2023-2024 SRJC Faculty Staffing Process Data Form DUE WITH NARRATIVE FORM & CLUSTER RANKING – OCTOBER 13, 2023 by 5 PM Email all documents to Victor Tam (<u>vtam@santarosa.edu</u>) and Nancy Persons (<u>npersons@santarosa.edu</u>)

Submitter Information

Name of Cluster Dean: Vanessa Luna Shannon (Kerry Loewen for Arts & Humanities) Name of Department Chair: Michael McKeever Name of Program Coordinator (if different): Michael McKeever Cluster: Petaluma (and Arts and Humanities)

CRITERION #1: DISCIPLINE/DEPARTMENT/PROGRAM NEEDS
Department: Computer Studies
Discipline: Computer Information Systems
Instructional type (Check all that apply): 🛛 Credit 🗌 Non-Credit 🗌 Allied 🗌 CE
Site(s) of requested position: SR PET PSTC Roseland Shone
Is this request included in PRPP? 🛛 Yes 🗌 No
 If no, please provide an explanation:
Is this a growth position (increase in current FT FTE)? 🔀 Yes 🗌 No
Does target program currently have contract faculty? 🛛 Yes 🗌 No
 Has the department identified external budgetary resources (grants, categorical state funding, etc.) to fund or partially fund this position? Yes No If yes, please explain.
The new faculty position would teach courses in the following (check all that apply):
 in department's degree program
 in department's certificate program
• 🔀 GE program
 in prerequisites for core courses in programs in or outside of discipline Identify:
Would this position provide expertise that current discipline faculty do not possess?
Yes No

• If yes, identify expertise and service or course need: Penetration Testing and Vulnerability Assessment (commonly referred to as Ethical Hacking) for Website Applications and Cloud Services. Digital Forensics and Incident Response (DFIR)

CE Position Requests Only

Current labor market demand in Sonoma County (or larger regional area, if appropriate). 130 openings

Please cite source of data and include link. CA Employment Development Department https://app.powerbigov.us/view?r=eyJrIjoiZDI5ODI2Y2YtYTAyNS00MGEwLThIMzItMGRkOWY 3MTEzMDljIiwidCl6IjA2Y2FjMjQ5LTU3YzYtNGVIZC05NGZkLTI1NmFiZGU4MmI0ZSJ9&pageNa me=ReportSectioneed0ef440c940c70081a

Projected labor market demand in Sonoma County (or larger regional area, if appropriate) over the next 3-5 years. 600 openings

Please cite source of data and include link. CA Employment Development Department https://app.powerbigov.us/view?r=eyJrIjoiZDI5ODI2Y2YtYTAyNS00MGEwLThIMzItMGRkOWY 3MTEzMDljIiwidCl6IjA2Y2FjMjQ5LTU3YzYtNGVIZC05NGZkLTI1NmFiZGU4MmI0ZSJ9&pageNa me=ReportSectioneed0ef440c940c70081a

CRITERION #2: STUDENT & STAFFING NEEDS

NOTE: Please use site specific data, where appropriate.

CONTRACT FACULTY (use current data for Fall 2023)

Number of contract faculty members in department (headcount): 10

Number of contract faculty in discipline (headcount): 3

Total FTE of contract faculty (data provided): 9.16

Total FTE of reassign time for contract faculty: 0.55

Total FTE of overload assignments (data provided): 1.56

Net loss/gain in number of discipline contract faculty from F19 to F23 (data provided): 0

Net loss/gain in number of discipline contract faculty at target site from F19 to F23 (if different from department; data provided): 0

ASSOCIATE FACULTY (use current data for Fall 2023)

Number of associate faculty members in department (headcount): 24

Number of associate faculty members in discipline (headcount): 2

Total FTE of associate faculty members (data provided): 4.78

	S (historic data provided)
	ssociate FTE in department:
•	Fall 2023: 31%
٠	Spring 2023: 34%
٠	Fall 2022: 39%
٠	Spring 2022: 44%
٠	Fall 2021: 42%
٠	Spring 2021: 46%
•	Fall 2020: 52%
٠	Spring 2020: 50%
٠	Fall 2019: 39%
% of a	ssociate FTE in discipline, if different:
•	Fall 2023: 03%
•	Spring 2023: 03%
•	Fall 2022: 03%
٠	Spring 2022: 04%
٠	Fall 2021: 03%
•	Spring 2021: 04%
•	Fall 2020: 04%
٠	Spring 2020: 04%
•	Fall 2019: 03%

ALLIED ASSIGNMENTS (Counseling, DRD, Athletics, Library, etc.)

FTES/FTEF recommendations from national or state groups/associations, if any:0

Cite source for and provide link to above data: N/A

ALLIED ASSIGNMENTS - CONTINUED

If any, provide other data metrics or recommendations that inform appropriate staffing levels in the discipline/department: N/A

STUDENT DEMAND FOR DEPARTMENT -- OR DISCIPLINE, IF APPLICABLE.

(historic data provided)

Enrollment at Census (duplicated headcount) over the past 4 years:

- Fall 2023: 2,022
- Spring 2023: 1,837
- Fall 2022: 1,821
- Spring 2022: 1,769
- Fall 2021: 1,809
- Spring 2021: 1,965
- Fall 2020: 2,061
- Spring 2020: 1,953
- Fall 2019: 2,245

Productivity (FTES/FTEF) over the past 4 years:

- Fall 2023: 15.48
- Spring 2023: 13.99
- Fall 2022: 14.77
- Spring 2022: 13.55
- Fall 2021: 14.24
- Spring 2021: 14.03
- Fall 2020: 15.19
- Spring 2020: 15.38
- Fall 2019: 15.49

Enrollment efficiency (fill rate) over the past 4 years:

- Fall 2023: 90
- Spring 2023: 90
- Fall 2022: 86
- Spring 2022: 79
- Fall 2021: 84
- Spring 2021: 84
- Fall 2020: 91
- Spring 2020: 87
- Fall 2019: 92

Is the department/discipline able to meet staffing demands with current associate faculty?

• If no, when was the last associate hiring process and how many were hired? 2021, 2 hired

No

If this position is not approved, will core classes be cancelled? 🔀 Yes 🛛 🛽

If yes, please explain: The Network and Systems Security Administration (NSSA) cyber security degree has some 39 units of Computer Studies classes required. Now, in its second full year (Fall 2023), we will start a cycle of first and second year classes running in the same semesters. This number of units a semester/year represents two (2) 2 FtF workloads. At present, we have one (1) FtF teaching the program.

CRITERION #3: STUDENT EQUITY NEEDS

 Please discuss the department/discipline's student equity efforts, plans, and challenges in the narrative form.

CRITERION #4: DISTRICT, STATE, AND SOCIETAL PRIORITIES
Degrees and Certificate Data (historic data provided)
Number of local AA/AS degrees awarded in discipline for each of the last 4 years (if
applicable):
• 2019-2020: N/A
• 2020-2021: N/A
• 2021-2022: N/A
• 2022-2023: N/A
Number of ADT degrees awarded for each of the last 4 years (if applicable):
• 2019-2020: N/A
• 2020-2021: N/A
• 2021-2022: N/A
• 2022-2023: N/A
Number of certificates awarded in discipline for each of the last 4 years (if applicable):
• 2019-2020: 18
• 2020-2021: 5
• 2021-2022: 0
2022 2022 5

• 2022-2023: 5

Program Review

When last was the program reviewed under Policy 3.6? N/A (program established 2021).

What was the Policy 3.6 determination?

Vital	Further Information Require	Discontinue
Voluntary Discontinuance	Revitalize	Evaluation Report Req
Other 🗌 Other		
% of SLOs assessed in discipline	e (data provided): 49.00%	

This position (equest is required to fulfill a licensing and/or accreditation mandate?
	NO
If yes:	
0	Identify agency:
0	Provide language of requirement:
0	Provide link to relevant language:

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Please use this section of the request process to provide additional information that the Data Form did not ask for, nuance, or explanations of responses on the Data Form that you believe should inform the Committee's consideration of your data.

In scoring each criterion, the Faculty Staffing Committee will consider the data that you provide for that section and the information that you provide in the text boxes below (250-word limit for each). Effective responses will be specific and, where information on the form does not already provide evidence for claims, will provide evidence.

CRITERION #1: DISCIPLINE/DEPARTMENT/PROGRAM NEEDS (0 – 10) points

Please address the overall well-being of the Department's programs, the existing faculty's disciplinary expertise in relation to program needs (services, courses), and any plans for strategic growth.

We have seen growth to levels that preceded the pandemic and 2017 fires in our department this semester, especially in our Programming and new Cyber Security programs. Our Year 1 new full-time programming instructor is, just in time, filling old and new staffing deficiencies. We have entered into a collaborative effort with six (6) other BACCC colleges to establish a Regional Virtual Production Academy (RVPA). The web development program is robust with classes full each semester and will grow with the RVPA.

The Computer Studies Department (CSD) is requesting three (3) new positions in different technical arenas and locations. One of them is for the Petaluma campus for supporting the Cyber Security major. (Of the two in Santa Rosa, one is a replacement position for one of our most innovative and the most senior member of the department, Donald Laird, who will conclude his tenure at SRJC at the end of this semester. The other position in SR for someone to conduct our Artificial Intelligence (AI) and Data Science (DS) courses).

This narrative is for the Petaluma site-based Network and Systems Security Administration (NSSA) cyber security instructor. See:

https://portal.santarosa.edu/srweb/SR ProgramOfStudy.aspx?MajorCertID=2 447

The NSSA is a Petaluma program established with Petaluma funds, face-to-face time and effort, and facilities. This terminal degree has some 39 units of Computer Studies classes required. Now, in its second full year (Fall 2023), we will start a cycle of first and second year

classes running in the same semesters. This number of units a semester/year represents two (2) in-person/face-to-face workloads.

CRITERION #2: STUDENT & STAFFING NEEDS (0 - 10 points)

Please describe how this position will provide necessary FTEF and contract faculty positions to meet the program's FTES demand and contribute to the work of the department. Include information about the program's current enrollment trend in the context of the recent budget climate.

Cybersecurity* refers to any technology, measure or practice for preventing cyberattacks or mitigating their impact. Cybersecurity aims to protect individuals' and organizations' systems, applications, computing devices, sensitive data and financial assets against simple and annoying computer viruses, sophisticated and costly ransomware attacks, and everything in between.

The average cost of a data breach in 2023 was USD 4.45 million, up 15 percent over the last three years;

The average cost of a ransomware-related data breach in 2023 was even higher, at USD 5.13 million. This does not the cost of the ransom payment, which averaged an additional USD 1,542,333, up 89 percent from the previous year.

By one estimate, cybercrime will cost the world economy USD 10.5 trillion per year by 2025. *<u>https://www.ibm.com/topics/cybersecurity</u>

We could easily expand and broaden the program by adding more classes in:

-Automating Information Security with Python – This would be the logical progression point for students who have completed CS 81.41A, Programming Essentials in Python for Networking.

-Cloud Computing – Currently we have one (1) and an additional would strengthen the program and afford students better skills, knowledge, and abilities (KSAs) to gain and advance employment opportunities.

-Digital Forensics and Incident Response (DFIR) – DFIR is a specialized field focused on identifying, remediating, and investigating cybersecurity incidents. Digital forensics involves collecting, preserving, and analyzing forensic evidence. Incident response involves containing, stopping, and preventing a cyberattack.

We should also add Penetration Testing and Vulnerability Assessment (commonly referred to as Ethical Hacking) for Website Applications and Cloud Services.

CRITERION #3: STUDENT EQUITY NEEDS (0 - 10 points)

Please describe how this position will allow the Department or Program to effectively serve disproportionately impacted populations, help students to overcome barriers, and close equity gaps. Include an assessment of the current department or program's ability to serve disproportionately impacted student groups.

Conducting the classes in this program (and most all our programs) using online, combinedmodality, and HyFlex modalities of instruction, allow us to reach students who otherwise would not be able to attend classes on campus. This locally unique and innovative program provides access to learning opportunities and high-earning careers many would be hardpressed to obtain. We frequently hear from students in hard manual-labor jobs that they need to get out and do something less taxing on their young bodies. Barriers of race, gender, income disparity, socioeconomic status, etc., are more easily overcome with online and technical professions.

https://www.oecd.org/digital/bridging-the-digital-gender-divide.pdf https://www.americanprogress.org/article/occupational-segregation-in-america/

Furthermore, we will attract both a larger potential student population beyond Sonoma county and allow incumbent workers to enhance their employability.

Cyber security will continue to experience great demands in the labor market. <u>https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm</u>

https://www.spiceworks.com/tech/it-careers-skills/articles/cybersecuritycareer-path/

CRITERION #4: DISTRICT, STATE, & SOCIETAL PRIORITIES (0 - 10 points)

Please address how this position will support District priorities, statewide initiatives, and societal well-being.

This position is for a dynamic, innovative, and cutting-edge discipline enabling significant career building skills for our students. The program this instructor will lead is vital to the ongoing rehabilitation of the SRJC image within the Sonoma County community and afford our students, especially the traditionally underserved, access to learning opportunities and high-earning careers they would otherwise not obtain.

As mentioned above, our embracing and use of a variety of course delivery modalities not only increases FTES, it helps balance our budget shortfalls, makes our instructors more efficient. Furthermore, in this mobile work environment, we help students to learn to communicate, problem solve, collaborate, and troubleshoot both in-person and remotely. Communicating and working in-person and at a distance is a requirement of this industry and as such, been a hallmark feature of our courses in this area throughout the years.

There are no other such courses or programs in our local area, especially of this high caliber.