

Section A - Enrollment and Demographics

Examine the enrollment and demographic data in Section A of the datasheet.

- Is your program's enrollment increasing, decreasing, or remaining constant?

 Increasing
- 2. Describe the reason(s) for the trend in your program's enrollment (600 characters max).

Enrollment has increased from 3,669 in 2012 to 4,396 in 2014. While some disciplines (e.g. MICR, PHSO) have stable enrollment, we have seen enrollment increases in ANAT and BIOL, the latter largely driven non-majors biology enrollment (BIOL V01/L). Enrollment in these areas may be bolstered partly by repeating students due to low success rates. Success rates have been low, but relatively stable in BIOL V01/L but have declined more in ANAT beginning in 2013 (down 7.8% from 2012) and continuing to decline in 2014 (down 4.4% from 2013). This could be limiting enrollment in PHSO and MICR.

- 3. Are the demographics of students in your program similar to those of the College, as a whole? No
- 4. If no, please describe why they differ (600 characters max).

We match the college ethnic makeup very closely, although males are less represented in Biology as compared to the College. This may be due to the pre-health students who contain more females than males. It will be interesting to compare ethnic make up for students who take Anatomy, Physio, and Micro to see if we are losing a specific ethnic group or gender in the pre-nursing pathway. It would also be interesting to see the specifics for our other courses. We can pull this data in Sp 16 and look for other equity gaps.

5. Are you able to increase your program's enrollment and/or enroll more students from underrepresented groups?

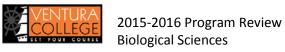
No

If yes, please create an initiative in Section H that describes how your program will do this, and what resources, if any, are necessary to achieve it.

6.	If no, please describe why your program is unable to do this. (600 characters max).
	We are unable to increase enrollment in even our most popular courses (BIOLV01/L and ANAT) due to limited lab space.
	n B - Course Success Rate
	ne your program's course success rate data in Section B of the datasheet. To satisfy an
	litation requirement, the College has set a standard of 66.7% for the course success rate that all ims are expected to meet.
1.	Was your program's course success rate in 2014 higher than the college standard of 66.7%?
2.	Was your program's course success rate in 2014 higher than the overall college success rate? Yes
3.	Is your program's course success rate increasing, decreasing, or remaining constant? Decreasing
4.	Are there gaps between demographic groups (ethnicity, gender) in your program's course success rate?
5.	Yes Briefly describe the reason(s) for the trend in your program's course success rate, and for any gaps between demographic groups (600 characters max).
	Our program's course success rate is trending downward during 2013 and 2014 (63.1%), down from a recent high in 2012 of 67.8%. This may be due to changing trends in the makeup of our student population given the recent regional economic changes. The gaps in our course success rate between
	the three largest ethnic groups, Hispanic, white and Asian, resemble the gaps seen college-wide. The more variable course success between genders in our program is difficult to explain, but may be due to students of specific genders preferring courses preparatory for gender-biased jobs.
6.	Are you able to increase your program's course success rate and/or close gaps between demographic groups? Yes

If yes, please create an initiative in Section H that describes how your program will do this, and

what resources, if any, are necessary to achieve it.



7.	If no, why not? (600 characters max)
	n C - Productivity
	ne your program's productivity data in Section C of the datasheet. The college has set an overall ctivity standard of 525.
1.	Was your program's productivity in 2014 higher, lower, or equal to the overall college standard of 525?
	Higher
2.	Is your program's productivity increasing, decreasing, or remaining constant?
2	Remaining Constant
3.	Is your program's course fill rate increasing, decreasing, or remaining constant? Decreasing
4.	
_	(600 characters max).
	Both productivity and fill rate peaked in 2011 in biology, mostly due to over-enrollment of lecture
	and lab sections. Over-filling labs is an unsafe practice and 2014 reflects more adherence to course caps. Productivity is still well over the VCCCD standard and fill rates remain high at 94% in 2014.
	3

5. Are you able to increase your productivity and/or course fill rate? No

If yes, please create an initiative in Section H that describes how your program will do this, and what resources, if any, are necessary to achieve it.

6.	If no, why not? (600 characters max)
	The Biology program does not intend to seek increase in productivity to maintain safe laboratory environments for students and staff and also to avoid increases in student:instructor ratios.

Section D - Degrees and Certificates Awarded

Does your program offer a degree or certificate of achievement?
 Yes

If yes, please examine the degree and certificate data on Section D of the datasheet and answer the questions below. If no, skip to Section E.

To satisfy an accreditation requirement, the college has set a standard to award a minimum of 1,178 degrees and certificates each year.

2. Briefly describe the trend in the number of degrees and certificates that your program has awarded over the last five years (600 characters max).

Biology had a small growth trend in awards in the years 2010-13. In 2014 the numbers went down. Some factors impacting this trend include: a) VC's Biology transfer students usually do not finish an award, b) they usually go to a UC, but our AA and the new ADT do not prepare them for that path, and c) if they earn an award, it is more often a Gen. Studies AA/AS in Natural Sciences (for which Biology does not get credit).

In Biotechnology a major drop in enrollment (as compared to further back in time) occurred, (partly because a "dropped" articulation) leading to few awards.

Programs that have awarded fewer than 15 degrees and certificates over the past five years may be placed on possible discontinuance.

3. Has your program awarded fewer than 15 total degrees and certificates over the past five years? No



4.	If yes, please describe the reason(s) why your program has awarded fewer than 15 total degrees and certificates (600 characters max). Also please create an initiative in Section H that describes how your program will increase the number of degrees/certificates awarded, and what resources, if any, are necessary to achieve it.
5. 5.	Are there gaps between demographic groups (ethnicity, gender) in your program's awarding of degrees and certificates? Yes If yes, please describe the reasons for any gaps between demographic groups (600 characters
ο.	max).
	Ethnicity seems to waver between Hispanic and White groups. The Hispanic peak seen in 2011-2 may be a result of incoming demographics and/or MESA and/or other counseling. Gender representation does not seem to have a consistent pattern but what we see may be informed by local employment trends.
7.	Are you able to increase the number of degrees/certificates that your program awards each year and/or close any gaps between demographic groups? Yes
	If yes, please create an initiative in Section H that describes how your program will do this, and what resources, if any, are necessary to achieve it.

8.	If no, why not? (600 characters max)
1. 2.	
tio	n E - Student Learning Outcomes
	Are there any courses your program offers that have never been assessed?
Ι.	Yes
2.	If yes, why haven't they been assessed? (600 characters max)
	Most of the courses that have not been assessed have had only part-time staff and sometimes multiple turnovers in the last 3-5 years. While regular offers and efforts to aid these faculty in SLO assessment have been made, this remains a problem operationally (partly as these faculty are not compensated for this work, which occurs outside of classroom hours), Full-time faculty usually try to participate but sometimes are overloaded by other commitments. These argue for more full-time faculty.
3.	What percentage of your program's courses have assessed at least half of their SLO's? 0%
4.	Have you made any changes to courses based on the results of SLO assessment? Yes
5.	If yes, briefly describe the changes were made and the impact they had on student learning. (600 characters max).
	Biology has received equipment through Program Review such as models, bones, fish chillers, etc. which has provided more opportunity for more students to get better hands-on experience in our laboratories. We've also received audio-visual/computer supplies and equipment that better enable students to observe and examine organisms (including components) so they have a more successful experience in class.



6.	How many courses have assessed SLO's, implemented a change, and then re-assessed the SLO's
	(i.e. "closed the loop")?

4 Courses

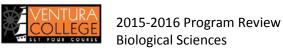
7.	How closely have you adhered to your SLO rotational plan?
	Mostly

/.	Mostly
8.	•
	Not enough faculty time to help with the assessment, particularly insufficient full-time faculty.
9.	How does your program facilitate the achievement of the college's institutional learning outcomes? (600 characters max)
	Relevenat ISLOs are incorporated into course design and are part of Biology's rotational plan.
10	. How many department/program meetings have you held in the previous year in which SLO's

have been discussed? 9

11. Are you able to improve the student learning outcomes for your program (i.e. number of SLO's assessed, adherence to rotational plan, student SLO attainment, etc.)? Yes

If yes, please create an initiative in Section H that describes how your program will do this, and what resources, if any, are necessary to achieve it.



12	2. If no, why not? (600 characters max)
ļ	
Sectio	n F - Budget
1.	Have there been any significant changes in your program's budget over the past 3 years?
	No
2.	How have these changes impacted student learning? (600 characters max)
	Riology lab sections have increased from 95 sections to 112 sections in the last 3 years a 17.0%

in larger groups than a lab pair resulting in less hands-on experience. Labs are not updated to save funds. Examples include purchasing non-conductive bacterial colony counters, adding a respiration lab exercise, fully utilizing BioPac units due to lack of consumables, continuing the urinalysis lab, and updating the enzyme lab. Unsafe equipment has not been replaced resulting in shortages.

Section G - Previous Year Initiatives

Program	Funding Category	Initiative ID	Initiative Title	Initiative Description	Cost	Grants/ Categorical	College Funds	Program Priority	Division Priority	Committee Priority	College Priority	Funded	Status	Outcome
Biology	Faculty	BIOL1208	Full Time Biology Faculty Hire	A tenure track Biology faculty position to support the needs of the department. Ranked number 2 priority by the division.	120,000		120,00 0	Н	H	Н	Н	No	Ongoing	Revise to Anatomy faculty
Biology	Faculty	BIOL1501	Full Time Biology Faculty Hire	A tenure track Biology faculty position to support the needs of the department. Ranked number 4 priority by the division.	120,000		120,00 0	M	M	M	M	No	Ongoing	Revise to High Priority
Biology	Computer	BIOL1411	Upgrade of Computer and A-V Instructional Technology in Biology Classrooms	Purchase of an instructional computer and HD projector and cabling in Microbiology (Sci-311) to	23,500		12,000	L	L	L	L	Yes	Pending	Revise to include SCI-318, upgrading all computers with new graphics



augment the			cards, and
use of the			obtain full
new			funding
instructional			(new
microscope			estimate
purchased			\$24,000)
last year.			- IT
Instructor			dependent
demonstratio			dependent
n of microbes			
as well as			
teaching			
microscopy			
skills to			
students in			
Microbiology			
are important			
components			
of the course,			
but we			
presently lack			
the			
instructional			
computer and			
projector to			
fully realize			
the potential			
of our new			
instructional			
microscope in			
this capacity.			
HD projectors			
and cabling			
(Sci-313, Sci-			
316), Bule-			
ray player			
(Sci-316), and			
doc camera			



				(Sci-315) are important in showing biological organisms and processes in Majors Biology, Introductory Biology, and other courses.									
Biology	Computer	BIOL1509	Upgrade of Computer Technology in Physiology Classroom	Upgrade Computers in Sci-318 (Physiology/A natomy labs). Add 6 additional computers and large monitors, and replace 6 existing moniors with large monitors in Sci-318 for use in Physiology. This will allow smaller groups to perform PhysioEx lab simulations as well as Biopac Physiology measurement	7,200	7,200	Н	Н	Н	Н	No	Ongoing	Revise to Low Priority



				s and data analysis.									
Biology	Facilities	BIOL1503	Expansion and Upgrading of Biology Laboratory Facilities	Electrical, ventilation, lighting, and other infrastructure work in Biology labs; Replacement of lab stools; purchase of stackable chairs for Physiology. Investigate the possibility of converting Sci-313 into a laboratory room, and if not, investigation into reconfiguration of projector screens and seating/desks in Sci-313.	3,608	3,608	Н	Н	Н	Н	No	Discontinued	Divide into 2 new Initiatives (1 for SCI 313 renovation BIOL1608 and the other for a new Anatomy lab facility BIOL 1607)
Biology	Equipment	BIOL1506	Acquisition of Stockroom Labware Steam Dishwasher	Purchase of a labware steam dishwasher for the Biology stockroom and repair of associated	9,500	9,500	М	M	М	M	Yes	Completed	Installed



			1	1	1		
	plumbing.						
	Biology is a						
	glassware						
	intensive						
	discipline, and						
	the cleaning						
	of glassware						
	as well as						
	safety goggles						
	is essential to						
	the proper						
	preparation						
	of labs for						
	various						
	Biology						
	classes,						
	including						
	Microbiology						
	and Majors						
	Biology where						
	this is a						
	potential						
	contaminatio						
	n issue. The						
	present						
	dishwasher is						
	old, not						
	functioning						
	properly, and						
	is likely						
	irreparable,						
	and						
	associated						
	plumbing is						
	clogged and						
	ineffective for						
	drainage						
	while using						



		1	1			1	1	1		1			ı	1
				the										
				dishwasher.										
				This is a										
				potential										
				safety issue in										
				the context of										
				preventing										
				the use of										
				contaminated										
				glassware in										
				classes.										
Biology	Equipment	BIOL1508	Acquisition	Purchase of 4				M	М	M	M	Yes	Pending	here but not
			of	Isotherm	17,186		17,186							installed -
			Microbiolog	incubators for										cabinetry
			y and Majors	Microbiology										modification
			Biology	and Majors										needed (M
			Isotherm	Biology labs.										& O
			Incubators	Essential for										understaffe
				providing										d)
				appropriate										
				growth										
				conditions for										
				microbes										
				and/or cells										
				used										
				extensively in										
				Microbiology,										
				Majors										
				Biology, and										
				Biotechnology										
				. Some labs in										
				the										
				curriculum										
				cannot be										
				taught										
				without										
				functioning										
				incubators,										



				and those we have are unable to maintain appropriate microbial and cell growth conditions and are irreparable.									
Biology	Equipment	BIOL1502	Acquisition of Biology Equipment	Micropipettor s, Bunsen burners for Microbiology, Physiology, Lab Techs. Presently we do not have Bunsen burners in Microbiology, and use older large flame burners which are ineffecient in the Microbiology lab. We need additional micropipettor s so that there are enough for each lab group in Microbiology	4,265	4,265	M	M	M	M	No	Ongoing	In addition to current burners being inefficient, they are also unsafe. Revise to Low Priority



				and Physiology.									
Biology	Equipment	BIOL1507	Acquisition of Stereo Microscopes for Biology labs.	Purchase of a set of 12 McBain stereo microscopes for the introductory Biology lab. This will allow close observations of specimens not now possible.	20,150	20,150	L	L	L	L	No	Ongoing	Revise to 13 microscopes , new cost estimate \$17,000 Medium Priority

Section H – 2015-2016 Initiatives

Program	Initiative ID	Initiative Title	Initiative Description	Cost	Funding Source	Initiative Category	Educational Master Plan Goal	Expected Improvement	Program Priority	Division Priority	Committee Priority	College Priority
Biology	BIOL1601	Autoclave Boiler replacement	Safety item: Essential for preparing media for microbiology, biology and biotech labs. Essential for decontaminating waste from microbiology and biology labs as well as processing medical waste from the health office. Autoclave is maintained on annual contract, but boiler replacement is not considered maintenance. Autoclave is certified by the county for disposal of medical waste.	\$9000	College Funds	Equipment	□Goal 1 □Goal 2 □Goal 3 □Goal 4 □Goal 5	☐ Enrollment ☐ # Under- represented students ☐ Course Success Rate ☐ Productivity/ Fill Rate ☐ Degrees/ Certificates ☐ Close equity gaps	Req High Low	Req High Med Low	Req High Low	Req High Low



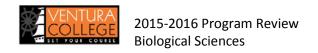
Blology	BIOL1602	Student worker budget	To support all of Biology's laboratory courses we need a defined student worker budget of at least 15 hours per week for the full year (this includes essential work between semesters).	\$8250	College Funds	General Fun	☐ Goal 1 ☐ Goal 2 ☐ Goal 3 ☐ Goal 4 ☐ Goal 5	Enrollment # Under- represented students Course Success Rate Productivity/ Fill Rate Degrees/ Certificates Close equity gaps	Req High Med Low	Req High Med Low	Req High Med Low	Req High Med Low
Program	Initiative ID	Initiative Title	Initiative Description	Cost	Funding Source	Initiative Category	Educational Master Plan Goal	Expected Improvement	Program Priority	Division Priority	Committee Priority	College Priority
Biology	BIOL1603	Additional cost-of-doing-business Supply Budget increase	The costs for all our supplies increases each year, yet our budget has not increased in over 7 years While we have economized as much as possible, Blology is now also serving almost 18% more lab sections than it	20 % more beyond current	College Funds	General Fun	Goal 1 Goal 2 Goal 3 Goal 4 Goal 5	☐ Enrollment☐ # Under- represented students☐ Course Success Rate☐ Productivity/ Fill Rate☐ Degrees/ Certificates☐ Close equity gaps	Req High Low	Req High Med Low	Req High Med Low	Req High Low

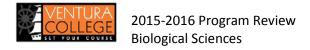


Biology	BIOL1604	Laboratory stools	did 3 years ago. The increase requested matches closely the increase in BIOL VO1L sections since 2008 with a small addition for inflation. 112 replacement stools for aging and broken ones in Biology laboratories. In this semester alone we've lost 7 in the last 2 weeks. These plastic and metal stools are original equipment of the SCI Bldg and are becoming unsafe.	\$21,500	College Funds	Facilities	Goal 1 Goal 2 Goal 3 Goal 4 Goal 5	Enrollment # Under- represented students Course Success Rate Productivity/ Fill Rate Degrees/ Certificates Close equity gaps	Req High Med Low	Req High Low	Req High Low	Req High Low
Program	Initiative ID	Initiative Title	Initiative Description	Cost	Funding Source	Initiative Category	Educational Master Plan Goal	Expected Improvement	Program Priority	Division Priority	Committee Priority	College Priority
Blology	BIOL1605	Clickers for classrooms	Clickers provide a means to survey and quiz		College Funds	Computer	Goal 1 Goal 2 Goal 3	Enrollment	☐Req ☐High ☑Med	Req High Med	Req High Med	Req High Med



			students in an engaging and active manner in a classroom or lecture hall. By adding this technology to some of our classrooms we hope to increase attention, retention and success in our courses. (2 sets of 80) Section B-6				□Goal 4 □Goal 5	# Under- represented students Course Success Rate Productivity/ Fill Rate Degrees/ Certificates Close equity gaps	Low	Low	Low	Low
Biology	BIOL1606	District Initiative – Chemical Safety Training – Professional Developmen t	A training course about chemical safety, disposal, and storage for the chemistry and biology laboratory technicians and other handlers of chemicals in the District. This will enable us to update our chemical hygiene plans. It requires an inperson course tailored for our lab facilities and needs. (Estimated cost for 10 staff)	\$4800.00	College Funds	Classified	Goal 1 Goal 2 Goal 3 Goal 4 Goal 5	☐ Enrollment ☐ # Under- represented students ☐ Course Success Rate ☐ Productivity/ Fill Rate ☐ Degrees/ Certificates ☐ Close equity gaps	Req High Low	Req High Med Low	Req High Med Low	Req High Med Low





Educational Master Plan Goals

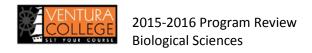
Goal 1: Continuously improve educational programs and services to meet student, community, and workforce development needs.

Goal 2: Provide students with information and access to diverse and comprehensive support services that lead to their success.

Goal 3: Partner with local and regional organizations to achieve mutual goals and strengthen the College, the community and the area's economic vitality.

Goal 4: Continuously enhance institutional operations and effectiveness.

Goal 5: Implement the Ventura College East Campus Educational Plan.



<u>Section I – Process Assessment</u>

Dean Verification:

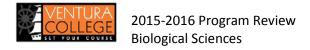
provide comments (optional):

How have the changes in the program review process this year worked for your area?

How would you improve the program review process based on this experience?

Appeals
After the program review process is complete, your program has the right to appeal the ranking of initiatives (i.e. initiatives that should have been ranked high but were not, initiatives that were ranked high but should not have been), the division's decision to support/not support program discontinuance, or the process (either within the department/program or the division) itself.
If you choose to appeal, please complete the Appeals form (Appendix E) that explains and supports your position. Forms are located at the Program Review VC website.
The appeal will be handled at the next higher level of the program review process.
Section I – Submission Verification
Preparer:
Dates met (include email discussions):
List of Faculty who participated in the program Review Process:
Preparer Verification:
☐ I verify that this program document was completed in accordance with the program review process.

☐ I verify that I have reviewed this program review document and find it complete. *The dean may also*



APPEAL FORM

The program review appeals process is available to any faculty, staff, or administrator who feels strongly that the prioritization of initiatives (i.e. initiatives that were not ranked high but should have been, initiatives that were ranked high but should not have been), the decision to support or not support program discontinuance, or the process followed by the division should be reviewed by the College Planning Council.

Appeal submitted by: (r	name and program)
Date:	
Category for appeal:	Faculty
	Personnel – Other
	Equipment- Computer
	Equipment – Other
	Facilities
	Operating Budget
	Program Discontinuance
	Other (Please specify)
Briefly explain the proce	ess that was used to prioritize the initiative(s) being appealed:
Briefly explain the ratio changed:	nale for asking that the prioritization of an initiative/resource request be
Appeals will be heard b	by the College Planning Council. You will be notified of your time to present.