#### **PROGRAM REVIEW Fall 2021**

**Program: CIS/CNT/CS** 

**Division: STEM** 

**Date: October 18th, 2021** 

Writer(s): William Komanetsky

SLO/SAO Point-Person: William Komanetsky

**Audience:** Deans, Vice Presidents of Student Services and Academic Services, All Planning and Allocation Committees. This document will be available to the public.

**Uses:** This Program Review will be used to inform the campus and community about your program. It will also be used in the processes of creating Division Summaries, determining College Planning Priorities and allocating resources. A final use is to document fulfillment of accreditation requirements.

**Please note:** Program Review is NOT in itself a vehicle for making requests. All requests should be made through appropriate processes (e.g., Instructional Equipment Request Process) or directed to your Dean or supervisor.

**Time Frame:** This Program Review should reflect on program status during the 2021-22 academic year. It should describe plans starting now and continuing through 2022-23.

**Sections**: There are three sections to this document. Sections and questions identify the name of the committee or office that will use the information and where you can get additional help.

- The first section focuses on general program reflection and planning.
- The second section is a review of curriculum, to be filled out only by programs with curriculum.
- The third section is a review for CTE programs, to be filled out only by these programs.

**Topics:** The Program Review Glossary defines key terms. Writers should review this glossary before writing: <a href="https://bit.ly/2LqPxOW">https://bit.ly/2LqPxOW</a>

For Help: Contact Nadiyah Taylor: <a href="mailto:ntaylor@laspositascollege.edu">ntaylor@laspositascollege.edu</a>.

A list of contacts for help with specific sections is provided on the Program Review website under the "tools for writers" tab. [https://bit.ly/3fY7Ead]

#### **Instructions:**

- 1) Please respond to each question with enough detail to present your information, but it doesn't have to be very long.
- 2) If the requested information does not apply to your program, write "Not Applicable."
- 3) Optional/suggested: Communicate with your dean while completing this document.
- 4) Send an electronic copy of this form to Nadiyah Taylor and your dean by when?

#### Links:

Program Review Home Page Fall 2020 Program Reviews Frequently Asked Questions

### Section One: Your Program In 20-21 – Please check N/A where relevant

A. Accomplishments: How did your Program's accomplishments during AY20-21 support the newly revised college mission, the goals of the Educational Master Plan, and/or the President's Call to Action on anti-racism? Areas to consider include impacts to students by race/ethnicity, gender, sexuality, age, or disability status, or those disproportionately impacted by the shift to remote instruction and services.

- College Mission
- Educational Master Plan
- Presidential Task Force: Call to Action

Description	Mission	Master Plan	Presidential Task Force
1 New vocational-type certificates (MIS, RHEL)	X	X	X
2 CS Symposium bringing under-represented to LPC	X	X	X
3 CS-CodeJam (NSF) helping under-represented be a success	X	X	X
4 Summer CS technology Seminars	X	X	
5 Goole IT Professional Certificate w/CNT-51	X	X	X
6 LPC CNT staff have become tutors/Advocates to Google	X	X	
Program			
7 CS LLNL Internship Training/Selection	X	X	

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B. Challenges, Obstacles and Needs: What significant challenges or obstacles did your Program face during AY20-21 in supporting the newly revised college mission, the goals of the Educational Master Plan, and/or the President's Call to Action on anti-racism? Areas to consider include impacts to students by race/ethnicity, gender, sexuality, age, or disability status, or those disproportionately impacted by the shift to remote instruction and services.

\_\_\_\_N/A

Description	Mission	Master Plan	Presidential Task Force
1 Using the plan as an obstacle for needed classes	X	X	
2 FTES reallocation limitations	X	X	
3 Need targeted outreach/marketing/promotion of all industry certifications students may obtain to increase enrollment.	X	X	X
4 Need to implement degree works to issue more LPC credentials for Sciff automatically	X	X	
5			
6			

Tab to add more lines as needed

# C. Planning: What are the most important plans, either new or continuing, for your Program? N/A

Plan	New	Continuing	Short	Long
			term	term
Extension of CodeJam (NSF grant)		X		X
NSF Grant Proposal for Low Income Scholarships	X			X
Summer Cyber-Camp resurrection		X		X
Dual Enrollment w/LHS	X			X
Kaiser Permenente Internship Program		X		X

Tab to add more lines as needed

# D. How have your program's interactions with the larger campus systems benefitted your students? For example, working with allocation committees, participation on committees, etc. N/A

Campus system or Committee	How has it benefitted your students?
LPC Technology Committee	To assure students have the resources they need
ILLICTRICE LACHNOLOGY LAMMITTAA	To assure students/faculty have the technology infrastructure they need
	To assure students/faculty/staff have the technology and infrastructure needed

# E. If you have outreached to students in your department, program or classes, please share information about what you discovered and how you have used the feedback

\_\_\_\_N/A

Describe student outreach used to gather feedback? For example, through surveys, conversations, etc.	Questioning students about their ability to perform well with distance learning
What did you learn?	Difficult for many, problem holding their attention during class and during the semester
How will you use the feedback?	Adjust teaching methods to better support students having problems. Shorter subjects, More on-line resources identified for students to use, smaller instructional videos for subjects

2.	Describe student outreach used to gather feedback? For example, through surveys, conversations, etc.	Questioning students regarding the new CS Artificial intelligence program to assure enrollment interest
	What did you learn?	Very few students wanted to take two AI classes in the same semester, we changed the schedule to accommodate them
	How will you use the feedback?	Modify the scheding of AI courses once a semester instead of twice a semester
3.	Describe student outreach used to gather feedback? For example, through surveys, conversations, etc.	Hardware/software surveys for students learning fromn home
	What did you learn?	About 15% of students don't have the hardware necessary for computer studies
	How will you use the feedback?	Inform students about the computer loaner program, Inform/educate students to use the LPC Netlabs service for remote computer usage

### Section Two: Data Analysis – Quantitative and Qualitative

A. IR Data Review: Describe any significant trends in your program's data provided by the office of Institutional Research and Planning. (Note: Not all Programs have IR data available; if your program does not have a data packet or dashboard data, you may note that in the response box.) You may also discuss any other data used by your program for decision-making and planning.

- IR Data packets are available here: <a href="https://bit.ly/2IYaFu7">https://bit.ly/2IYaFu7</a>
- Course Success Rates Dashboard can be found at the bottom of this page: https://bit.ly/2Y9vGpl
  - Headcount/enrollment is down 7% since 2016. All enrollment numbers have trended downward since 2016.
  - Enrollment status is consistent with continuing students increasing since 2016.
  - Female enrollment percentages have gone up in CIS, CS and CNT. This may correlate to our implementation of CodeJam (an NSF study to engage students of color and women)
  - African American enrollments have gone from 8%-4% (CIS), 3% steady (CS), from 8%-10% (CNT)
  - Asian and Latino enrollments have gone from 17%/25% to 23%/28% (CIS/CNT), from 25% 33% Asian, Latino steady at 17% (CS). This may correlate to our implementation of CodeJam (an NSF study to engage students of color and women)

- Whites have gone down from 37% to 31% (CIS), from 42% - 30% (CS/CNT)

B. Program-Set Standard (Instructional Programs Only): The program-set standard is a baseline that alerts programs if their student success rates have dipped suddenly. There may be many valid reasons a program does not meet the Program Set Standard; when a program does not meet this standard, they are simply asked to examine possible reasons and note any actions that should be taken, if appropriate.

Program-set standard data can be found on this page:

(http://www.laspositascollege.edu/research/outcomes.php)

- Did your program meet its program-set standard for successful course completion?
   X\_yes \_\_\_\_\_no
- If your program did not meet your program-set standard, discuss possible reasons and how this may affect program planning or resource requests.

Set standards by program are above median for CIS, CS and CNT 5% - 11%.

### SLOs/SAOs:

For assistance with these questions, contact the SLO Committee Chair. [https://bit.ly/3fY7Ead]

Each year programs must discuss how their PSLOs, CSLOs, or Service Area Outcomes (SAOs) support the College Mission. This helps us to see how our students are progressing in their learning.

You should complete ONE of the following three sections. Please choose the option that is most appropriate for your program:

C1: Instructional Programs with PSLOs
C2: Instructional Programs without PSLOs or with Special Circumstances
C3: Non-Instructional Programs

Go directly to the section you chose. If you are not sure which option to pick, contact the SLO Committee Chair or Program Review Committee Chair for assistance.

#### C1: Instructional Programs with PSLOs

#### **PSLO** Assessments:

(1) Please list the PSLO(s) that were reviewed in this last cycle and explain why these were chosen.

CS:	
CS-1	<ul> <li>Students will be able to design and implement a programmer-defined function in C++</li> <li>Students will be able to develop a C++ program that demonstrates fundamental syntax and utilizes control</li> </ul>
CS-31	Students will be able to create and use programmer-defined functions in Java.
CS-7	Students will be able to explain and implement programmer-defined functions in Python.
CNT:	
CNT-51	Install, configure, secure, and troubleshoot PC/Network/Mobile devices
CNT-52	Configure, secure, and troubleshoot home or business networks

CNT-8001	Build a simple Ethernet network using routers and switches
CNT-7285	Identify, differentiate various infrastructure components of classic, virtualized data centers
CNT-7501	Report network security analysis observations
CIS:	
CIS-74	Descrpbe the charactistics and personal qualities that are important for admnistrative professions and the importance of ethics, customer service, and teamwork in the workplace
CIS-43	Use principles of routine and informative writing to create an appropriate response; apply standard business English including grammar, punctuation, and mechanics
CIS-54	Analyze a business problem and apply appropriate Excel formulas, functions, and features to develop a solution
CIS-88A	Create, save, retrieve, edit and print documents in correct business formats
CIS-88B	Produce complex business     documents, create tables of     contents and indexes, use Word's     collaboration features to share     documents and initegrate data from     Excel and other programs
CIS-89A	Design, create, and view slide show presentation
CIS-79	Medical office principles and procedures to include the importance of medical ethics in

CIS-66	<ul> <li>Install, configure, secure, and troubleshoot home or business networks</li> </ul>
CIS-74	Ability to produce correctly formatted business documents
	application of professional office behavior, telecommunications, scheduling appointments, office equipment, medical documents an word processing, managing medic records, banking, payroll, expense reports, petty cash, billing, recordkeeping, postal services, health insurance, coding, and utilizing the Internet for online financial services and resources.

(2)	What percentage of faculty	completed t	the planned	assessments?	(run Faculty	Participation
	report from last year)	CIS: 85%, C	CS: 100%, CN	NT: 100%	_%	

- (3) Did you get the assessment data that you needed to complete this report? If not, then describe the barriers that you can identify. \_\_\_\_YES \_\_\_X\_\_\_No
  - Instructors need to not be posting their conclusions and measurements anonymously
  - Many assessments have no comments associated with them excluding those measurements from possible improvement ideas
- (4) Discuss the findings of the PSLO(s) that were up for review last year (according to your 3-year planning template). What conclusions can be drawn about student learning?
  - Assigning more Group assignments may assist with instilling the knowledge necessary to be successful.
  - Students seem to respond better to shorter, less involved assignments, but more of them, may benefit student performance on those assignments

Short videos describing course concepts seem to benefit student success

(5) Was the data disaggregated and, if so, on what parameters? What, if any, equity issues emerged?

N/A
(6) List changes that you plan on making to improve student learning and address inequities.
<ul> <li>More substantive reflection comments need to be made to better measure the effectiveness of classes and their teaching procedures. To date, not enough reflection comments have been made to give us a meaningful plan for improvement.</li> <li>Smaller more numerous assignments</li> <li>Custom short videos to increase student interest. Videos over 3 minutes can cause students to loose their attention to the subject material. No more than ten minutes is recommend within the industry</li> </ul>
(7) Discuss the challenges, if any, to improving student learning and equity. You may refer back to items listed in Section 1B.
<ul> <li>Reaching out to less represented students in the area and thus communicating the benefits of learning at LPC.</li> <li>We see no direct equity issues emerging. Enrollments by under represented students (women in particularily) are rising in all three disciplines and success rates between the genders seems to be steady.</li> </ul>
(8) Are you planning on revising on your 3-year planning template? If so, describe. XYESNo
CS-31 was planned to be assessed in Spring of 2021, but was left out of the official Elumin plan (coordinator's oversite). It has now been rescheduled for Fall of 2021 for assessment. CS-21 was evaluated in Spring 2021 instead of Spring 2023 and will be assessed every semester
C2: Instructional Programs without PSLOs or with Special Circumstances
CSLO Assessments: Student Learning
(1) List the CSLO(s) that were up for review last year (according to your 3-year planning template) and explain why your department selected these CSLOs for review.

reflection questions, what type of conclusions can be made about student learning?
N/A
(4) Describe the pertinent findings. What, if any, equity issues emerged?
N/A
(5) List changes that you plan on making to improve student learning.
N/A
Assessment Process: To be completed by the department/program or the SLO Coordinator
(1) List changes that you plan on making to improve student learning and address inequities.  N/A
(2) Discuss the challenges, if any, to improving student learning and equity. You may refer back to items listed in Section 1B.
N/A
(3) Are you planning on revising your 3-year planning template? If so, describe. YESNo
N/A

(3) <u>Discussion-based analysis of student learning</u>: Using the CSLO data and answers to the

# C3: Non-Instructional Programs

#### SAO Assessments:

Support of Student Learning

(1) List the SAO(s) that were up for review last year (according template) and explain why your department selected these	
N/A	
(2) What percentage of faculty completed the planned assessme report from last year)%	ents? (run Faculty Participation
(3) <u>Discussion-based analysis of student learning</u> : Using the SA reflection questions, what type of conclusions can be made a	
N/A	
(4) Describe the pertinent findings. What, if any, equity issues e	merged?
N/A	
(5) List changes that you plan on making to improve student lea	arning.
N/A	
sessment Process: To be completed by the department/program	or the SLO Coordinator
(6) List changes that you plan on making to improve student lea	arning and address inequities.
N/A	

(7) Discuss the challenges, if any, to improving student learning and equity. You may refer back to items listed in Section 1B. Are you planning on revising on your 3-year planning template and, if so, describe?

N/A	
(8) Are you pl	anning on revising on your 3-year planning template? If so, describe.
YES	
N/A	

Program Review Suggestions (optional): What questions or suggestions do you have regarding this year's Program Review forms or process?

What happened to the narrative section? Are we ignoring narratives about programs and turning to fully analytical data? If so, why bother?

## Section Three: Curriculum Review (Programs with Courses Only)

For assistance with this section, contact the Curriculum Committee Chair. [https://bit.ly/3fY7Ead]

The following questions ask you to review your program's curriculum. To see the last outline revision date and revision due date:

A. Title V Updates [Curriculum Committee]: Are any of your courses requiring an update

- 1. Log in to CurricUNET
- 2. Select "Course Outline Report" under "Reports/Interfaces"
- 3. Select the report as an Excel file or as HTML

to stay within the 5-year cycle? List courses needing updates below. Reminder: updates to course title or units, and course deactivations, will require updating any program they are associated with. List programs requiring updating in question (B).
<u>X</u> YESNo
Course Name & Number
CS: Spring 2022: CS 16 Mobile Application Development – Iphone, CS 18 Mobile Application Development – Android, Fall 2022: CS 20 Advanced Programming with Data Structures/C++
CIS: Spring 2022: CIS 54 Excel: Intro to Spreadsheets, CIS 59 Web Dev: HTML/CSS/Javascript, CIS 59C Web Programming - JavaScript, CIS 74 Office Procedures, CIS 8 Essential Computing Skills, CIS 84 Windows, CIS 88A Introduction to Microsoft Word, CIS 88B Adv Microsoft Word, CIS 89A Desktop Presentation, CIS 89B Desktop Publishing, CIS 9001 Database Design Methodology, CIS 92 Web: PHP Programming, MySQL
Fall 2022: CIS 41 CyberSecurity Camp, CIS 42 Cybersecurity Competition Prep, CIS 55B Advanced MS Office Skills, CIS 71A Keyboarding (The Alphabet), CIS 71B Keyboard (Numbers and Symbols), CIS 71C Skills Improvement, CIS 72A Data Managemen, CIS 73A Ten-Key Skill Development, CIS 75 Office Technology/Communications, CIS 79 Medical Office Procedures,
CNT: Spring 2022: None
Fall 2022: CNT 7501 Ethical Hacking

B. Degree/Certificate Updates [Curriculum Committee]: Are there any programs

requiring modification? If yes, list them below.

<u>\_\_X</u>\_\_No

\_\_\_\_YES

C. Are there	any courses or programs for which a non-mandatory update is planned?
YES	XNot at this time
	lain details, rationale, or any support that might be helpful
<b>If yes,</b> exp	idili detallo, i dilolidie, ei dily bappert tildt linglit be lielpidi
<b>If yes,</b> exp	and declare, rationale, or any support that might be neithful
If yes, exp	iam actano, rationale, or any support that might be neithful
If yes, exp	ann actano, rationale, or any support that might be neithful
If yes, exp	ann accano, radionalo, or any support that might be neithful
D. Does your	program plan to create any new courses or programs this year?No
D. Does your	program plan to create any new courses or programs this year?
D. Does yourXYES	program plan to create any new courses or programs this year?

# Section Four: CTE Updates

# (CTE Programs Only) Vicki Shipman will provide you with or support any data needs

	last 2 years).
-	Does your program continue to meet a documented labor market demand? <u>CYESNo</u>
:	Does this program represent a training need that is not duplicated in the college's service area?  X YESNo
Please o	explain
posit	021, there are still more positions open than candidates. In 2021 Janco expects 152,000 new tions in IT, higher than the previous high in 2018 of 112,500. Current estimates of IT jobs in It is 3.72 million.
-	Advisory Boards: Has your program complied with advisory board recommendations?  X_YESNo  If not, please explain.
	ng Workforce Program Metrics: Utilizing LaunchBoard, review the Strong Workforce metrics. Review the data and then answer the following questions.
	s your program meet or exceed the regional and state medians for increased enrollments, tions, and/or transfer since your last program review?
<u>X</u> _Y	ESNo
If not, w	hat program improvements may be made to increase this metric?

C2. Does your program meet or exceed the regional and state medians <b>for students gaining employment in their field of study</b> ?
<u>X</u> YESNo
If not, what program improvements may be made to increase this metric?
LPC Livinig Wage: 64%, Statewide: 52% A career center to assist our students
SINCE LAUNCH BOARD DATA IS INCOMPLETE (OR, NOT AVAILABLE) THIS SECTION CANNOT BE ADDRESSED. THE NEW LAUNCHBOARD DATA NOW ADDRESSES THE SCFF WHEREAS THIS SECTION WAS DEVELOPED PRIOR TO SCFF METRICS
C3. Does your program meet or exceed the regional and state medians <b>for student employment rates after leaving the college</b> ?
_XYESNo
If not, what program improvements may be made to increase this metric?
A career center to assist our students could assist in brining these numbers even higher
C4. Does your program meet or exceed the regional and state medians for increased student earnings and median change in earnings?
XYESNo
If not, what program improvements may be made to increase this metric?

SINCE LAUNCH BOARD DATA IS INCOMPLETE (OR, NOT AVAILABLE) THIS SECTION CANNOT BE ADDRESSED. THE NEW LAUNCHBOARD DATA NOW ADDRESSES THE SCFF WHEREAS THIS

LPC Transfer rate: 30%, Statewide: 30%.

SECTION WAS DEVELOPED PRIOR TO SCFF METRICS

**Enable Degreeworks to automatically issue Certificate of completions** 

Median for LPC is \$44,000 state median is \$33,918

SINCE LAUNCH BOARD DATA IS INCOMPLETE (OR, NOT AVAILABLE) THIS SECTION CANNOT BE ADDRESSED. THE NEW LAUNCHBOARD DATA NOW ADDRESSES THE SCFF WHEREAS THIS SECTION WAS DEVELOPED PRIOR TO SCFF METRICS