# INSTITUTIONAL PROGRAM REVIEW 2014 – 2015 Program Efficacy Phase: Instruction DUE: April 13, 2015

#### 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.

Two or three committee members will be meeting with you to carefully review and discuss your 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 (and submitted to the Dean) so that your review team can work with you at the small-group workshops (Feb 13, Feb 27, Mar 27, and Apr 10, 2015). Final documents are due to the Committee co-chair by **Friday**, **April 13**, **2015** at midnight.

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

In response to campus-wide feedback that program review be a more interactive process, the committee piloted a new program efficacy process in Spring 2010 that included a review team who will work with the writer as they draft their documents during the efficacy process. Another campus concern focused on the duplication of information required for campus reports. As such, the efficacy process now incorporates the EMP sheet, a curriculum report, SLO/SAO documentation already generated elsewhere. The committee continues to strive to reduce duplication of other information while maintaining a high-quality efficacy process.

# Program Efficacy 2014 – 2015

Complete this cover sheet as the first page of your report.

#### **Program Being Evaluated**

Architecture and Environmental Design

#### Name of Division

Science and Health Science

#### Name of Person Preparing this Report

Judy Zak Jorgensen

909-387-1609 or 707-344-7416

Extension

## Names of Department Members Consulted

John Stanskas Mike Anton

## Name of Reviewers

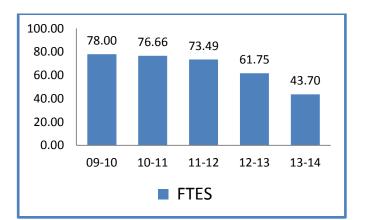
Susan Bangasser John Stanskas Stacy Meyer Joel Lamore Diane Dusick

Work Flow	Due Date	Date Submitted
Date of initial meeting with department	March 6, 2015	2-27-15
Final draft sent to the dean & committee	March 20, 2015	3-20-15
Report submitted to Program Review Team		4-6-15
Meeting with Review Team		
Report submitted to Program Review co-chair		4-13-15

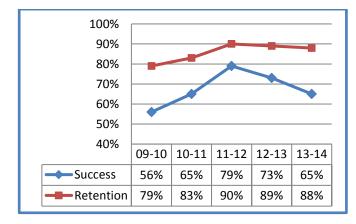
## Staffing

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	Dean of Science	None	None
Faculty	One	2-3	None
Classified Staff	None	None	None
Total	1	2-3	None



	09-10	10-11	11-12	12-13	13-14
Duplicated Enrollment	563	539	463	357	283
FTEF	5.74	6.24	4.99	4.67	4.20
WSCH per FTEF	363	369	442	397	312



#### Description:

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, urban planning and city and regional planning. The Drafting classes serve career and technical education students as well as support major's preparation.

#### Assessment:

- The FTES generation of the program grew significantly until the college was forced to scale back instructional offerings.
- The success and retention rates of students are good.

Department Goals:

- The program is in the midst of a complete redesign of curriculum to be implemented in Fall 2014 based on lengthy conversations within the division and with an advisory group. Portions of this are implemented and will have 100 /101 offered as a full first year transfer. The 145 History Honors will be offered in support of transfer students in all related fields. .
- The program will explore the possibility of some lecture content in an online format for design students and an Honors Program in Architectural History 146.

Challenges & Opportunities:

- One major challenge is articulation with transfer institutions. Most universities award credit only by portfolio review for transfer students.
- The curricular improvements under review this year are another challenge and opportunity for the program.
- Limits on course offerings impact the degrees awarded. Students are transferring with courses but without degrees to the 4/5 year programs.
- The program continues to explore mechanisms to public and private institutions to ease the transfer process in a variety of related fields.

	09-10	10-11	11-12	12-13	13-14
Sections	26	25	20	17	15
% of online enrollment	39%	32%	20%	12%	13%
Degrees awarded*	0	1	0	0	1
Certificates awarded*	0	1	0	0	1

Action Plan:

- The program will continue to explore transfer and career options for students.
- The program will continue to explore on-line and hybrid offering
- The program will investigate ways to improve degree and certificate awards through campus and off campus support.
- The program will explore other segments of the field like urban planning and landscape design.

# Part I: Questions Related to Strategic Initiative: Access

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

Strategic Initiative	Institutional	Expectations
Initiative	Does Not Meet	Meets
Part I: Access		
Demographics	The program does not provide an appropriate analysis regarding identified differences in the program's population compared to that of the general population	The program provides an <u>analysis</u> of the demographic data and provides an interpretation in response to any identified variance. <i>If warranted, discuss the plans or</i> <i>activities that are in place to recruit and</i> <i>retain underserved populations.</i>
Pattern of Service	The program's pattern of service is not related to the needs of students.	The program provides <u>evidence</u> that the pattern of service or instruction meets student needs. If warranted, plans or activities are in place to meet a broader range of needs.

Demographics - Ac	ademic Years - 2011-12 to	2013-14		
Demographic Measure	Program: Architecture	Campus-wide	Program – campus wide	Program / campus wide
Asian	4.3%	5.2%	9	.82
African-American	11.8%	14.2%	-2.4	.83
Hispanic	61.7%	59.2%	+2.5	1.04
Native American	1.1%	0.3%	.8	3.66
Pacific Islander	0.4%	0.4%	.0	1
White	19.1%	16.8%	2.3	1.13
Unknown	1.6%	3.9%	-2.3	.41
Female	41.5%	54.8%	-13.3	.75
Male	58.5	45.1%	+13.4	1.29
Disability	5.3%	5.7%	4	.92
Age Min:	18	14	+4.0	1.28
Age Max:	74	84	-10.0	.88
Age Mean:	28	29	-1.0	.96

De	emographics - A	Academic Years	- 2011-12 to 2013-14	
Demographic Measure	Program: Architecture	Campus- wide	Program % above or below Campus	Program deviation from campus
Asian	4.3%	5.2%	.82% of campus= -18%	18% less
African-American	11.8%	14.2%	.83 of campus= -17%	17 % less
Hispanic	61.7%	59.2%	1.03 of campus =+.0 3%	.03% higher
Native American	1.1%	0.3%	1.1 of campus = + 367%	367% higher
Pacific Islander	0.4%	0.4%	Identical to campus population	equal
White	19.1%	16.8%	1.14 of campus= +13.7%	13.7 % higher
Unknown	1.6%	3.9%	.41 of campus population=	59 % less
Female	41.5%	54.8%	75.9 of campus population	24% less
Male	58.5	45.1%	1.29 of campus population =	29 % higher
Disability	5.3%	5.7%	.93 of campus population	7 % less
Age Min:	18	14	1.28	28% higher
Age Max:	74	84	.88 of campus = - 12%	12% less
Age Mean:	28	29	.96 of campus population= -4%	4 % less

Does the program population reflect the college's population? Is this an issue of concern? If not, why not? If so, what steps are you taking to address the issue?

The table above was expanded to provide a comparison of the program and campus wide demographics. The greatest variation of the program from the campus statistics in number of students is exhibited in gender. We have demonstrated success in graduating a Hispanic female from the program who has transferred and graduated with her architectural degree overcoming cultural and social stereotypes. Over the last 30 years this gap has narrowed considerably in a field that is predominately male dominated where numbers were often under two percent. Plans and activities to increase awareness and interest into architecture and related fields include featuring women architects in the course interview series, and expanding awareness of related programs that have been more accessible to women.

Demographic data was provided for evaluation by ethnicity, gender, disability and age. The program was evaluated by comparing to program relative to statistics to the campus.

- In terms of ethnicity the representation of Pacific Islanders is Ethnicity -\_ identical to the campus. The program represents 18% less Asians, 17% less African-Americans, and 59% less unknown. The program representation statistically represents a .03% higher Hispanics, 367 % more Native American and 15% more white population than the campus. Asian and African –American is less than but within 20% of the campus population. This is offset with a higher ethnic representation by White and Native American. The Pacific Islander and Hispanic populations are essentially identical to the campus profile. The expression of a statistically high deviation is the Native American Population served by the program. It is anticipated that this is a small population in numbers and the enrollment of a few may strongly influence the statistic. This trend will be observed and evaluated.
- Gender Architecture and Environmental Design related fields have traditionally been male dominated. Female program participation being 24% less than the campus and male population being only 29% higher, although appearing disparate, are well within a desirable range. These figures actually represent a very desirable trend that we would seek to maintain or improve.
- **Disability** The program does represent 7% less than the campus profile. This does not appear to be a significant deviation. The program welcomes and has successful accommodated and served the needs of special needs students with mobility and space at computer stations and hearing impaired students with the assistance of student services. We seek to serve the needs of any student with disabilities that chooses to participate in any aspect of the program.

**Age** – The mean age of the program is only 4% from the campus wide mean age. This is not considered significant. The maximum and minimum age ranges represented by the Architecture Program are 18-74 where the campus is 14 to 84 the department expresses the ability to serve a wide range as does the campus

#### Pattern of Service

How does 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 are challenged with financial, transportation, variable work schedules and child care needs. The program has attempted to meet these needs by offering afternoon and evening courses as well as online courses. Due to the number of courses that are three and 4 units these have been scheduled as full semester 18 week class offerings. The program has a policy of providing online access to support materials in all courses offered. **Challenges** –

Student challenges that influence success or retention -

- **Changes in work schedule** within the 18 weeks (students may change to another section but with course reductions another section may not be available and the student drops or withdraws from the course)
- **Child care needs** discussions with single parent students have revealed that consistent reliable safe child care is a major factor in their stress and ability to continue attending courses. The campus child care center has over a one year waiting list.
- **Financial Needs** SBVC services a very low income population. The Architecture and Environmental Design courses necessitate student supplies and materials. The faculty has worked to tailor and minimize the expenses but still some students are unable to obtain materials for success. Faculty has been able to loan some materials however this becomes a distraction from class time and only provides students access during lab times.
- **Transportation** Students who ride public transportation must catch the last bus by a certain hour and it may take a student up to two hours to commute from home to school. Continue to support the partnership between transit and campus for free student transportation.

The program currently offers courses in the afternoon, evening and on Saturday to reach a broad student population. Several course adjustments are currently in development and progressing through curriculum review to reduce the course units and create smaller segments. This will support greater flexibility in short term course offerings and smaller increments of success to be achieved by students. An additional portion of courses may be offered in a hybrid format to support student flexibility and transportation needs. The department will seek to provide open-lab time at times supportive of students.

**Exploring Solutions** - that can support students through pattern of service in their need to meet these challenges in the area of work schedules, child care, financial needs and transportation may include but are not limited to:

- **Expand additional** on line course offerings to increase on resources that may reduce the need for in class scheduled lecture or lab time. Increase the number of hybrid courses. The amount of time that the students have flexibility to schedule their own time can address some transportation, work schedule and reliable safe child care issues.

- **Support the campus** child care center in meeting the needs of current students
- Materials and supplies provide a lab check out system outside of the classroom
- Provide a **campus rental system** for supplies and materials
- Students services inventory of materials to provide students as soon as they verify enrollment
- Transportation needs can be supported by scheduling all classes to end before 8:30 or 9 pm
   Schedule full day courses on a Friday or Saturday (students would attend one entire day per week similar to an office workday workplace 9am 5pm)
  - **Reduce** the number of units in course offerings by breaking a course into 1-2 unit courses. This would allow the students to increase success by breaking the path into smaller segments. This would also increase greater flexibility in course scheduling by accommodating short term courses schedules and late start courses

Strategic Initiative	Institutiona	I Expectations							
	Does Not Meet	Meets							
Part II: Student Success – Rubric									
Data/analysis demonstrating achievement of instructional or service success	Program does not provide an adequate <u>analysis</u> of the data provided with respect to relevant program data.	Program provides an <u>analysis</u> of the data which indicates progress on departmental goals. If applicable, supplemental data is analyzed.							
Student Learning Outcomes (SLOs)	Program has not demonstrated that they are continuously assessing Student Learning Outcomes (SLOs) based on the plans of the program since their last program efficacy.	Program has demonstrated that they are continuously assessing Student Learning Outcomes (SLOs) based on the plans of the program since their last program efficacy.							
	Evidence of data collection, evaluation, and reflection/feedback, and/or connection to student learning is missing or incomplete.	Evidence of data collection, evaluation, and reflection/feedback, and connection to student learning is complete.							

# Part II: Questions Related to Strategic Initiative: 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 3 & 4 that address Success & Retention and Degrees and Certificates Awarded")

The data in the EMP show that while retention has been fairly stable and comparable to college's overall retention, student success has declined slightly to 68% from the peak year of 2011-2012. This may be attributed to the decrease in the number of sections offered. Once the sections were cut due to budget constraints, it has been difficult re-growing the program. The number of certificates awarded has been consistently low. There are several reasons. Many students transfer into an environmental design program, such as urban planning, landscape architecture or architecture, however do not finish the certificate. Another reason is that we have not offered the higher level courses, the ones needed to complete the certificate. We plan to increase the number of students in the early design classes so we can build the program and offer the more advanced sections. Our plan to offer more hybrid classes may help reach our student population.

## **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 field of architecture is impacted so many students are either entering drafting careers or pursuing other environmental design fields, such as landscape architecture or urban planning. A recent conversation with Cal Poly Pomona Architecture has revealed that they are experiencing greater success with transfer students than freshmen entering directly from high school. This is a very promising indication and we expect to benefit from any changes and modifications they implement.

## **Student Learning Outcomes**

**Course SLOs.** Demonstrate that your program is continuously assessing Course Student Learning Outcomes (SLOs), based on the plans of the program since the last efficacy review. Include evidence of data collection, evaluation, and reflection/feedback, and describe how the SLOs are being used to improve student learning (e.g., faculty discussions, SLO revisions, assessments, etc.). This section is required for all programs. See <u>Strategic</u> <u>Goal 2.11</u>

The Architecture and Environmental Design program has ten courses, and seven of them have had course SLOs assessed. Six courses have continued assessment. The courses that have not been assessed have not been offered for several years. Dialog on the assessment results takes place either at a department meeting or in conversations with the specific adjunct who teach the particular course.

		General	Not																			
		Ed	Assessed	Assessed	Ongoing	F07	S08	F08	S09	F09	S10	F10 5	\$11 F1	S12	F12	S13	F13	S14	F14	S15	F15	Note
	100			x	x				x	x	x						x					
_	101			x	x						x						x					
	120 145	CSU/UC		x	x			x	x x	x	x						x x	x	x			
_	146	CSU/UC		x	x			~	x	~	~		x				x	x				
-	200	,	x	~					-					-			~	~				Last Offered SP '12
н	201		S09																			Last Offered SP '12
н	220			x	x				x								х					
н	221			x					x													Last Offered FA '13
_	250																					Course has Never been Offe
	270		x	_								_										Last Offered SP '11
ota	IS:	2	3	7	6			1	6													
									1	2	3		1				6	3	1			L
										-	3		1				6	3	1			I
											3		1				6	3	1			I
											3		1				6	3	1			
											3		1				6	3	1			
											3		1				6	3	1			
										_	3		1				6	3	1			

assessment tools. In the History Classes an abundant number of assessments requiring students to select the images that best represent the work of an architect, or the structures in a certain location, or representative of specific type of development. It was discovered that where students scored low it was most frequently due to the loss of images in the assessment. These were revised and scores of course increased to desirable levels. Locate the parts or places assessments also known as 'hot spots' in blackboard, we found low scores to be associated with the web browser used by the student. An offset occurred between the where the student

indicated location and the location recorded by blackboard, significant and consistently. Students are directed not to use Google Chrome for these exercises and to use either Firefox or IE. Strong alignments are confirmed between the SLOs /the course content and student achievement. A historic timeline or sequencing of structures or locations could be considered in the future. Design courses indicate strong SLO achievement among students that submit the assignments. Additional open lab time has been made available to support student success and ability to submit assignments in a timely manner. Additional materials and supplies for students unable to obtain the kits would be an additional support. We are investigating alternative resources.

SLO Evaluation folders are available for review from the department.

**Instructional Program SLOs.** If your program offers a degree, certificate, or TMC, describe how the SLOs are being used to improve student learning at the program level (e.g., faculty discussions, SLO revisions, assessments, etc.). Include a discussion of how the <u>courses are mapped to the program</u>, and how this set of data is either being evaluated or is planned to be evaluated. If your program does not offer a degree, certificate, or TMC, this section is optional (but encouraged). (INSERT MAPPING GRID & RECENT PROGRAM EVAL. INFORMATION)

See Strategic Goal 2.11

The drafting courses within the program are currently under revision and the SLOs were developed by the department and reviewed by the division and the curriculum committee technical review team. These will improve the student success and alignment sequence of course learning outcomes.

**Institutional SLOs/Core Competencies.** Complete the <u>Core Competency grid</u>). Describe how the Institutional SLOs/Core Competencies are being used to improve student learning in your program (e.g., faculty discussions, SLO revisions, assessments, etc.). This section is required for all programs.

See Strategic Goal 2.11

The core competency grid is presented below. This was the first expression of this grid and the one that is currently on record are the X locations within the grid. The A locations are the areas that the program is actually addressing the desired core competencies but did not previously check and should be amended to include. The evaluation of the current grid and the proposed amendments clearly indicates that the core competencies of the campus are reflected in the course offerings of the Architecture and Environmental Design Department.

	San Bernardino Valley College	Ą	A	A	A	Ą	Þ	Ą	Ą	A	ΔI	A
	Department: <u>Architecture</u>	ARCH 100	ARCH 101	ARCH 120	ARCH 145	ARCH 146	ARCH 200	ARCH 201	ARCH 220	ARCH 221	ARCH 250	ARCH 270
	For each course, use an x to identify the core competencies that are given a major emphasis and are measured.											
	1.1 Read and retain information	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	1.2 Write clearly				X	X						<u>A</u>
Commun.	1.3 Speak clearly	A	A				A	A		A	A	A
CO	1.4 Employ vocabulary of the subject studied	х	X	X	X	X	X	X	X	х	X	х
	1.5 Demonstrate active listening skills	<u>A</u>	A	A	A	<u>A</u>		A	A	A	A	<u>A</u>
	2.1 Find and interpret information	A	A		A	A		A	A	A	A	A
	2.2 Evaluate authority and bias of information											
đ	2.3 Utilize technology to organize and present information			х					х	х	X	
Info Conmp	2.4 Demonstrate working knowledge of basic computer function			X					x	X	X	
	3.1 Evaluate strengths, weaknesses and fallacies of logic											
	3.2 Locate, evaluate and select evidence to support or discredit an argument											
iking	3.3 Construct a persuasive argument							A	A			A
Critical Thinkir	3.4 Apply learned knowledge to new situations	х	X		X	X	X	X	X	X		х
Critic	3.5 Apply principles of scientific reasoning to solve problems	A	A	A	A	A		A				
	3.6 Defend a logical hypothesis to explain observed phenomenon				A			A	A			A
	4.1 Accept responsibility for own actions	<u>a</u>										
S	4.2 Demonstrate respect for a diversity of ideas and the rights of others											
Ethics	4.3 Exhibit personal, professional and academic honesty											
	4.4 Display behavior consistent with ethical standards w/in a discipline	<u>a</u>	X									

	4.5 Apply lessons from the past to ethical issues faced in the present											
	4.6 Evaluate own ethical beliefs in relationship to moral dilemmas											
	4.7 Assume civic, political or social responsibilities		<u>a</u>				<u>a</u>	<u>a</u>				
	5.1 Recognize own strengths and weaknesses	<u>a</u>										
	5.2 Recognize own biases and values											
ess	5.3 Recognize own learning style	<u>a</u>										
waren	5.4 Give and receive constructive feedback											Х
k Self A	5.5 Develop time management skills	A	A	A	A	A	A	A	A	A	A	<u>A</u>
pression 8	5.6 Set goals for educational, personal and professional development		<u>a</u>									
Creative Expression & Self Awareness	5.7 Set goals to create balance in personal and professional life	<u>a</u>										
ō	5.8 Evaluate diverse artistic works	Х	Х		Х	Х	X	X				Х
	5.9 Demonstrate creative thought through original expression		X				X	X			X	Х
versity	6.1 Demonstrate etiquette in face-to-face and written interactions	A	<u>A</u>	<u>A</u>	A	<u>A</u>	A	A	A	A	A	A
ural Di	6.2 Work effectively in group settings		<u>A</u>			<u>A</u>	<u>A</u>	<u>A</u>	A	A		Х
& Cult	6.3 Utilize conflict resolution skills	<u>A</u>										
Social Interaction & Cultural Diversity	6.4 Demonstrate knowledge of and respect for other cultures											
Social Ir	6.5 Demonstrate knowledge of and respect for one's own culture											

# Part III: Questions Related to Strategic Initiative: Institutional Effectiveness

Strategic Initiative	Institutiona	I Expectations							
initiative	Does Not Meet	Meets							
Part III: Institutional Effectiveness - Rubric									
Mission and Purpose	The program does not have a mission, or it does not clearly link with the institutional mission.	The program has a mission, and it links clearly with the institutional mission.							
Productivity	The data does not show an acceptable level of productivity for the program, or the issue of productivity is not adequately addressed.	The data shows the program is productive at an acceptable level.							
Relevance, Currency, Articulation	<ul> <li>The program does not provide evidence that it is relevant, current, and that courses articulate with CSU/UC, if appropriate.</li> <li>Out of date course(s) that are not launched into Curricunet by Oct. 1 may result in an overall recommendation no higher than Conditional.</li> </ul>	The program provides evidence that the curriculum review process is up to date. Courses are relevant and current to the mission of the program. Appropriate courses have been articulated or transfer with UC/CSU, or plans are in place to articulate appropriate courses.							

## Mission and Purpose:

SBVC Mission: San Bernardino Valley College provides quality education and services that support a diverse community of learners.

What is the mission statement of the program?

Architecture, Environmental Design, and Drafting 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 purpose relate to the college mission?

The mission of the college is to provide quality education to a diverse community of learners. The legislature and the state chancellor's office define our primary mission to support basic skills, career preparation and transfer. Architecture and Environmental Design program provides quality education to students requiring transfer

preparation as well as career preparation.

#### Productivity

Provide additional analysis and explanation of the productivity data and narrative in the EMP Summary, if needed. (Use data from charts 1 and 2 (FTEs; Enrollment; FTFE and WSCH per FTFE) on page 3 of this form). Explain any unique aspects of the program that impact productivity data for example; Federal Guidelines, Perkins, number of workstations, licenses, etc.

- The FTES and FTEF of the program steadily increased for five years. One of the programs goals was to improve the efficiency of the program. There has been a moderate increase in the efficiency from 323 to 363 and peaked to 442 in 2011-12. The program has low class caps in both the design and drafting classes due to the nature of the curriculum. To enhance this, the program has tried to stack similar classes without compromising the integrity of instruction. We strive for further success in efficiency, but not to the level of the campus as a whole, due to safety considerations and instructional limitations on the number of seats. For example, all drafting classes have a cap of 24, the first –year design classes have a cap of 25. We have a site license for the drafting classes for 24 students at one time, and the design classes require space and supplies that are difficult to supervise more than 20-25. This is much lower than the 35 at census required to meet the arbitrarily determined '525' efficiency desired by the chancellor's office.
- The Architecture and Environmental Design program has only one full time faculty member and the adjunct course offerings are rotated among several knowledgeable part time faculties. Relative comparison to the similar department at other single or multi-campus districts in terms of staffing this is very low. Specifically -Norco, Mount Sac, Chaffey and College of the Desert.
- Compliance with state, local, and federal regulations awareness and continuing education is important to students entering the field as well as persons currently practicing. Accessibility standards and the historic background through to the current standards and most recent changes are a timely topic. The Architecture and Environmental Design Club on campus sponsored an educational program with the local AIA. This was hosted on the campus in the library viewing room, table setting centerpieces were also designed and constructed by the club.
- Average time to respond to requests for service is outstanding. Both full time and adjunct faculty
  provide personal email and phone numbers to afford students access to faculty well beyond
  expected standards. Average time to respond to complaints or concerns which are primarily
  related to Blackboard issues is also addressed with extended access to faculty who are often
  easily able to address the student concern.
- •Results of user satisfaction surveys are outstanding within the courses. At the conclusion of each course after grades have been posted students are surveyed anonymously to comment on specific categories and make recommendations regarding future courses.
- Additional identified benchmarks of excellence for the department, and department standing relative to these benchmarks of excellence.
- The AIAIC professional organization offers annual scholarships to Community College Students. In addition AIA holds Design Awards once every 2 or 3 years recognition with a student division open to first through fifth year architectural students. The two students that received the two awards offered were both students in Associate Professor Jorgensen's courses.

## **Relevance and Currency, Articulation of Curriculum**

If applicable to your area, describe your curriculum by answering the questions that appear after the Content Review Summary from Curricunet.

The Content Review Summary from Curricunet indicates the program's current curriculum status. If curriculum is out of date, explain the circumstances and plans to remedy the discrepancy.

ICE Analitaatuma & Environmental Design			
Architecture & Environmental Design Course	Status	Last Content Review	Next Reviev Date
ARCH100 Environmental Design	Active	02/24/2014	02/24/2020
ENGR100 Engineering Career Exploration	Active	05/16/2011	05/16/2017
ARCH101 Environmental Design Communication	Active	02/24/2014	02/24/2020
ARCH120 Introduction to Computer Aided Drafting	Active	11/15/2005	11/15/2011
ARCH145 History of Architecture: Early Design through Gothic	Active	02/24/2014	02/24/2020
ARCH146 History of Architecture: Renaissance through Modern	Active	02/24/2014	02/24/2020
ARCH200 Architectural Design I	Active	11/15/2005	11/15/2011
ARCH201 Architectural Design II	Active	04/15/2005	04/15/2011
ARCH220 Architectural Computer Aided Drafting I	Active	04/15/2005	04/15/2011
ARCH221 Architectural Computer Aided Drafting II	Active	04/15/2005	04/15/2011
ARCH250 Materials and Construction	Active	04/15/2005	04/15/2011
ENGR265 Engineering Mechanics - Statics	Active	10/17/2011	10/17/2017
ARCH270 Portfolio Design	Active	04/15/2005	04/15/2011
DRAFT120 Introduction to Computer Aided Drafting	Pending	11/15/2005	11/15/2011
DRAFT125 Computer Aided Drafting, Design and Modeling	Pending	11/15/2005	11/15/2011
ARCH146 History of Architecture: Renaissance through Modern	Pending	02/24/2014	02/24/2020
ARCH200 Environmental Design	Pending	11/15/2005	11/15/2011
ARCH201 Architectural Design	Pending	04/15/2005	04/15/2011
ARCH220 Architectural Computer Aided Drafting I	Pending	04/15/2005	04/15/2011
ARCH221 Architectural Computer Aided	Pending	04/15/2005	04/15/2011

Drafting II			
ARCH250A Materials of Construction - Introduction	Pending	04/15/2005	04/15/2011
ARCH270x3 Portfolio Design	Pending	04/15/2005	04/15/2011
ARCH145 History of Architecture: Early Design through Gothic	Launched	02/24/2014	02/24/2020

# Articulation and Transfer

	With CSU	
List Courses above 100 where articulation or transfer is <u><b>not</b></u> occurring	Primary transfer schools are Cal Poly Pomona and Cal Poly San Luis Obispo which are impacted programs who will not articulate. The credits are offered and accepted. The placement of students is based on space available and portfolio review.	With UC
ARCH 100	Just aligned with Cal Poly first year (3 quarters our 2 semesters)	
ARCH 101	Just aligned with Cal Poly first year (3 quarters our 2 semesters)	
ARCH 145	Accepted at Cal Poly Pomona in Architecture and Urban Planning	
ARCH 146	Accepted at Cal Poly Pomona in Architecture and Urban Planning	
ARCH 200	Proposed for alignment with Cal Poly 2ed Year	
ARCH 201	Proposed for alignment with Cal Poly 2ed Year	
ARCH 250	In curriculum for	
ARCH 270	In curriculum for repetition and smaller increments	

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

The Architecture and Environmental Design Courses I and II have been revised to 4 unit courses with the purpose of having these courses complete a first year design sequence at the transfer level.

Architecture 145 and 146 are the Architectural History Courses which have been accepted at Cal Poly Pomona as meeting the Architectural History requirements for majors in both Architecture and City and Regional Planning, (letter on file)

Currently in curriculum process:

- Methods and Materials of Construction are in curriculum review to be segmented into smaller unit courses.
- Adding increased levels to portfolio design and development course so students can update portfolio when needed
- 200 and 201 revision to equate and align with a full year at Cal Poly three quarter courses
- Honors option for Architectural History

Continuous dialogue with Cal Poly Pomona has indicated that the highly restrictive transfer into the impacted program is in the process of being opened. The faculty has found that transfer students are highly successful and frequently more successful. As a result additional spaces will be opened for transfer students in upcoming years.

Articulation considerations are being reviewed during the content review process. However, Architecture is an impacted program in every California university. Student advance placement is also dependent on space availability which has historically been limited to 2-3 slots. The general consensus among universities is that students should construct a portfolio that demonstrates their skills. Then, upon review of the university faculty, students are admitted or not into second or third year sequences. This is a common practice for impacted university programs. We are increasing our transfer success into impacted and related programs from SBVC. This has been a major accomplishment and a testament that our curriculum adequately prepares transfer students for the rigors expected by these universities. The good news is that recent comments from university faculty have indicated that they have been monitoring the success of their students vs. transfer students and they may be modifying the program to admit additional transfer students.

The New School of Architecture, a fully accredited intuition through NAAB, National Architectural Accrediting Board is private school based in San Diego. We have **implemented an articulation agreement** with this school that is also offering a related major of Construction Management.

## Currency

Follow the link below and review the last college catalog data. http://www.valleycollege.edu/academic-career-programs/college-catalog.aspx

Is the information given accurate? Which courses are no longer being offered? (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?

Curriculum review process has been a long and arduous process for this program for a variety of reasons.

- Recent successes include the 100 and 101 courses have been amended to provide a smooth transition between the semester and quarter formats at transfer institutions. First year at

SBVC will meet first year at quarter based transfer institutions.

- Architecture History has been accepted at the local transfer institution of Cal Poly Pomona in Architecture, Urban Planning and Architecture as meeting their requirements and students do not need to repeat courses within their program. Suggestions from administration and faculty that the 146 and 145 Architectural History courses may be too rigorous for general education humanities course has been addressed. The curriculum committee just approved an Honors course in 145 and the same is proposed for the 146 course. This will allow the activities between the standard and the honors course to meet the needs of a greater range of students.

- Architecture 115 – In terms of meeting currency this is a new course proposal to introduce student's to the broad variety of professional programs and software available and on the horizon in the industry.

- Architecture 120 – This is a 4 unit introductory CAD course, is currently in curriculum review for unit reduction to 3 units and partial online. This is concurrent with the introduction of several 1-2 unit drafting courses in an attempt to meet student's needs.

- Architecture 200 and 201 will be modified to meet second year smooth transition.

- Architecture 250 in in the curriculum process with the intention of breaking this into several smaller segmented courses. Discussion with transfer institutions have expressed and opinion that this is acceptable.

- Architecture 270 a portfolio development course is in curriculum as a modification to reduce the units and to increase the number of times that it may be taken. This is a course that will better serve the needs of students if the portfolio develops with the student and is not a capstone only course. The portfolio can be developed for student focus and a transfer and placement document or a job interview portfolio. ARCH 250 is in the curriculum process of being segmented into smaller portions. ARCH 200 and 201 will be reviewed and aligned with Cal Poly's second year design sequence.

- ARCH 260 is a new course proposal for work experience in the design field.

- ARCH 295 is a new course pending proposal in curriculum for special topics.

The 200 level courses have not been offered in the recent academic year due to the reduction of course offerings and are being addressed with the modifications currently in curriculum review. The catalog is current at this time. The program is in the process of updating the drafting certificate and the architectural degree and will be updated in the next catalogue. IE the 100 and 101 units will be modified and Architectural History 145 / 146 Honors options will be updated.

The program is currently in curriculum process remedying the situation. The ARCH250 and ARCH270 are going through curriculum review to restructure the courses to support student needs and make these more efficient. We plan to keep these in the catalogue while implementing the course revisions through curriculum and building student base.

# Part IV: Planning

Strategic

#### Institutional Expectations

Initiative	Does Not Meet	Meets	
Part IV: Planning – Rubric			
Trends	The program does not identify major trends, or the plans are not supported by the data and information provided.	The program <u>identifies and describes</u> major trends in the field. Program addresses how trends will affect enrollment and planning. Provide data or research from the field for support.	
Accomplishments	The program does not incorporate accomplishments and strengths into planning.	The program incorporates substantial accomplishments and strengths into planning.	
Challenges	The program does not incorporate weaknesses and challenges into planning.	The program incorporates weaknesses and challenges into planning.	

What are the trends, in the field or discipline, impacting your student enrollment/service utilization? How will these trends impact program planning?

Bureau of Labor Statistics, BLS indications for Architecture, Landscape Architects and Public Administration (Urban Planning) all indicate growth sectors from increasing as expected at 10% to faster than average projections at 17%.

Data is located below in two summaries; Architecture and related industries and then Public Administration.

# **Summary - Architecture**



**Quick Facts: Architects** 

2012 Median Pay

\$73,090 per year \$35.14 per hour Bachelor's degree

Entry-Level EducationBacheWork Experience in a Related OccupationNone

On-the-job Training Number of Jobs, 2012 Job Outlook, 2012-22 Employment Change, 2012-22 Internship/residency 107,400 17% (Faster than average) 18,600



# Architecture and construction

Careers in the architecture and construction cluster involve designing and building homes, roads, and other structures. Nearly all of the <u>construction and extraction occupations</u> and many of the <u>architecture</u> and <u>engineering occupations</u> in the *OOH* are assigned to this cluster.

BLS counted about 7.8 million jobs in the SOC occupations that are assigned to the architecture and construction cluster. Median annual wages for these occupations ranged from \$23,940 for <u>landscaping</u> and groundskeeping workers to \$84,410 for <u>construction managers</u>.

More than half of the occupations in this cluster typically require a high school diploma or equivalent. However, specific designations range from less than a high school diploma and short-term on-the-job training for <u>carpet installers</u> to a bachelor's degree and an internship for occupations such as <u>architects</u>.

BLS projects most job openings in the architecture and construction cluster to be in occupations assigned to the construction pathway. The occupation expected to have the largest number of job openings in the cluster is <u>construction laborers</u>. (See chart 2.)

Job openings (thousands)Chart 2. Occupations assigned to the architecture and construction cluster that are projected to have the most job openings, 2012–22Construction laborers Landscaping and grounds keeping workers Carpenters Electricians\_First-line supervisors of\_construction trades and\_extraction workers01002003004005000100200300400500Sources: National Association of State Directors of Career Technical Education Consortium (Career Cluster); Bureau of Labor Statistics, Employment Projections program (projected job openings).

View Chart Data

Summary Government and Public Administration -

**Government and public administration** 

• Urban Planning,

- City and Regional Planning,
- Transportation Planning,
- Code Enforcement Officers
- Building Inspection
- •

Careers in the government and public administration cluster involve making laws, ensuring safety, and providing other public services. All of the <u>military careers</u> in the *OOH* are assigned to this cluster. However, BLS does not collect employment and wage data, designate education and training, or make projections for military specific occupations. Therefore, the information that follows excludes these occupations.

BLS counted about 1 million jobs in the nonmilitary SOC occupations that are assigned to the government and public administration cluster. Median annual wages for these occupations ranged from \$20,620 for legislators to \$76,890 for financial examiners.

Many of the occupations in this cluster typically require a bachelor's degree for entry, but specific designations range from a high school diploma or equivalent and short-term on-the-job training for transportation security screeners to a master's degree for <u>urban and regional planners</u>.

BLS projects most job openings in this cluster to be in occupations assigned to the governance pathway. The occupation projected to have the largest number of job openings in the cluster is <u>compliance</u> <u>officers</u>. (See chart 7.)

Job openings (thousands)Chart 7. Occupations assigned to the government and public administration cluster that are projected to have the most job openings, 2012–22Compliance officers\_Government programs eligibility interviewers Construction and building\_inspectors\_Court, municipal, and license clerks\_Tax examiners and collectors,\_and revenue agents01020304050600102030405060Sources: National Association of State Directors of Career Technical Education Consortium (Career Cluster); Bureau of Labor Statistics, Employment Projections program (projected job openings).

# View Chart Data

7. Occupations assigned to the government and public administration cluster that are projected to have the most job openings, 2012–22

Occupation	Job openings, projected 2012–22 (thousands)
Tax examiners and collectors, and revenue agents	23.9
Court, municipal, and license clerks	33.8
<b>Construction and building inspectors</b>	36.7
Government programs eligibility interviewers	41.6
<b>Compliance officers</b>	55.3
ces: National Association of State Directors of Career Techni	ical

Sources: National Association of State Directors of Career Technical Education Consortium (Career Cluster); Bureau of Labor Statistics, Employment Projections program (projected job openings).

- The program will continue to develop student readiness for transfer.
- The program will continue to explore career and placement opportunities within the trades for drafting.
- Hybrid and online offerings for Methods and Materials courses will continue to be developed
- The program will continue to develop related field opportunities including City and Regional Planning and Landscape Architecture

#### **Accomplishments and Strengths**

Referencing the narratives in the EMP Summary, provide any additional data or new information regarding the accomplishments of the program, if applicable. In what way does your planning address accomplishments and strengths in the program?

**Design Awards and student scholarships** earned by students over other community colleges clearly demonstrates that students are achieving desirable skills and knowledge.

**The number of women** represented in the courses is considered outstanding in what has historically been a male dominated career field. In the 1970's local high schools did not even allow girls to take drafting courses and colleges enrolled less than 5 percent women, The -41% women and 58% men in the program enrollment is an outstanding positive trend.

The number **of students accepted as transfer students without** a degree from Valley or a Degree into both Architecture, and Urban Planning majors at the four year colleges.

**Honors courses distinctions** at the San Bernardino Valley College campus have completed the technical review level in the curriculum review process.

**Cal Poly Pomona** is accepting the SBVC Architectural History courses for Architecture, Urban Planning and Landscape Architecture as well as USC.

**Articulation agreements** have been developed with the New School of Architecture located in San Diego and soon to be opening campus in the Inland Empire.

Students have also **transferred and demonstrated success** at California Baptist University another private university located in Riverside.

**Work experience and special topics** opportunities have been provided for students, however without units or credits at this time, is in the process of being remedied through curriculum,

**The program has many accomplishments**. The program identified challenges in efficiency and has worked to improve that with stacked labs and structured sequence offerings. The program identified its on-line offerings as strength and has evaluated curriculum through content review identified innovative ways to improve access and efficiency through hybrid courses and alternative structures. The on-line course material for CAD has been through many hours of development and is ready for implementation in 2016.

**The program has used SLO** results to identify weaknesses in student learning and improve student learning through curriculum delivery innovations.

## Challenges

Referencing the narratives in the EMP Summary and/or your data, 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?

The longstanding challenge of articulation into an **impacted major** will continue to be monitored and the student transfer opportunities developed

**Hybrid course** offerings will be explored as a support to students in online courses to explore additional support of student success.

**Degree and certificate** barriers at the campus level for students will be explored beyond the campus curriculum process

**Trends** – proposing new courses to overview the new software has recently completed the technical review process and will be progressing to the full committee level.

**Special Topics** – A special topics course has been proposed and is in the initial stages of curriculum development. This will allow students the opportunity to explore specialized opportunities of investigative education in the areas of Architecture and Urban Planning or Landscape Architecture that relevant but do not fit within the curriculum of other courses.

**Work Experience** - The program identified the drafting component as a weakness and has incorporated plans to broaden the appeal of the courses to a variety of fields (engineering, GIS technicians, landscape design, and transportation planners) to improve the utility of the courses and enrollment. In addition the program has secured the donation of additional software (REVIT) that will make the drafting program more competitive and directly applicable to the workforce

**Studio Space** – the architecture program has the use of a one room computer lab. The increased sharing of this space has made it difficult to have additional open lab/ studio time for students. Projects and models that students should construct and develop are not always compatible with a computer lab or shared room with classes that are not respectful of student projects.

# V: Questions Related to Strategic Initiative: Technology, Campus Climate and Partnerships

Strategic Initiative	Institutional Expectations		
	Does Not Meet	Meets	
Part V: Tech	nology, Partnerships & Cam	pus Climate	

Program does not demonstrate that it incorporates the strategic initiatives of Technology, Partnerships, or Campus Climate.	Program demonstrates that it incorporates the strategic initiatives of Technology, Partnerships and/or Campus Climate.
Program does not have plans to implement the strategic initiatives of Technology, Partnerships, or Campus Climate	Program has plans to further implement the strategic initiatives of Technology, Partnerships and/or Campus Climate.

Describe how your program has addressed the strategic initiatives of technology, campus climate and/or partnerships that apply to your program. What plans does your program have to further implement any of these initiatives?

#### Partnerships -

- The Architecture and Environmental Design program has partnered with the San Bernardino Symphony for the past few years bringing outstanding art and architectural experiences to the student community of SBVC. The historic California Theater is able to be accessed by students for a cultural experience at a substantially reduced cost. In excess of 2,000 students have participated in this outstanding opportunity made possible by Judy Bruer and The San Bernardino Symphony.
  - A student has accepted the challenge of developing a special booklet for the San Bernardino Symphony. This booklet will benefit the younger people of the San Bernardino area with a group of educational activities based off of images of the theater. Architecture features will be abstracted as well as other images of the symphony events.
  - AIA SBVC the local Inland California Chapter of the American Institute of Architecture has increased student memberships and now has a student representative that attends the AIA Board meetings. AIA has provided design competitions and scholarships to community college students. In recent years SBVC has participated in student memberships, and has demonstrated success winning awards at design completions and scholarships.
  - **Habitat for Humanity** has partnered with SBVC to provide an Earth Day event. About 20 students last year developed projects and provided demonstrations to the public at a Saturday event. With this being Habitats most successful event the students were invited back this year.
  - Students have volunteered in various stages of the construction of a Habitat Home in San Bernardino on Ivy Street.

**Lowe's Home Improvement** – has supported the campus with almost 100 building kits for the students at the elementary school supporting our outreach and developing student interests.

**San Bernardino public art** display on 4-11-15 honored an architect students work from one of the courses at the California Theater exhibition and on stage during the symphony program.

- Discounts on paint and supplies for SBVC student campus improvement projects.
- Students have served as docents and volunteers at a variety of events.
  - $\circ$   $\,$  The reopening of the historic Frank Lloyd Wright house April 2015  $\,$
  - Mid Century Modernism Week April 2015
    - Multiple events from specific homes, featured lectures, book signings etc.
  - $\circ$  Ken Kellogg Architect special site and home tours various dates
  - AIA Design Awards program December 2014
  - Growers association construction of the California State Capital building out of cans at the Palm Springs Convention Center

- CSI Construction Specification Institute holds monthly meetings and educational events. The
  president of this organization has provided student scholarships to attend these events. Topics
  such as the use of drones in the industry, the transportation complex in Anaheim and new
  materials have benefited our students along with the opportunity to meet with industry
  professionals.
- **Simpson Strong Tie –** a local manufacturer of building connectors has provided an instructional day and tours of their testing lab, manufacturing and distribution facilities.
- **Faculty** has participated in local elementary science fair judging, and guest speaking on special topics

## Technology –

-All courses in the program incorporate technology in the instructional environment. Blackboard shells support faculty and student communication to achieve a high level of rigor and information exchange.

-Architecture Computer Lab utilizes CAD technologies including the three dimensional building information management system, REVIT recent version. This provides students who wish to enter the workplace the ability to meet workplace expectations.

**Campus Climate** – Students in the Architecture and Environmental Design Program have provided a variety of community and SBVC campus climate improvement proposals and implemented a few projects.

- Past projects have included work with the City of San Bernardino, Recreation, Parks and Water divisions, Kimberly Crest Foundation in Redlands, The Edward Dean Museum, Riverside County, City of Redlands and AIA.

- A small team of students developed a lobby redesign for the Health and Life Sciences reception and office area. This design was accepted and endorsed by the HLS administration and staff. It is pending funding.

- Students painted the areas behind the inspirational quotes displayed in the PS hallways. The paint was color coded by floor and provided visual contrast to make the quotes visible to the passer by.

-Students designed and created office signs for faculty in the PS Building room 111 where it was difficult for students to specifically locate instructors. The success of these signs generated additional requests from IT and then from the STEM program located nearby. These signs were also developed as an extra out of class activity for students.

- Alcove areas in the hallways of the Physical Science building have received approval for painting and are in the process of being implemented. These depict geometric designs based on color abstraction exercises.

Students have evaluated the campus and student needs and proposed a variety of campus improvement projects including but not limited to:

- Student seating with study and conversation areas in the shade
- Parking arrangement and striping for the gravel parking lot
- Improvements to planter and landscape areas on campus

The students are currently involved in a multidisciplinary project with the communications media class recording and videotaping Living Treasures featuring local architects of distinction. The noted Mid-Century Architect Clare Day now in his 90's was interviewed. This is a totally student centered project. Robert McCann, world famous theater architect and architect of the Riverside

Fox Theater has visited the campus and conducted the first phase student interview. Currently in the editing process these interviews may be broadcast over KVCR or will at least benefit students on campus.

Multiple LEED Certified structures have been experienced by students during the construction phases and post construction pre occupancy and post occupancy.

# **VI: Previous Does Not Meets Categories**

Listed below, from your most recent Program Efficacy document, are those areas which previously received "Does Not Meet." Address each area, by describing below how your program has remedied these deficiencies, and, if these areas have been discussed elsewhere in this current document, provide the section where these discussions can be located.

## SPECIFIC DETAILS TO BE PROVIDED BY PROGRAM REVIEW COMMITTEE