUNITY – Education</p> <p>Symphony books were designed and developed by Architectural students to be distributed by the Symphony Board.</p> <p>Outreach to all regional Elementary Schools</p>	<p>This activity/coloring book first edition was designed featuring the Historic California Theater and the Valley College Theater.</p> <p>The second edition featured an additional theme of educational pathways and significant community</p>	<p>Continue to support awareness</p> <ul style="list-style-type: none"> • educational pathways • art of music • art of the built environment
<p>COMMUNITY – Habitat for Humanity</p>	<p>Participation in EARTH DAY where students recycle, reuse and repurpose items and display these for a weekend event.</p> <p>Participation in building events within the community area of homes.</p>	<p>Continue to support and participate in these events.</p>

Data demonstrating communication with campus and community	Outreach, events, emails, flyers, etc.	Services, goals, achievements
Community – Academic <ul style="list-style-type: none"> • Cal Poly Pomona • Cal Baptist University, Riverside • New School of Architecture, San Diego 	Students tour these educational facilities, participate in events, and experience guest speakers Faculty participates and opens scholarship opportunities (NSASD).	Continue and expand. Provide transportation to those that cannot access or afford their own
Campus Displays	Display cases have been established presenting and 'showcasing' student works	Continue and possibly expand to other areas of the campus.
Community Displays <ul style="list-style-type: none"> • Orange Show • Community Art Shows 	Orange show Citrus Displays – students are entering displays for the May event at this time.	Continue and expand.

Describe how your program seeks to enhance the culture and climate of the college.

Much of the list described above enhances the culture and climate of the college. The Architecture students regularly evaluate aspects of the campus environment as described above. For example, they have painted geometric designs (based on color abstraction exercises) in the seating alcove areas in the hallways of the Physical Science building. They have also been involved with project that placed the blue benches around campus. The students have participated in a number of garden developments (such as the area outside the elevators in the Physical Science building).

The goal of the program is to develop and implement one campus project per year, in order to improve the physical climate of the college.

Describe one or more external/internal partnerships.

As described above, the Architecture program has partnerships with American Institute of Architects (both Inland California and Pasadena Foothill Chapters), Construction Specifications Institute, Habitat for Humanity, and San Bernardino Symphony Orchestra.

We expect to expand our interaction via these external partnerships, with future plans to include:

- Host or provide meeting location on campus.
- Explore providing continuing education courses through the campus in a variety of subjects both in campus meetings and through the online environment.
- Provide continuing education opportunities for AIA with campus facilities or Canvas resources.

What plans does your program have to further implement any of these initiatives?

Many of the examples listed above for communication, culture, and climate are ongoing activities by the Program and expect to be continued, which include: participating in STEMAPALOOZA or similar events, creating and executing one campus development project per year, expanding use of STARFISH and CANVAS as means of communication, participating in community events such as student design competitions through American Institute of Architects, Mid-Century Modernism events in Palm Springs, monthly professional meetings through AIA and CSI (described above), Earth Day activities, and community displays (e.g., Orange Show).

IV: Questions Related to Strategic Initiative: Maintain Leadership & Promote Professional Development

Goal: SBVC will maintain capable leadership and provide professional development to a staff that will need skills to function effectively in an evolving educational environment.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Professional Development	The program does not identify currency in professional development activities.	Program identifies current avenues for professional development.	In addition to the meets criteria, the program shows that professional development has impacted/expanded the program and demonstrates that the program is positioning itself for growth.

Professional Development:

1. Discuss the ways that members of your department maintain currency in their field (conferences, workshops, technical trainings, etc.).

Currency in the field of Architecture is maintained by the faculty attending workshops and trainings; participating in user groups and self-directed studies; conducting online research and readings of professional periodicals; and making site visits to significant structures or attending other events.

Specific examples include: Annual Mid Century Modernism event in Palm Springs; American Institute of Architects design awards, special events, and monthly meetings; Construction Specifications Institute monthly meetings, special events, and showcases; monthly subscriptions to periodicals such as Architect and Architectural Digest, purchased books on topics such as architect Albert Frey.

2. Identify the professional organizations that your department and/or department members belong to and how those organizations meet professional development parameters.

The Architecture faculty belong to the following professional organizations:

- AIA – American Institute of Architects (Inland California Chapter and Pasadena Foothill Chapter)
- AICP – American Institute of Certified Planners
- CSI – Construction Specifications Institute, Inland Empire
- NBAK – National Bath and Kitchen Interior Design
- ASID – American Society of Interior Designers
- San Bernardino Symphony
- Arts Council
- AICP – American Institute of City Planners
- REVIT – [software] users group

Examples of how these organizations meet professional development parameters:

The American Institute of Architects (AIA) works to advance our nation's quality of life and protect the public's health, safety and welfare, as it has done for 160 years. It provides professional programs, exhibits, awards, continuing education for professionals, scholarships, conferences, webinars, workshops, professional development.

Construction Specifications Institute – Inland Empire (CSI) focuses on Project Delivery Method, Methods of Specifying, Construction Documents, Procurement and Contracting, Construction

The American Institute of Certified Planners (AICP) is the American Planning Association's professional institute. AICP certifies professionals in the United States in the field of Urban Planning and assists planners in the areas of ethics, professional development, planning education, and the standards of planning practice.

3. Discuss specific ways faculty and staff engage in professional growth (i.e. attend or present at conferences, establish training opportunities with other community colleges). Include future opportunities that are planned by faculty and staff. Discuss how professional development has impacted/expanded the program.

The Architecture faculty engage in professional growth as described in 1 and 2 above. Professional development has impacted the program as follows:

AIA. Has provided professional development through ongoing education of faculty. In addition, AIA now provides a student opportunity to attend educational meetings at no cost. AIA provides student scholarships, opportunities to participate in competitions, and to shadow professionals.

CSI. Has provided professional development through ongoing education of faculty. In addition, CSI has provided student opportunities for access to professional meetings and events, showcased student works and provided links for resources to implement student projects.

ASID. Has provided professional development through ongoing education of faculty. ASID has provided student opportunities for competitions, educational and showcase events.

San Bernardino Symphony – Provides very low-cost tickets so that students may attend events in the historically significant California Theater. The Symphony also sponsors programs that reach out to the K-12 students of the Inland Empire. On two occasions SBVC architecture students have had the opportunity to design

and publish educational activity books. The first focused on the California Theater and the SBVC Auditorium along with musically related pages. The second edition provided an emphasis of educational opportunities and pathways and included additional significant structures within the area.

AICP & AIA will hold a conference this summer in an adjacent state focusing on the development and built environment of the City.

V: Questions Related to Strategic Initiative: Effective Evaluation & Accountability

Goal: SBVC will improve institutional effectiveness through a process of evaluation and continuous improvement.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Mission/ Statement of Purpose	The program <u>does not have</u> a mission/ statement of purpose, or it <u>does not clearly link</u> with the institutional mission.	The program <u>has</u> a mission/statement of purpose, and it <u>links</u> clearly with the institutional mission.	
Productivity	The data <u>does not show</u> an acceptable level of productivity for the program, or the issue of productivity is not adequately addressed.	The data <u>shows</u> the program is productive at an acceptable level.	The program functions at a highly productive level and has planned for growth as appropriate.
Relevance, Currency, Articulation	The program <u>does not provide</u> evidence that it is relevant, current, and that courses articulate with CSU/UC, if appropriate. <u>Out of date course(s) that were not launched into Curricunet by Oct. 1, 2017 may result in an overall recommendation no higher than Conditional.</u>	The program <u>provides</u> evidence that the curriculum review process is up to date. Courses are relevant and current to the mission of the program. Appropriate courses <u>have been articulated</u> or transfer with UC/CSU, or <u>plans are in place</u> to articulate appropriate courses.	In addition to the meets criteria, the program <u>discusses plans</u> to enhance current course offerings that link to student/community needs and positions the program for improved student outcomes.
Challenges	The program <u>does not incorporate</u> weaknesses and challenges into planning.	The program <u>incorporates</u> weaknesses and challenges into planning.	The program <u>incorporates</u> weaknesses and challenges into planning that demonstrate the need for expansion.

Mission and Purpose:

San Bernardino Valley College maintains a culture of continuous improvement and a commitment to provide high-quality education, innovative instruction, and services to a diverse community of learners. Its mission is to prepare students for transfer to four-year universities, to enter the workforce by earning applied degrees and certificates, to foster economic growth and global competitiveness through workforce development, and to improve the quality of life in the Inland Empire and beyond.

What is the mission statement or purpose of the program?

The Architecture and Environmental Design Program serves a variety of students through instructional course offerings. The Architecture History courses serve both as major’s preparation in Architecture and City and Regional Planning, and general education courses. The Architectural Design sequence serves as major’s preparation for transfer students to a variety of architecture related fields. Drafting classes serve career and technical education students as well as support major’s preparation.

The purpose of the Architecture and Environmental Design program is to provide general education instruction, provide career enhancement training, and provide major’s preparation for transfer students. The architectural history classes support general education requirements for graduation, the computer aided drafting classes provide career preparation and enhancement training for a variety of fields, and the design classes prepare students to construct a portfolio required for transfer to a bachelor’s degree programs.

How does this mission or purpose relate to the college mission?

The mission of the college includes preparing students for transfer to four-year universities and to enter the workforce by earning applied degrees and certificates. The purpose of the Architecture and Environmental Design program (described above) is to do both, thereby directly linking the Program mission to that of the college.

Productivity:

Provide additional **analysis and explanation** of the productivity data and narrative in the EMP summary if needed. Use data from charts (FTEs; Enrollment; FTFE and WSCH per FTFE). Explain any unique aspects of the program that impact productivity data, for example, Federal Guidelines, Perkins, number of workstations, licenses, etc.

Productivity for classes such as ours that are limited by space (i.e., workstations) will never reach the optimum value of WCSH per FTEF of 525. The program has low class caps in both the design and the drafting classes due to the nature of the curriculum. For example, the software in the drafting classes has a site license of 24, and the first-year design classes require space and supplies such that it is difficult to supervise more than 25 students. In the past, we have tried to stack similar classes without compromising the integrity of instruction, but this approach is no longer allowed by the institution.

Improving our productivity will require that our fill rate increases. Over the next academic year, we will have limited course offerings as we begin to transition to the new curriculum. We will encourage students to enroll in all applicable courses, which should maintain or improve the productivity. Once our new 2-year rotation of course offerings begins, we expect enrollment and productivity indicators to increase.

Relevance and Currency, Articulation of Curriculum:

The Content Review Summary from Curriconet indicates the program's current curriculum status. If curriculum is out of date, explain the circumstances and plans to remedy the discrepancy. (NOTE: If the report is inaccurate, contact Mary Copeland, Co-Chair, Curriculum Committee, (mcopel@valleycollege.edu) or Kay Dee Yarbrough, Administrative Curriculum Coordinator, (kyarbrough@sbccd.cc.ca.us) for updated information.

Science				
Architecture & Environmental Design				
	Course	Status	Last Content Review	Next Review Date
	ARCH 100 Environmental Design	Active	02/24/2014	02/24/2020
	ENGR 100 Engineering Career Exploration	Active	09/11/2017	09/11/2023
	ARCH 101 Environmental Design Communication	Active	02/24/2014	02/24/2020
	ARCH 120 Introduction to Computer Aided Drafting	Active	11/15/2005	11/15/2011
	ARCH 145 History of Architecture: Early Design through Gothic	Active	03/30/2015	03/30/2021
	ARCH 145H History of Architecture: Early Design through Gothic - Honors	Active	03/30/2015	03/30/2021
	ARCH 146 History of Architecture: Renaissance through Modern	Active	04/27/2015	04/27/2021
	ARCH 146H Architecture History: Renaissance to Modern - Honors	Active	04/27/2015	04/27/2021
	ARCH 200 Architectural Design I	Active	11/08/2016	11/08/2022
	ARCH 201 Architectural Design II	Active	04/15/2005	04/15/2011
	ARCH 220 Architectural Computer Aided Drafting I	Active	11/08/2016	11/08/2022
	ARCH 221 Architectural Computer Aided Drafting II	Active	04/15/2005	04/15/2011
	ARCH 250 Materials and Construction	Active	04/15/2005	04/15/2011
	ENGR 265 Engineering Mechanics - Statics	Active	10/09/2017	10/09/2023
	ARCH 270 Portfolio Design	Active	04/15/2005	04/15/2011
	ENGR 100 Engineering Career Exploration	Historical		
	ENGR 100 Engineering Career Exploration	Historical		
	ARCH 100 Environmental Design I	Historical		

	ARCH 100 Environmental Design I	Historical		
	ARCH 101 Environmental Design II	Historical		
	ARCH 145 History of Architecture: Early Design through Gothic	Historical		
	ARCH 145 History of Architecture: Early Design through Gothic	Historical		
	ARCH 145 HISTORY OF ARCHITECTURE: EARLY DESIGN TO GOTHIC	Historical		
	ARCH 146 History of Architecture: Renaissance through Modern	Historical		
	ARCH 146 HISTORY OF ARCHITECTURE: RENAISSANCE TO MODERN	Historical		
	ARCH 200 Architectural Design I	Historical		
	ARCH 220 Architectural Computer Aided Drafting I	Historical		
	ENGR 265 Engineering Mechanics	Historical		
	ENGR 265 Engineering Mechanics - Statics	Historical		

Articulation and Transfer

List Courses above 100 where articulation or transfer is <u>not</u> occurring	With CSU	With UC
ARCH 100		
ARCH 101		
ARCH 120		
ARCH 200		
ARCH 201		
ARCH 220		
ARCH 221		
ARCH 250		
ARCH 270		

Describe your plans to make these course(s) qualify for articulation or transfer. Describe any exceptions to courses above 100.

The Architecture & Environmental Design curriculum has been completely restructured in order to update the curriculum and to strengthen articulation and transfer (effective Fall 2020). Working closely with our articulation officer, we have developed new courses to more closely align with similar blocks of courses at Cal Poly Pomona. We expect that all courses over 100 will articulate. The only courses that will remain from the Content Review Summary above are the history courses: ARCH 145/H and ARCH 146/H. Portfolio Design (ARCH 270) has been renumbered and revised to ARCH 070. All other courses in our curriculum have been re-designed as new courses, and the evidence is shown in the screen shot to the right; the new degree and certificates are shown below. All of these courses, three new certificates, and a new degree have been approved at Technical Review (March 4, 2019). They are on the agenda for approval by the full Curriculum Committee on March 18, 2019, and will go into effect Fall 2020.

Program Search Results		
Actions	Program	Status
	3D Modeling and Design **New Certificate** Certificate Judy Jorgensen	Launched
	Architecture and Environmental Design **New Degree** A.S. Degree Major Judy Jorgensen	Launched
	Building Information Management (BIM) **New Certificate** Certificate Judy Jorgensen	Launched
	Building Information and 3D Modeling **New Certificate** Certificate Judy Jorgensen	Launched

Course Search Results	
Actions	Discipline Course Number Title
	ARCH 015 Survey of Design and Drafting Software Applications *Launched* **New Course With Distance Education** Judy Jorgensen
	ARCH 070 Portfolio Design *Launched* **Course Modification with Distance Education** Judy Jorgensen
	ARCH 098 Environmental Design Work Experience *Launched* **New Course With Distance Education** Judy Jorgensen
	ARCH 110 Introduction to Architecture *Launched* **New Course With Distance Education** Judy Jorgensen
	ARCH 111 Sketching and Design Visualization *Launched* **New Course With Distance Education** Judy Jorgensen
	ARCH 112 Architectural Design and Theory I *Launched* **New Course With Distance Education** Judy Jorgensen
	ARCH 113 Design Visualization and Presentation *Launched* **New Course With Distance Education** Judy Jorgensen
	ARCH 130 Computer-Aided Design (CAD) Drafting *Launched* **New Course** Judy Jorgensen
	ARCH 131 Introduction to Building Information Modeling (BIM) *Launched* **New Course** Judy Jorgensen
	ARCH 133 Introduction to 3D Modeling and Design *Launched* **New Course** Judy Jorgensen
	ARCH 212 Architectural Design and Theory II *Launched* **Course Modification** Judy Jorgensen
	ARCH 213 Advanced Architectural Design II *Launched* **Course Modification** Judy Jorgensen
	ARCH 231 Advanced Building Information Modeling (BIM) *Launched* **New Course** Judy Jorgensen
	ARCH 233 Advanced 3D Modeling and Design *Launched* **New Course** Judy Jorgensen

Currency

Review all mentions of your area in the catalog. Is the information given accurate? If not, briefly identify the areas that will be revised.

The catalog information is accurate, except that Amy Avelar is the current Department Chair. Our new curriculum (courses, degree, and three certificates) will go into effect Fall 2020 (expected to be approved at the March 18, 2019 Curriculum Committee meeting). We will then work to make the relevant changes for the 2020 – 2021 catalog.

It is unclear why the Content Review Summary presented above includes Engineering courses. These courses are not scheduled out of our Department, nor are the faculty who teach those classes part of our Department. Curricunet should be modified so that ENGR courses are not part of the Architecture list of courses.

Coinciding with the design of the new curriculum, we have established 2-year pathways for the Architecture and Environmental Design Degree and the three new certificates: 3D Modeling and Design, Building Information Management (BIM), and Building Information and 3D Modeling. By making the pathway clear for a student’s desired certificate or transfer (completed; shown below), advertising this pathway (beginning 2019-2020 academic year), and scheduling the courses in a rotation so that a student may achieve their goal (beginning Fall 2020), we expect that enrollment and degrees/certificates awarded will increase, and student success will improve.

Figure 1 outlines the path of all of the courses for the degree (shown in blue boxes). The courses specific to the BIM certificate are highlighted in yellow (against the back drop of the degree courses) in Figure 2. Similarly, the 3D modeling certificate shows its courses highlighted in green in Figure 3. The Building Information and 3D Modeling certificate incorporates the courses highlighted in both yellow and green in Figures 2 and 3, respectively. Potential future courses (Architecture Orientation, or Overview of Architectural Computer Programs) are shown in the additional box during first semester (Figures 2 and 3).

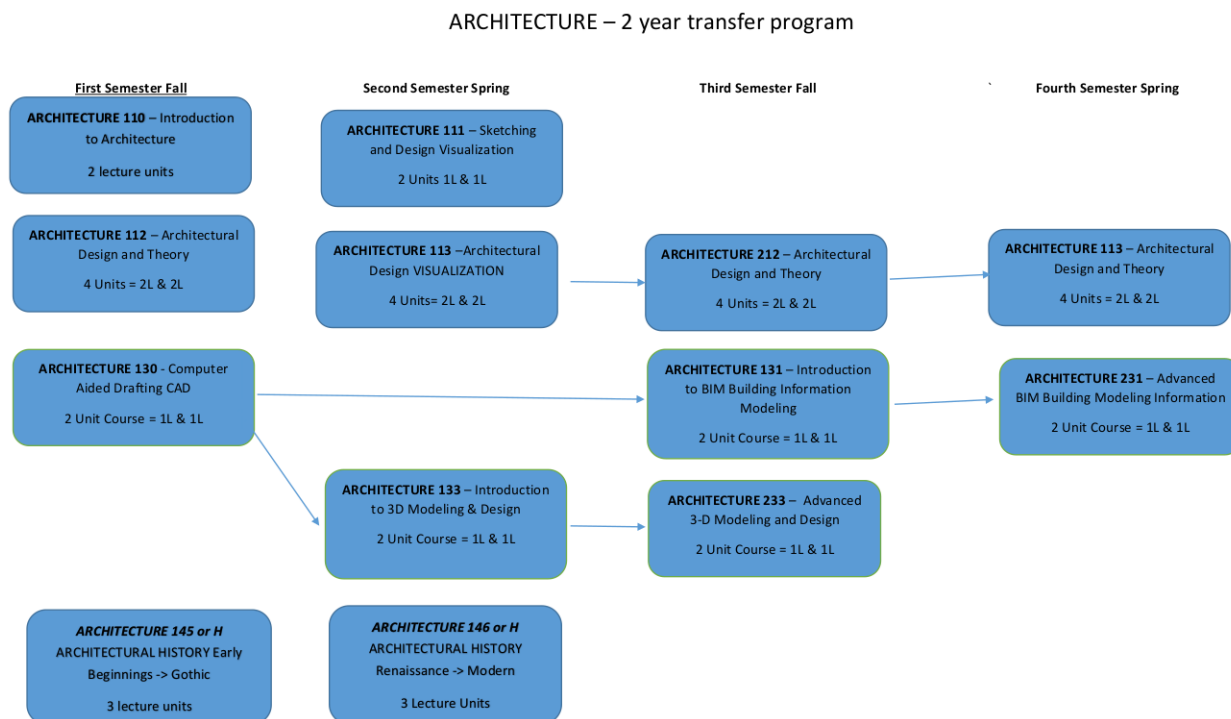


Figure 1. Architecture degree – 2-year pathway.

**ARCHITECTURE Program
Certificate BIM**

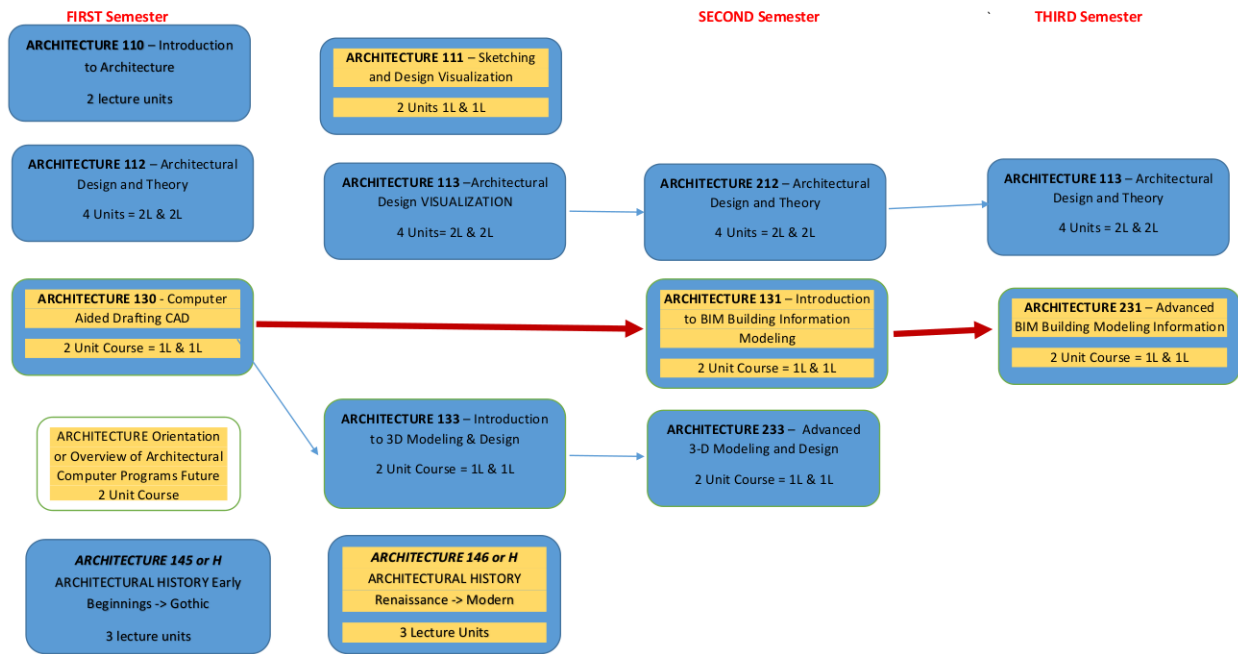


Figure 2. BIM certificate – 2-year pathway (courses highlighted in yellow).

**ARCHITECTURE
CERTIFICATE – 3-D Modeling and Design**

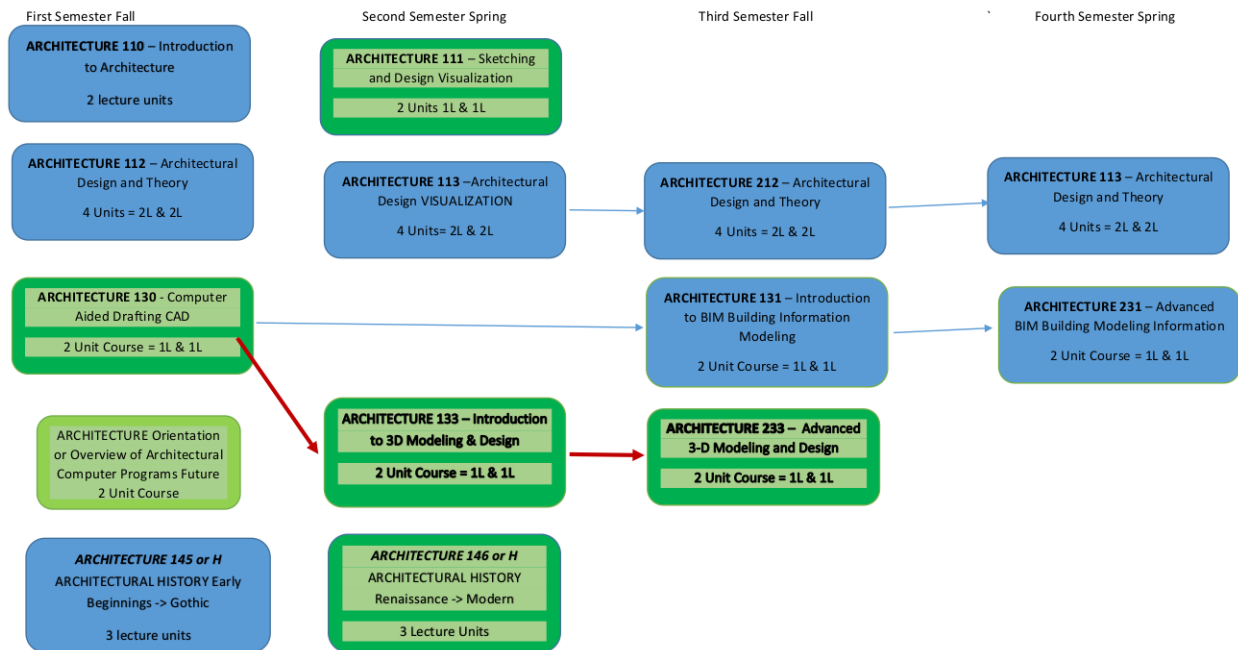


Figure 3. 3D modeling certificate – 2-year pathway (courses highlighted in green).

If any courses are no longer offered, list them here. (Include Course # and Title of the Course). If the information is inaccurate and/or there are listed courses not offered, how does the program plan to remedy the discrepancy?

Follow the link below and review the last college catalog data.

<http://www.valleycollege.edu/academic-career-programs/college-catalog.aspx>

If your information needs updating, contact Kay Dee Yarbrough, Administrative Curriculum Coordinator, (kyarbrough@sbccd.cc.ca.us).

For the 2019 – 2020 year, ARCH 120, 201, 221, 250, or 270 will not be offered. We will only be offering courses that are up-to-date in Curricunet, which include ARCH 100, 101, 145/H, 146/H, 200, and 220. In Fall 2020, our new curriculum will be implemented.

Challenges:

Referencing the narratives in the EMP summary, provide any additional data or new information regarding planning for the program. In what way does your planning address trends and weaknesses in the program?

Updated Curriculum and Articulation/Transfer. This has been an ongoing challenge for the program, and the single deficiency cited in Section VII (Previous Does Not Meets Categories). Over the years, a course or two would be updated and approved, but then similar revisions to other courses would not be approved. Sometimes when this happened, all of the changes recommended would be made, only for the courses to continue to be stuck in Technical Review. Over time, this inconsistent cycling with curriculum has led to some courses that are current (ARCH 100, 101, 145/H, 146/H, 200, and 220), and some that are severely out of date (ARCH 120, 201, 221, 250, and 270).

Another ongoing weakness has been the lack of official articulation of our courses to our primary transfer institution, Cal Poly Pomona. While some of our courses transfer as credit, strong articulation does not occur with our existing curriculum. The decision was then made to completely restructure the curriculum in order to more closely align with Cal Poly, rather than to continue making updates to individual courses.

With multiple parties working together – Architecture Faculty, (Chemistry) Faculty Chairs, Interim Dean of Science, Articulation Officer, Co-Chair of Curriculum Committee, and the Admin Support for Curriculum Committee – this goal has been achieved. The new curriculum was approved at Technical Review on March 4, 2019, and is expected to be approved at the full Curriculum committee meeting on March 18, 2019. As this is the same due date for this efficacy document, we will submit an update by email documenting its approval. This substantive change in curriculum will go into effect Fall 2020, and is the major aspect of our future planning.

Degrees and Certificates Awarded. As shown in the EMP, there have been no degrees or certificates awarded over the past few years. Not having consistent offerings of the courses required for the degree or certificate is likely the major reason that these numbers sit at zero. One reason that this occurred is that the program has 1 full-time faculty, and there were only 1 or 2 adjunct faculty in the department for close to 10 years. Classes need staffing. In addition, as a response to outdated curriculum, there were times when the Dean directed that only up-to-date courses could be scheduled. Coupled with the aforementioned challenges of getting the curriculum approved, there were several years when required courses weren't offered. These difficulties prevented a regular rotation of courses to be planned, promoted, and scheduled. For the 2019 – 2020 academic year, the final year of our existing curriculum, outdated courses in Curricunet will not be offered, so it is likely that degrees/certificates awarded will not change by much. However, once the new curriculum goes into effect, we expect to begin to see an increase in certificates, and then degrees, within a year or two. We have established 2-year pathways for the new degree and certificates, as shown on pages 25 – 26, which will be advertised to students and shared with Counseling.

Small Adjunct Pool. Most of the Architecture courses have been taught by one full-time faculty member, as there have only been 1 or 2 adjunct faculty in the Department for most of the past decade. One recent challenge was that for most of the past year, it was difficult for the Faculty Chair to gain access to the adjunct pool through ADP due to challenges with the system itself. We now have a pool of 4 adjunct teaching classes, which helps to expand the number of courses that can be offered. In addition, the additional faculty help to provide an added range of experience (e.g., one faculty member is highly knowledgeable in the three software programs required for the 3D and BIM certificates). We will continue to interview applicants as they appear in the adjunct pool, in order to build on the staffing expertise in the Department.

Architecture Placement. For more than 11 years, Architecture and Environmental Design has been conjoined with the Chemistry Department. Presumably this was done at a time that Architecture did not generate enough load to be its own department, as no other reason makes sense. While the Architecture and Chemistry faculty have had many positive interactions and have learned much from each other, this placement of Architecture is problematic and actually does a disservice to the program. Architecture and Environmental Design should be a stand-alone department.

Most importantly, the two fields have nothing to do with each other. The core content is different, the labs are different, the types of assignments/projects are different, and the ultimate careers are different. The Faculty Chair over Architecture has always been a Chemistry faculty, and as such, has no content expertise (alternatively, if the Faculty Chair over Chemistry & Architecture were to be an Architecture faculty, the same problems would exist). This means that the Faculty Chair can provide only limited assistance when it comes to work like writing Needs Assessment requests or Program Review Efficacy documents. More critically, the Faculty Chair cannot provide any assistance with writing curriculum, beyond wordsmithing and punctuation, because someone with a MS or PhD in Chemistry has no basis for understanding the content in design or drafting classes. Yet this is the situation that Architecture has faced *for years*.

Also, Architecture is a CTE program whereas Chemistry is not. Chemistry faculty know nothing about what it takes for a certificate or degree recipient in Architecture or Drafting to enter the labor market, yet the Faculty Chair is expected to help coordinate and participate in such things as Advisory Committee meetings. Even though the (Chemistry) Faculty Chair and the full-time Architecture faculty work well together, having Architecture tacked onto the Chemistry Department does not permit the program to flourish as it should.

How is this challenge incorporated into planning?

The first hurdle was to begin to lobby for adequate funding for the program, so that it can be properly sustained. Architecture has limped along with an insufficient budget of \$400 – \$500 for many years, despite it being a program with lab needs and an obvious discipline where field trips are essential. In Fall 2018, funds were requested and granted to increase the operating budget this year to \$2000, in order to purchase much-needed supplies in the Architecture lab. Until now, the Architecture faculty has spent money out-of-pocket to purchase additional supplies. We will continue to pursue an increased budget until the augmentation is made permanent. In addition, we were able to purchase the 3rd of 3 drafting software programs needed for our new curriculum (courses at Cal Poly Pomona emphasize these three software programs, making this purchase required for articulation). The other two software packages are available from the developer at no cost to educational institutions; the most recent versions are currently on the computers in the Architecture lab; we just need to make sure that we are incorporating the software as updates are released.

The next aspect of planning was to completely restructure the curriculum as mentioned earlier in this section and elsewhere throughout this document. The courses, degree, and new certificates are expected to be approved by the full Curriculum committee at the meeting on March 18, 2019.

A final component of planning was to begin to build the adjunct pool. Architecture only has 1 full-time faculty, and we can't offer classes without proper staffing. After many years of only having 1 – 2 adjunct faculty, we now have a pool of 4 adjunct faculty.

With all of these pieces in place (budget, curriculum, and staffing), and a consistent load over the past couple years of more than 2 FTEF per semester, the solution is to allow Architecture to break away from Chemistry and be established as its own Department, with a discipline expert as its Faculty Chair.

VI: Questions Related to Strategic Initiative: Provide Exceptional Facilities

Goal: SBVC will support the construction and maintenance of safe, efficient, and functional facilities and infrastructure to meet the needs of students, employees, and the community.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Facilities	The program <u>does not provide an evaluation</u> that addresses the sustainability of the physical environment for its programs.	Program <u>provides an evaluation</u> of the physical environment for its programs and <u>presents evidence</u> to support the evaluation.	In addition to the meets criteria, the program has <u>developed a plan</u> for obtaining or utilizing additional facilities for program growth.

Facilities:

Provide an evaluation of the facilities in your area and their impact on the educational environment for your students (classroom facilities, technology, space needs, maintenance issues, etc.). Address sustainability of the facility (including technology needs).

The Architecture courses (lecture and lab) are usually taught in the Architecture computer lab (PS 217). The layout of this lab is not ideal to facilitate group projects and group learning, as it consists of rows of desks with computers (similar to many computer labs). Projects and models that students should construct and develop are not always compatible with a computer lab. We have drafted drawings showing proposed facilities changes, and plan to submit them during next year's Needs Assessment.

Our new curriculum includes introductory and advanced courses in 2D and 3D modeling and drawing. Two of the software programs are available free to educational institutions (and are installed on the student computers), and the third program was approved to purchase this year through Needs Assessment (Fall 2018). As of right now, our technology needs are satisfactory.

VII: Previous Does Not Meets Categories

Listed below, from your most recent Program Efficacy document, are those areas which previously received "Does Not Meet."

Address, in **DETAIL AND WITH SPECIFIC EXAMPLES**, how each deficiency was resolved. If these areas have been discussed elsewhere in this current document, provide the section where these discussions can be located.

Spring 2017 CTE Two-Year Review:

Curriculum is not up-to-date.

Response: The Architecture curriculum has been completely re-designed, in an effort to strengthen articulation with transfer institutions (primarily Cal Poly Pomona). The courses, degree, and three certificates were approved by Technical Review on March 4, 2019, to move forward to the full Curriculum Committee on March 18, 2019. As March 18 is the same date this efficacy document is due, we will submit an update by email documenting the approval of the curriculum. Because of substantial changes and articulation, the new curriculum will go into effect Fall 2020. More detail is provided in Section V of this document (pages 24 – 27).