Program Review Peer Review

Program/Division/Area Name:	Math, Science & Engineering
Date:	5/31/2022

On behalf of the Program Review Committee (PRC), we thank you for your time and effort in completing the Program Review this year and for your ongoing efforts to continuously improve AVC's programs and services for our students. Your program review allows the rest of AVC to better understand your efforts and how they support the college mission, vision, EMP and other goals.

Program Review Committee Feedback

Program Review Report Section	*Exemplary:* Reflects a clear and thorough report that presents a well-documented review of the program.	*Adequate:* The self-study adequately presents program information for each section e.g. analysis of data; narrative information is provided regarding goals/objectives, planning, and recommendations relating to the analysis and use of data, institutional learning outcomes, and mission.	*Improvement Needed:* One or more sections of the report are lacking and/or contain some inaccuracies. The report must be revised and resubmitted in order to meet the requirements of the program review process. Complete/revise Part(s) mentioned in the Comments Section.	*Comments:*
Program Overview, Overall	☐	X	☐	
1.1.Program's contribution to the District Mission	X	☐	☐	
1.2.Program highlights	☐	X	☐	See comments below
2.A. Results of environmental scan information for program	☐	X	☐	See comments below

2.B. Analysis of program review data	☐	X	☐	See comments below
2.C. Progress towards SLO/PLO/OO Action Plans	☐	X	☐	See comments below
2.D. Progress towards past program review goals	☐	X	☐	See comments below
3. 2020-2021 Planning: Division/Program/Area Goals	☐	X	☐	See comments below
4. Resource Requests that Support Program Needs	☐	X	☐	See comments below

COMMENTS:

Overall, good Program Review, but varies notably by discipline. For the most part, data and analysis offered supports your goals and resource requests. Most areas provided an insightful and thoughtful look at their data and explained what is needed to serve our students! We enjoyed reading about the great work your division is doing!

Additional Comments by Discipline:

AGRI: Adequate considering planned discontinuation, but usually the Program Review document is used to support the discontinuance and lack of demand for the program.

ASTR: In Part 3 Goals, only your goal should be in the 3rd column and each goal needs to be focused on student learning. Goals 2, 3 & 4 should be re-worded as student-focused goals and then the need for software, equipment, etc., should be listed in the fourth column "Steps to be taken to achieve goal." The resource requests in Part 4 are well supported by the goals in Part 3.

BIOL: Very thorough SWOT analysis. In Part 2C, you can just list the actions plans and provide a brief update regarding progress. In Part 4, each resource request listed needs be obviously connected and supported by at least one goal in Part 3. That connection is apparent for some resource requests, but not for others. For example, the request for additional faculty and for storage cabinets, does not seem to be connected to your goals in Part 3.

CHEM: In Part 1.1, just describe how your program supports the district mission. In Part 1.2, this is a place to brag about program highlights and accomplishments. Requesting to hire new faculty due to a faculty retirement does not belong here. In Part 2B SWOT

Analysis, Opportunities are external factors that contribute to the program and Threats are potential problems or risks caused be external factors that may affect the program. In Part 2C, you can just list the actions plans and provide a brief update regarding progress. In Part 3, Goal #3 could use a little more explanation and should be measurable, such as "Increase undergraduate research participation by 20%." The resource requests in Part 4 are well supported by the goals in Part 3.

CIS: In Part 1.2, "The Computer Sciences Discipline has produced approximately 9.6% (303 of 3,150) of AVC degrees and certificates awarded last academic year "doesn't seem to be true. The data provided shows that 5 degrees and 5 certificates awarded, which is vastly different than 303. In Part 2A, Advisory Committee recommendations are required for CTE programs. The labor market data should be updated, as data projections are available for 2018-2028. In Part 2B, your SWOT analysis is anecdotal and could be strengthened with data. Opportunities are external factors that contribute to the program and Threats are potential problems or risks caused by external factors that may affect the program. In Part 2C, you need to list the actions plans and provide a brief update regarding progress. In Part 2D, you need to list the past Program Review goals and provide a brief update regarding progress. In Part 3, the first column should just be a goal # and maybe a one-word label that helps you identify the goal. The actual goal should be in the 3rd column. Goal #4 is not a valid goal, but rather a resource request. Hiring faculty is not a goal, but possibly a step to be taken to achieve the real goal, which is likely something related to improving student success. Please re-phrase the goal. The fourth column should clearly and concisely list steps to be taken to achieve the goal. In Part 4, each resource request listed needs be obviously connected and supported by at least one goal in Part 3. As currently, most of your resource requests are not supported by your goals.

ENGR: In Part 1.1, just describe how your program supports the district mission. In Part 2A, *if* Engineering is a CTE program, then labor market data and advisory committee recommendations should also be included here. In Part 2B, the SWOT analysis is very brief and could be strengthened by the use of more data. Opportunities are external factors that contribute to the program and Threats are potential problems or risks caused by external factors that may affect the program. Goals in Part 3 are student-focused and support the resources requested in Part 4.

GEOL/GEOG/ERSC: In Part 2B, the SWOT analysis could be strengthened by the use of more data. Threats are potential problems or risks caused be external factors that may affect the program. In Part 2C, you should list the actions plans and provide a brief update regarding progress. In Part 2D, you should list the past Program Review goals and provide a brief update regarding progress. Your goals in Part 3 need to be re-worded to be student-focused. For example, for Goal #1 instead of "Switch Computers to ArcGIS Pro" you might change it to "To improve employability, provide students with access to and experience with industry software." Then in the "steps to be taken to achieve goal" you would list upgrading computer software in labs to ArcGIS Pro and installing GIS software in STEM Center.

MATH: In Part 2B SWOT analysis, Opportunities are external factors that contribute to the program and Threats are potential problems or risks caused by external factors that may affect the program. In Part 2C, you should list the actions plans and provide a

brief update regarding progress. In Part 2D, you provided a succinct update on the progress toward Goals #2 & #3, but wrote nothing about #1. Your Goals in Part 3 are well-done and all focused on student success; however in Part 4, each resource request listed needs be obviously connected and supported by at least one goal in Part 3.

PSCI: Part 2A is a little brief. It seems that there may be other internal and external things going on that would affect your program, aside from a 2019 student survey. (A lot has happened since then!) In Part 2B SWOT analysis, Opportunities are external factors that contribute to the program and Threats are potential problems or risks caused by external factors that may affect the program. In Part 2C, you should list the actions plans and provide a brief update regarding progress. The response in Part 2C makes it sound as if there is only one SLO for all of the PSCI discipline courses. Regardless of whether SLO achievement targets have been met, an Action Plan should be written. In Part 2D, you need to list the past Program Review goals and provide a brief update regarding progress. In Part 3, the first column should just be a goal # and maybe a one-word label that helps you identify the goal. The actual goal should be in the 3rd column. Your Goal in Part 3 is well-done and focused on student success; however in Part 4, each resource request listed needs be obviously connected and supported by at least one goal in Part 3.

PHYS: Part 2A is required for all disciplines. It seems that there may at least be other internal and external factors that would affect your program. This does not have to be a formal survey or data, but could also be just a scan of trends in education and your discipline affecting student enrollment, success, transfer rates, etc. In Part 2B SWOT analysis, Opportunities are external factors that contribute to the program. Your Goals in Part 3 are well-done and all focused on student success; however in Part 4, each resource request listed needs be obviously connected and supported by at least one goal in Part 3.

WDTO: In Part 2A, labor market data should be included, as well as advisory committee recommendations, if applicable. In Part 2B SWOT analysis, Opportunities are external factors that contribute to the program and Threats are potential problems or risks caused by external factors that may affect the program. In Part 2C, you should list the actions plans and provide a brief update regarding progress. In Part 2D, you need to list the past Program Review goals and provide a brief update regarding progress. In Part 3, the first column should just be a goal # and maybe a one-word label that helps you identify the goal. The actual goal should be in the 3rd column. Your Goals in Part 3 are well-done and focused on program improvement / growth and student success.