

Instructional Program Review

Program: Information Systems

Academic Year: 2023-2024

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Accepted by Academic Senate: 11/28/23

Accepted by Consultation Council: 12/11/23

Accepted by Governing Board: 12/12/23

Executive Summary

The Information Systems department at Lassen College consists of one full-time faculty member for the CIS courses and two adjunct faculty members for the GIS courses. All faculty members worked to ensure that all course offerings were up to date in regards to the texts needed for the courses and gave feedback on SLO changes, adjustments, and results.

The Information Systems department is a continuously growing department at Lassen College. With the IT landscape and needs constantly changing, CIS faculty are regularly attending conferences, meetings, and following Labor Market changes to adapt and adjust the courses and program to ensure that the courses are meeting the current and future needs of Lassen College students.

Currently, all courses are asynchronous online courses with instructors providing online office hours. The CIS courses also offer in-person office hours several days a week. Through student survey's and the number of in-person visits, it is apparent that there is a need to start offering some of the CIS courses in an in-person or hybrid modality. This will still offer the flexibility many students find appealing, but also allow for that in-person guidance and instruction that many students need.

As cybersecurity labor needs grow, it would benefit Lassen College to expand some of the cybersecurity focused courses and offerings. Additionally, the adult education programs have always been very well received by the community and expansion in these area's should also be considered.

Marketing for the Information Systems program needs to be expanded so that students outside of the direct area can see the opportunities available to them. Discussions with the Information Systems advisory board have repeatedly shown the need for these course offerings and job opportunities in these areas, but there seems to be a bit of a disconnect with potential students knowing of the offerings. Expansion in the marketing area should include online marketing to students in the WUE area and using platforms that will reach students of all ages.

One other major area of concern is the retention rates of students in the Information Systems courses. Due to the nature of online courses, it is easier for students to lose motivation, get distracted and just fall off the path. Instructors have typically reached out via email and with counselors, but this doesn't always prove effective. The Information Systems department feels like better course development, instructor training on interactive online teaching and direct development in student retention in online learning would be the most beneficial aspects to address student retention.

Finally, it is a core belief in our program that all students should feel valued, welcomed, and wanted. Instructors in the Information Systems department take student equity seriously and it drives our teaching practice. The Information Systems department feels that it is crucial that all students, inclusive of ALL backgrounds, beliefs, and origins have the opportunity to pursue an education that appeals to them and makes them feel successful.

Based on the above information, review of data and instructor feedback the information systems program has developed the following goals:

1. Begin offering some courses in a hybrid modality.
2. Expand marketing efforts using a variety of platforms.
3. Increase instructor knowledge regarding best practices for student engagement and retention in asynchronous online courses.
4. Continually participate in Equity Development and adjust curriculum to meet DEIA best practices.

SECTION 1: ACADEMIC PLANNING

Program Overview, Objectives, and Student Learning Outcomes

The Lassen College Information Systems Department consists of two main disciplines: Geographic Information Systems and Computer Information Systems. The Geographic Information System had its initial course offerings in during the Fall of 2020 and was reviewed in the 2021-2022 academic year.

Since that time the Information Systems offerings have been expanded to include Computer Information Systems courses and certificates as well as a CIS terminal Degree. Below is a table outlining the changes between the two IPR cycles:

2021-2022 IPR			2023-2024 IPR		
Courses Offered	Certificates Offered	Degrees Offered	Courses Offered	Certificates Offered	Degrees Offered
GIS 1	Certificate of Achievement in Geographic Information Systems		GIS 1		
GIS 2			GIS 2		
GIS 3			GIS 3		
GIS 5			GIS 5		
GIS 4			GIS 4		
			CIS 50	Computer Support Professional Certificate of Achievement	Computer Information Systems A.S. *
			CIS 60	IT Support Professional Certificate	
			CIS 70		
			CIS 71*		
			CIS 80		
			CIS 81*		
			CIS 82*		
			CIS 90		
			CIS 160		
			CS 150		
			CS 151		
			CS 152		
			CS 153		
			CS 154		

*Denotes courses/programs with initial offerings as of Fall 2023 or later, data is not available as of the

time of writing

As the table above shows, the Information systems department has grown to include 13 additional courses, 2 additional certificates and recently added an Associates of Science Degree. With many of the additional classes and certificates being new and having had only one offering at the time of writing, much of the data is incomplete and/or undefined. As the programs grow more complete data will be available and success rates will continue to grow.

Currently, the Information Systems department consists of one full-time Faculty member and two adjunct faculty. All course offerings within the information systems program are online only, allowing students to take these courses in a flexible manner to meet their needs and schedules.

These courses offer students in our service area the opportunity to gain skills and knowledge to be competitive in a fast-growing technological job market. Many of the courses offer virtual lab opportunities that allow students to practice vital skills that they need to have to be career ready.

Prior to implementing the Information Systems programs and courses, Lassen College had very limited and basic computer/technology courses. Leaving students that wanted to pursue education in these areas with no options but to enroll in schools outside of the area.

Several of the courses added are non-credit adult education courses that lead to direct employer recognized certifications. This allows for many students to enhance their technology skills or learn new skills. It also allows students to dabble in the world of IT without worrying about a significant time or financial commitment.

Below you will find the Lassen Community College Vision, Mission Statement and Strategic Goals. At the end you will see a summary of how the Information Systems programs and courses have been developed and cultivated to align with these goals and values.

LCC Vision

Lassen College will be a highly efficient self-sustaining rural community college, a catalyst for the region's image, economy, and human capital, and an example of a "we can" culture" of collective impact by being:

- The Academic Leader by ensuring quality instruction and encouraging student success.
- The Educational Leader by expanding outreach and student access with an equity mindset.
- A Trusted Steward by providing capable leadership and accountability.
- The Economic and Workforce Development Leader for the community
- The Cultural Leader in the community
- The Civic and Social Leader in the community

LCC Mission

Lassen Community College provides programs for all pursuing higher education goals. The core programs offer a wide range of educational opportunities including transfer degrees and certificates, economic and workforce development, and basic skills instruction. The College serves diverse students, both on campus and in outreach areas in its effort to build intellectual growth, human perspective and economic potential.

Strategic Goals

1. **Institutional Effectiveness:** Provide the governance, leadership, integrated planning and accountability structures, and processes to effectively support an inclusive learning environment, while ensuring responsible stewardship of public trust and resources.
2. **Learning Opportunities:** Provide an array of rigorous academic programs delivered via a variety of modalities that promote student equity and learning while meeting the needs of the local and global community.
3. **Resource Management:** Manage human, physical, technological, and financial resources to sustain fiscal stability and to effectively support the learning environment.
4. **Student Success:** Provide a college environment that reaches-out-to and supports students, minimizes barriers, and increases opportunity and success through access and retention to enable student attainment of educational goals including completion of degrees and certificates, transfer, job placement and advancement, improvement of basic skills, and self-development through lifelong learning.

The Information Systems department provides several programs for students that are pursuing higher education, job enhancement or personal knowledge. By offering asynchronous online courses, the Information Systems department is helping break the scheduling barriers many students face when it comes to taking college courses. In addition, many of the courses have no or low-cost textbooks that also help eliminate the financial barrier students face. Our instructors regularly attend workshops, conferences, and other professional development programs to ensure we are addressing the most relevant topics in our courses. Equity, success of our students and workforce essential skills drive our curriculum and teaching. The Information Systems faculty participate in campus committees, as well as regularly assess and report on student learning outcomes. In doing all of the forementioned, we ensure that the courses and programs in the Information Systems department are aligned with the LCC Mission, Vision and Strategic Goals and provide the education our students need.

Student Achievement and Learning Outcomes

Course Success Rates

Course Enrollment	2019-20	2020-21	2021-22	2022-23
Program-Level				
Information Systems Overall Enrollment	17	231	217	289
Lassen College Enrollment	14,318	12,243	11,847	11,195
Course	2019-20	2020-21	2021-22	2022-23
CIS-160				21
CIS-50				10
CIS-60				11
CIS-70				12
CIS-80				11
CIS-90				10
CS-1	17	19		
CS-150		63	27	40
CS-151		56	25	38
CS-152		25	53	39
CS-153		22	55	39
CS-154		27	55	41
GIS-1		5	1	4
GIS-2		5	1	4
GIS-3		3		3
GIS-4		3		3
GIS-5		3		3

Course Enrollment	2019-20	2020-21	2021-22	2022-23
Program-Level				
Information Systems Overall Enrollment	17	231	217	289
Gender	2019-20	2020-21	2021-22	2022-23
Female	10	106	120	118
Male	7	121	97	170
Unreported		4		1
Ethnicity	2019-20	2020-21	2021-22	2022-23
American Indian or AK Native		13	5	12
Asian		11		6
Black or African American	1	6		7
Filipino				5
Hispanic or Latinx	4	29	25	41
Pacific Islander or HI Native	1	2	1	6
Unreported	2	12	11	
White	9	158	175	212
Age Group	2019-20	2020-21	2021-22	2022-23
17 and Younger	3	13	9	20
18 to 24	7	37	31	48
25 to 49	7	132	148	181

50 and Older		49	29	40
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Course Success Rate	2019-20	2020-21	2021-22	2022-23
Program-Level				
Information Systems Overall Success Rate	60%	72%	0%	69%
Lassen College Success Rate	80%	77%	78%	77%
Course-Level				
CIS-160				
CIS-50				30%
CIS-60				36%
CIS-70				42%
CIS-80				36%
CIS-90				50%
CS-1	60%	95%		
CS-150		50%		81%
CS-151		0%		96%
CS-152				70%
CS-153		0%		79%
CS-154				72%
GIS-1		80%	0%	75%
GIS-2		80%	0%	75%
GIS-3		67%		100%
GIS-4		67%		100%
GIS-5		67%		100%
Modality				
C - Correspondence				
F - Face-to-Face				
H - Hybrid				
N - Internet	60%	72%	0%	69%

Course Success Rate	2019-20	2020-21	2021-22	2022-23
Program-Level				
Information Systems Overall Success Rate	60%	72%	0%	69%
Gender	2019-20	2020-21	2021-22	2022-23
Female	50%	63%	0%	69%
Male	71%	77%		69%
Unreported				
Ethnicity	2019-20	2020-21	2021-22	2022-23
American Indian or AK Native		100%	0%	63%
Asian		100%		100%
Black or African American	0%	100%		0%
Filipino				100%
Hispanic or Latinx	50%	60%		74%
Pacific Islander or HI Native	100%	100%		67%
Unreported	50%	100%		
White	67%	70%		67%
Age Group	2019-20	2020-21	2021-22	2022-23
17 and Younger	67%	33%		40%
18 to 24	57%	86%	0%	50%
25 to 49	60%	72%		81%
50 and Older		0%		40%

Course Retention Rates

Course Retention Rate	2019-20	2020-21	2021-22	2022-23
Program-Level				
Information Systems Overall Retention Rate	100%	72%	0%	93%
Lassen College Retention Rate	91%	88%	89%	89%
Course-Level				
CIS-160				
CIS-50				30%
CIS-60				36%
CIS-70				42%
CIS-80				36%
CIS-90				50%
CS-1	60%	95%		
CS-150		50%		81%
CS-151		0%		96%
CS-152				70%
CS-153		0%		79%
CS-154				72%
GIS-1		80%	0%	75%
GIS-2		80%	0%	75%
GIS-3		67%		100%
GIS-4		67%		100%
GIS-5		67%		100%
Modality				
C - Correspondence				
F - Face-to-Face				
H - Hybrid				
N - Internet	60%	72%	0%	69%

Course Retention Rate	2019-20	2020-21	2021-22	2022-23
Program-Level				
Information Systems Overall Retention Rate	100%	72%	0%	93%
Gender	2019-20	2020-21	2021-22	2022-23
Female	100%	63%	0%	91%
Male	100%	77%		94%
Unreported				
Ethnicity	2019-20	2020-21	2021-22	2022-23
American Indian or AK Native		100%	0%	100%
Asian		100%		100%
Black or African American	100%	100%		0%
Filipino				100%
Hispanic or Latinx	100%	60%		91%
Pacific Islander or HI Native	100%	100%		100%
Unreported	100%	100%		
White	100%	70%		94%
Age Group	2019-20	2020-21	2021-22	2022-23
17 and Younger	100%	33%		80%
18 to 24	100%	86%	0%	91%
25 to 49	100%	72%		94%
50 and Older		0%		100%

Awards

Degree and Certificates	2018-19	2019-20	2020-21	2021-22
Information Systems Degrees Awarded	0	0	0	0
Lassen College Degrees Awarded	260	340	297	321
Information Systems Certificates Awarded	0	2	0	1
Lassen College Certificates Awarded	128	162	107	137
Degree or Certificate Program				
AS Degree in Computer Information Systems				
Cert. of Achievement Computer Information Systems				
Cert. of Achievement Geographic Information Systems		2		1

Achievement

During Covid and the Dixie Fire the retention rates for the Information Systems programs declined but have since rebounded. These declines during traumatic events for our students are to be expected but we expect to see the rebound continue and retention rates remain high. In addition, with the new offerings of certificates and a degree in the Information Systems program, the retention rates and degrees/certificates awarded will rise.

Equity

Based on the data above, the retention rates across the demographics show that students from diverse backgrounds continue with the courses and programs in the Information Systems department. Though younger students seem to be the demographic that need more assistance and focus to increase retention. This may be due to the fact that younger students generally struggle to adapt to the self-structure and monitoring needed to be successful in asynchronous online courses. To help these younger students be successful additional offerings in a hybrid modality and more intentional instructor monitoring will be required.

Student Learning Outcomes

Below are snapshots of the SLO results from each program. As shown, most of the courses exceed the SLO Requirements. The ones that did not were identified and improvements were implemented, and subsequent course offerings had improvements in meeting the SLO requirements. In all instances of courses not meeting SLO requirements, the low enrollment numbers played a significant role. The other factor was that technological troubles arose and caused students to complete the assessments only partially.

CIS For Credit/Degree Applicable Course:

SLO Table

Course	SLO	SLO Description	Fall 2022	Spring 2023
CIS-50	SLO-2	Apply knowledge to install and configure laptops and...	100%	
	SLO-3	Demonstrate how to troubleshoot advanced hardwa...	100%	
CIS-60	SLO-1	Explain the purpose of a variety of networking conce...		86%
	SLO-2	Determine and explain the appropriate cabling, devic...		100%
	SLO-3	Explain the network troubleshooting methodology a...		60%
CIS-70	SLO-1	Analyze and implement security concepts and securit...		80%
	SLO-2	Analyze common threats to and vulnerabilities of co...		67%
CIS-80	SLO-1	Implement and analyze databases		100%
	SLO-2	Maintain database management systems and data		100%
CIS-90	SLO-2	Prepare for and conduct a tech job hunt.	100%	
	SLO-3	Troubleshoot operating system and software errors ..	100%	

CIS Non-Credit/Adult education Courses:

SLO Table

Course	SLO	SLO Description	Spring 2021	Summer 2021	Spring 2022	Fall 2022	Spring 2023
CS-150	SLO-1	Demonstrate knowledge of different computer hard...	91%		100%		100%
	SLO-2	Apply the concepts of software compatibility and ins...	93%		90%	100%	100%
	SLO-3	Identify appropriate troubleshooting procedures and...	98%		100%	100%	100%
CS-151	SLO-1	Demonstrate knowledge of different layers and prof...	96%		100%	100%	100%
	SLO-2	Apply the concepts of DNS and DHCP to connect com...	94%		100%	100%	100%
CS-152	SLO-3	Identify appropriate troubleshooting procedures and...	82%		100%	100%	100%
	SLO-1	Demonstrate knowledge of Windows and Linux filesy...	96%	83%	100%		76%
	SLO-2	Apply the concepts of operating systems to setup us...	100%	83%	100%	100%	94%
CS-153	SLO-3	Identify appropriate troubleshooting procedures and...	65%	63%	93%	100%	100%
	SLO-1	Demonstrate knowledge of different directory servic...	100%	67%	100%		100%
	SLO-2	Apply the concepts of system administration to real l...	100%	100%	100%	100%	100%
CS-154	SLO-3	Identify appropriate methods of system recovery an...	100%	67%	100%	100%	100%
	SLO-1	Demonstrate knowledge of how various encryption a...	100%	100%	100%	100%	100%
	SLO-2	Apply the concepts of IT security to real life scenario...	83%	100%	100%	100%	100%
	SLO-3	Identify the difference between authentication and a...	100%	100%	100%	100%	100%

GIS Courses:

SLO Table

Course	SLO	SLO Description	Fall 2020	Spring 2021	Fall 2022	Spring 2023
GIS-1	SLO-1	Address the capabilities, limitations, and application...	100%			
	SLO-2	Prepare a completed map, with effective format, lay...			100%	
GIS-2	SLO-1	Create a geodatabase, incorporating basic componen...	100%			
	SLO-2	Implement data geocoding as a means of capturing G...			100%	
GIS-3	SLO-1	Produce high quality map layouts, complete with sta...		100%		100%
	SLO-2	Assess various map layouts for accurate and effectiv...				100%
GIS-4	SLO-1	Exercise Map Algebra calculations, via a Raster Calcu...				100%
	SLO-2	Develop an effective GIS-based model that will proce...		100%		100%
GIS-5	SLO-1	Build a viable web map for online GIS use and viewing.		100%		100%
	SLO-2	Explain what a story map is, and successfully build o...				100%

Course Assessed	Recommendations for Improvement
CS-1: Computer Literacy	None at this time
CS-150: Technical Support Fundamentals	None at this time
CS-151: The Bits and Bytes of Computer	None at this time
CS-152: Operating Systems and You	None at this time
CS-153: System Administration and IT	None at this time
CS-154: IT Security: Defense	None at this time
GIS-1: Fundamentals of GIS	None at this time
GIS-2: GIS Data Concepts	None at this time
GIS-3: Cartography & Geovisualization	None at this time
GIS-4: Spatial Analysis	None at this time
GIS-5: Web/Mobile-Based GIS	None at this time

Below you will find screenshots of the current program findings in the Information Systems Program. The current CIS AS degree and certificate programs are newer and offerings have just recently begun, so data on these are not yet available.

IT Support Professional (CIS Adult Education)

Program Name	Program Student Learning Outcome (PSLO)	2020-21	2021-22	2022-23
Computer Information Systems: IT Support Professional Certificate of Completion	PSLO-1: Assemble a computer from scratch and install an operating system	100%	100%	100%
	PSLO-2: Build a network layer and compile the five-layer network model	100%	100%	100%
	PSLO-3: Explain the components of the Windows and Linux operating systems and through a series of hands-on labs, perf..	88%	81%	83%
	PSLO-4: Describe the different facets of information technology, like computer hardware, the Internet, computer s..	100%	86%	83%
	PSLO-5: Upon completion of this course, the student will be able to describe the different facets of information technolog..	100%	92%	100%
	PSLO-6: Grasp the fundamentals of computer networking, from modern networking technologies and protocols to an overvie..	91%	90%	94%
	PSLO-7: Apply infrastructure service management techniques that keep all organizations up and running, like managing and ..	100%	80%	100%
	PSLO-8: And describe a wide variety of IT security concepts, tools, and best practices, including how to safeguard data, typ..	100%	86%	100%

Program Student Learning Outcomes	Summarize Findings
PSLO 1	Students are successfully meeting this learning outcome
PSLO 2	Students are successfully meeting this learning outcome
PSLO 3	Students are successfully meeting this learning outcome
PSLO 4	Students are successfully meeting this learning outcome
PSLO 5	Students are successfully meeting this learning outcome
Recommendations for Improvement	
PSLO's 3 and 6 are meeting the required precents for student success, but at a lower rate than the other program outcomes. Both of these outcomes require an understanding of some higher level technical jargon especially when it refers to networking. To increase student success for these PSLO's instructors should assess students' prior knowledge in these areas and help increase student understanding of networking terms and jargon which will increase the success of these PSLO's.	

GIS Cert of Achievement

Program Name	Program Student Learning Outcome (PSLO)	2020-21	2022-23
Geographic Information Systems: Certificate of Achievement	PSLO-1: Demonstrate an understanding of what a GIS is, how it can be used, and how the technology has come to be.	100%	100%
	PSLO-2: Explain, in detail, the nature of geospatial data and associated systems – types, formats, structures, models, acquisition, maintenance, manipulation, and display.	100%	100%
	PSLO-3: Apply critical thinking skills to the approach of establishing a basic GIS and using said GIS to analyze pertinent data and information to derive results that can or may help to better understand a perceived real-world geospatial phenomenon.	100%	100%
	PSLO-4: Use the latest, basic GIS-based software technologies on the market with effective and efficient application.	100%	100%
	PSLO-5: Be academically prepared to obtain an entry-level position directly in GIS, or to greatly supplement and enhance another chosen career field that can benefit from the technical nature of GIS knowledge.	100%	100%

Program Student Learning Outcomes	Summarize Findings
PSLO 1	Students are successfully meeting this learning outcome
PSLO 2	Students are successfully meeting this learning outcome
PSLO 3	Students are successfully meeting this learning outcome
PSLO 4	Students are successfully meeting this learning outcome
PSLO 5	Students are successfully meeting this learning outcome
Recommendations for Improvement	
None at this time	

Enrollment Management

Enrollment Management	2019-20	2020-21	2021-22	2022-23
Information Systems Enrollment Overall	17	231	217	214
Lassen College Census Enrollment	14,318	12,243	11,847	11,195
Information Systems Full-Time Equivalent Students (FTES)	2.8	17.5	12.7	14.2
Lassen College Full-Time Equivalent Students (FTES)	1,538.3	1,283.8	1,200.6	1,153.9
Information Systems Number of Sections	1	13	15	15
Lassen College Number of Sections	851	758	818	769
Information Systems Fill Rate	49%	51%	41%	41%
Lassen College Fill Rate	50%	52%	48%	51%
Information Systems Full-Time Equivalent Faculty (FTEF)	0.1	1.3	1.1	1.3
Lassen College Full-Time Equivalent Faculty (FTEF)	79.8	70.7	74.5	72.4
Information Systems FTES/FTEF	20.0	13.5	11.7	10.7
Lassen College FTES/FTEF	20.0	13.5	11.7	10.7

Enrollment	2019-20	2020-21	2021-22	2022-23
Program-Level				
Information Systems Enrollment Overall	17	231	217	214
Enrollment	2019-20	2020-21	2021-22	2022-23
Course-Level				
CS-1	17	19		
CS-150		63	27	40
CS-151		56	25	38
CS-152		25	53	39
CS-153		22	55	39
CS-154		27	55	41
GIS-1		5	1	4
GIS-2		5	1	4
GIS-3		3		3
GIS-4		3		3
GIS-5		3		3
Modality				
C - Correspondence				
F - Face-to-Face				
H - Hybrid				
N - Internet	17	231	217	214

Enrollment	2019-20	2020-21	2021-22	2022-23
Program-Level				
Information Systems Enrollment Overall	17	231	217	214
Gender				
Female	10	106	120	96
Male	7	121	97	118
Unreported		4		
Ethnicity-Race-Ancestry				
American Indian or AK Native		13	5	9
Asian		11		5
Black or African American	1	6		5
Filipino				5
Hispanic or Latinx	4	29	25	28
Pacific Islander or HI Native	1	2	1	5
Unreported	2	12	11	
White	9	158	175	157
Age Group				
17 and Younger	3	13	9	15
18 to 24	7	37	31	31
25 to 49	7	132	148	135
50 and Older		49	29	33
Unreported				

The Information system program has a varied enrollment demographic. One area that is surprising, but encouraging, is the number of older students taking courses in the area. Being able to offer entry level, no cost programs has increased the number of older students willing to try an information systems course and increase their knowledge and skills.

As a CTE program, the Information Systems core goal is to provide workplace knowledge and skills so that students can get jobs or advance in their current career. Our enrollment in the 18-24 and 25-29 age ranges see our highest enrollment. It is this age group that typically enrolls in courses for employment advancement or opportunities, thus helping to reinforce that our goal is meeting the needs of those students

Curriculum

Degrees and/or Certificates

Degree or Certificate Title	Award Type	Term of Last Revision
AS Degree in Computer Information Systems	AS	Spring 2023
Certificate of Achievement Geographical Information Systems	CA	Fall 2023
Certificate of Achievement Computer Information Systems	CA	Fall 2023

Updated textbooks were made to the GIS Certificate. The CIS degree and Certificate were created and implemented.

Courses

GIS courses were reviewed and GIS 3 and GIS 5 had textbook updates. No other revisions to previously adopted courses were made.

Since the last program review several courses were added. CIS 50, 60, 70, 71, 80, 81, 82, 90 and 160 were added. These courses were added based on advisory board and LMI data recommendations to create a Computer Support Certificate and a Computer Information Systems terminal degree. CIS 50, 60, 70, 71, 80, 81 and 82 were developed and directly align with C-ID courses in the Information Technology sector.

All courses, certificates and degrees were reviewed and found that no changes to SLO's or PSLO's were needed at this time.

Course	Last Offered	Term of Last Revision
CS-1: Computer Literacy	Spring 2021	UNK-Business Course
CS-150: Technical Support Fundamentals	Fall 2023	Spring 2023
CS-151: The Bits and Bytes of Computer	Fall 2023	Spring 2023
CS-152: Operating Systems and You	Fall 2023	Spring 2023
CS-153: System Administration and IT	Fall 2023	Spring 2023
CS-154: IT Security: Defense	Fall 2023	Spring 2023
GIS-1: Fundamentals of GIS	Fall 2023	Spring 2023
GIS-2: GIS Data Concepts	Fall 2023	Spring 2023
GIS-3: Cartography & Geovisualization	Fall 2023	Spring 2023
GIS-4: Spatial Analysis	Spring 2023	Spring 2023
GIS-5: Web/Mobile-Based GIS	Spring 2023	Spring 2023

At this time none of the Information Systems courses are articulated with 4 year courses due to the limited availability of offerings in this area at the University level.

External Compliance

The Information Systems faculty regularly assess and attend meetings regarding compliance and accreditation and make changes to meet the requirements or recommendations of any organization or

committee.

External Analysis: Job Market Assessment

The Information Systems advisory board meets twice a year and goes over current labor market data for the Far North Region and labor needs for the more direct student population area. The advisory board continuously mentions the need for employees with GIS experience and the future needs of employees with knowledge and skills in computer information systems. All information gathered suggests continued labor market growth in the area's covered by the Information Systems department and courses.

Program Planning and Communication Strategies

Faculty meet and communicate in a variety of ways. Zoom is utilized often for faculty members to meet with out of area industry professionals and other planning professionals. Faculty members also attend in person and zoom meetings directly related to the college, including Curriculum and Academic Senate meetings. Email is utilized to communicate with advisory board members outside of the bi-annual meetings.

Academic Planning Analysis Summary

At this time the plan for the Information Systems department is to grow enrollment in the courses offered and possibly look into expanding adult education offerings to meet the needs of local employers and community members. In addition, cybersecurity expansion is being considered as grant funding and expand opportunities are becoming more prevalent in the industry and in discussions at the state level.

Section 2: Human Resource Planning

Workload and Staffing Assessment

Year	F/T Faculty	P/T Faculty
Previous Year	1	2
Current Year	1	2
Next 2 Years	1	3

The Information Systems program is still very much in its infancy and development stage and had only some courses offered. As we implement a full degree offering and additional courses, the need for additional faculty will be needed. One or two additional adjunct instructors will be needed for the CIS courses as those offerings expand.

Professional Development

Since the last program review, a full-time faculty member was added and that faculty member has participated in a variety of professional development activities including curriculum development, DEIA, course specific trainings and professional development related to workings of the college as whole.

To continue our commitment of offering equitable and relevant courses, the Information Systems faculty needs continued training in DEIA, creating and maintaining accessible Canvas courses, time to research and further professional knowledge in the areas that are growing within the industry, specifically time within the working hours dedicated to cybersecurity and database continuing education.

Section 3: Infrastructure Planning

Facilities

- Describe and evaluate the Lassen Community College facilities available to the program.
- Currently there are no facilities at Lassen Community College that are available to the CIS Program. All courses are online only.
- Describe and evaluate additional facilities utilized off-campus by the program
None
- Describe any facilities needs identified internal or external analysis
None at this time
- Justify any proposed modifications or additions to existing facilities that would better serve the program planned for the program review cycle.

The program would benefit from a dedicated student space that allows the instructors to work with students or allow for better recording by the instructors. For some courses, the ability to use real and demo real technology equipment would better help students get a sense of the hands-on experience. Currently there is no room for such recordings or equipment in the full-time faculty members office, so some of those recordings are done off-site or replaced

with YouTube videos.

Students that are on campus meet with the full-time instructor to get assistance with course work, but due to the limited space in the office, there is no where for the student to place their computer, and it is very limited on what the instructor can do to help the student.

Equipment

- Describe and evaluate equipment and equipment support provided for instruction and instructional support.

There are laptops purchased by grant funds specifically for CIS students. Students can request these laptops through the instructor. Chromebooks are not sufficient to meet the needs of the courses and therefore Chromebooks through the college library are not an option.

Technology

- Describe and evaluate technology and technology support provided for instruction and instructional support.

Technology related to the Information Systems program includes specialized software applications that must be downloaded on instructor and student computers. The IT staff has been very supportive and quick to respond to additional downloads and support that come up with the ever-changing needs of the Information Systems programs

- Justify any proposed modifications or additions to existing technology that would better serve the program planned for the next four years.

As the courses progress and the potential of losing access to virtual labs through other colleges arise, Lassen College should look at the costs, space and personnel requirements of creating them on NetLabs environments. This would allow Lassen College to not depend on other community colleges and grant support, which may or may not be available in subsequent years.

Section 4: Program Planning

Progress update on previous action plans

Action Plan	Progress Detail	Outcomes
Create an online CIS Program that will offer students industry certification and workforce skills	Completed	Increased enrollment
Create a terminal CIS Degree	Completed	Still to be determined, increased enrollment and increased retention rates are the goal but the terminal degree was just approved so data in regards to outcomes are not yet available

Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis

Complete SWOT analysis

Strengths	The Information Systems department offers courses online that are not widely available at other colleges or in the area. There are several free online courses offered in the department through the adult education program that help get students started in a way that feels less intimidating than taking the leap back to full-time or for credit courses.
Weaknesses	Enrollment for the Information systems courses is on the lower side due mainly to the lack of marketing and knowledge about program offerings. In addition retention rates for the department are on the lower side, but align with a lot of asynchronous online courses, due to the nature of online courses students lose track or motivation more easily than in person courses
Opportunities	There are many grants opportunities to expand course offerings, especially in the adult education cybersecurity areas. Local employers have approached the college regarding the need for training employees and are willing to pay for such trainings if Lassen College will develop and teach the curriculum
Threats	Continuous changing needs and evolution of technology are the greatest threat to the information systems department. The continuous need for updated instructor knowledge, skills and curriculum changes need to be at the forefront of the program or the Information Systems programs can quickly become outdated.

Program Plan

The goals listed below are all directly related to the Mission, Vision, and Strategic Goals of Lassen Community college by increasing course offerings the Information Systems department is expanding a wide variety of learning opportunities to students, ensuring that all students have access to the technology needed to be successful and thus helping Lassen College be a leader in education and workforce development.

Fall 2023 Instructional Program Review (IPR) - Student Evaluation

Action Plan	Supporting Evidence	Expected Outcome	Resource(s) to Achieve the Action Plan	Resource Category	Estimated Cost	Expense Type	Priority Ranking
Create a dedicated recording/office space for instructor use that also allows room for student interaction	Course Success and Retention Rates	Increase success and retention rates	Facilities planning	Facilities	\$5,000	One-Time	1
Increased Marketing	Enrollment rates	Increase in enrollment	Outreach Coordinator, outsourcing the project	Outreach	\$5000	On-Going	2
Increase Adult Education courses	Labor Market Data, Employer outreach concerning additional trainings	Increased learning opportunities, Increase in Enrollment Rates	Adjunct Faculty	Human Resources	Varies	On-going	3
Increase Cybersecurity Course Offerings	Labor Market Data, C-ID and state feedback	Increased learning opportunities, Increase in Enrollment Rates	Adjunct Faculty	Human Resources	Varies	On-going	4
Acquisition and installation of program Specific hardware and software (NETLab+)	Course Success rates	Increased Retention, Increased success rates	Technology and facilities	Technology	\$35000	One-Time	5

Student Surveys:

Q1 Course Number (Examples:

AGR-1-M0095,
etc...):

MUS-12-K0669,

Answered: 2 Skipped: 0

#	RESPONSES	DATE
1	Gis1	10/16/2023 5:23 PM
2	CIS-71-N1363, CIS-82-N1364	9/23/2023 9:27 PM

Q2 Name of Program: (Select only one option)

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Administration of Justice	0.00%	0
Agriculture	0.00%	0
Studio Art	0.00%	0
Automotive Technology	0.00%	0
Business	0.00%	0
Child Development	0.00%	0
Fire Technology	0.00%	0
Gunsmithing	0.00%	0
Health Occupations/Medical Assisting	0.00%	0
History/Social Science/Sociology/Psychology	0.00%	0
Human Services	0.00%	0
Humanities	0.00%	0
Information Systems	100.00%	2
Natural Science	0.00%	0
Physical Education	0.00%	0
Vocational Nursing/Allied Health	0.00%	0
Welding Technology	0.00%	0
Special Instructional Programs: Athletics	0.00%	0
Special Instructional Programs: Developmental Studies	0.00%	0
Special Instructional Programs: Work Experience	0.00%	0
TOTAL		2

Q3 Course Name/Title:

Answered: 2 Skipped: 0

#	RESPONSES	DATE
1	geographic information systems 1	10/16/2023 5:23 PM
2	Intro Cybersecurity: Ethical Hacking, Cloud Computing	9/23/2023 9:27 PM

Q4 Educational Goal: What is your educational objective at Lassen Community College? (Check all that apply):

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
General Education: Transfer to a 4-year Institution	0.00%	0
General Education: IGETC Certification	0.00%	0
General Education: CSU Certification	0.00%	0
General Education: Transfer to another Community College	50.00%	1
Degrees/Certificates: AA/AS	50.00%	1
Degrees/Certificates: Certificate of Achievement/Certificate of Completion	100.00%	2
Degrees/Certificates: Certificate of Accomplishment	50.00%	1
General Interest: Job Requirement	50.00%	1
General Interest: Continuing Education	50.00%	1
General Interest: Personal Development	50.00%	1

Total Respondents: 2

#	TITLE OF DEGREE OR CERTIFICATE:	DATE
1	Professional certificate in gis	10/16/2023 5:23 PM

Q5 You need this course: Why are you taking this course?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Core requirement for degree or certificate	100.00%	2
Elective for Degree or Certificate	50.00%	1
General Education course for degree or transfer	50.00%	1
Job Requirement	50.00%	1
Continuing Education	50.00%	1
Personal Development	50.00%	1

Total Respondents: 2

#	OTHER: PLEASE SPECIFY	DATE
	There are no responses.	

Q6 Does the course content reasonably compare with the catalog/schedule description?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
TOTAL		2

Q7 Did the catalog clearly explain the order in which the courses in this program should be taken?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
TOTAL		2

Q8 Was any cost for this course/program, beyond registration and books, clearly identified in the catalog?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
TOTAL		2

Q9 Did the instructor(s) use the required textbooks in the program?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
N/A	0.00%	0
TOTAL		2

Q10 Are the textbooks purchased for this program useful to you?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
N/A	0.00%	0
TOTAL		2

Q11 Scheduling: Did the scheduling of the course meet your needs?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Current schedule met my needs	100.00%	2
Needed morning offering	0.00%	0
Needed afternoon offering	0.00%	0
Needed evening offering	0.00%	0
Needed one day a week schedule	0.00%	0
Needed summer offering	0.00%	0
Needed week-end offering	0.00%	0
Needed short-term (less than semester) offering	0.00%	0
Other: Please Specify:	0.00%	0
TOTAL		2

#	OTHER: PLEASE SPECIFY:	DATE
	There are no responses.	

Q12 I was provided with reasonable access to the facilities?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
TOTAL		2

Q13 The temperature of the facilities in summer or fall is:

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Often too hot for the season	0.00%	0
Often too cold for the season	0.00%	0
Comfortable for the season	50.00%	1
N/A	50.00%	1
TOTAL		2

Q14 The lighting in the facilities is?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Too bright	0.00%	0
Adequate	50.00%	1
Too dark	0.00%	0
N/A	50.00%	1
TOTAL		2

Q15 The chairs/tables/desks are?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Adequate	50.00%	1
Inadequate	0.00%	0
N/A	50.00%	1
TOTAL		2

Q16 Is there enough space for you to do your work in class?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	50.00%	1
No	0.00%	0
N/A	50.00%	1
TOTAL		2

Q17 Please elaborate on your responses and include any additional facilities-related comments:

Answered: 0 Skipped: 2

#	RESPONSES	DATE
	There are no responses.	

Q18 Did the course/program provide the necessary equipment?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
N/A	0.00%	0
TOTAL		2

Q19 Is enough time on equipment allowed for each student?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
N/A	0.00%	0
TOTAL		2

Q20 Is equipment current?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
N/A	0.00%	0
TOTAL		2

Q21 Is equipment generally in good operation condition?

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
N/A	0.00%	0
TOTAL		2

Q22 Describe how this course/program could be improved to better meet the needs of the students at Lassen Community College:

Answered: 2 Skipped: 0

#	RESPONSES	DATE
1	There needs to be an online tutoring solution for this 100% online class.	10/16/2023 5:24 PM
2	By giving the IT teacher extra IT privileges, to improve the continuity of the course. Having an IT in-person class would drastically benefit the students and course, since they need hands-on training.	9/23/2023 9:35 PM

Lassen Community
College Status of

Q23 Please provide any additional comments on the course or program:

Answered: 1 Skipped: 1

Course Name	Curriculum Committee Review Completed	Curriculum Committee Review Not Completed	Course SLO mapping Curriculum Committee reviewed
# RESPONSES			
1 Amazing classes so far!	<i>Date course last reviewed</i>	<i>Date here if last review 4 years or more</i>	9/23/2022 9:35 PM
GIS 1 Fundamentals of GIS	10/3/2023		02/15/2022
GIS 2 GIS Data Concepts	10/3/2023		02/15/2022
GIS 3 Cartography and Geovisualization	10/3/2023		02/15/2022
GIS 4 Spatial Analysis	10/3/2023		02/15/2022
GIS 5 Web/Mobile-based GIS	3/7/2023		02/15/2022
CIS 50 IT Essentials	3/21/2023		10/3/2023
CIS 60 Networking Essentials	3/21/2023		10/3/2023
CIS 70 Computer and Network Security Fundamentals	3/21/2023		10/3/2023
CIS 74 Introduction to Cyber Security Ethics Hacking	New course 10/18/2022		10/18/2023
CIS 80 Introduction to Datasystems	3/21/2023		10/3/2023
CIS 81 Introduction to Python Programming	New course 10/18/2022		10/18/2023
CIS 82 Cloud Computing	New course 10/18/2022		10/18/2023
CIS 90 The IT Professional	3/21/2023		10/3/2023
CIS 160 Google Digital Marketing and E-Commerce	New course 1/17/2023		10/3/2023
CS 150 Technical Support Fundamentals	10/3/2023		02/15/2022
CS 151 The Bits and Bytes of Computer Networking	10/3/2023		02/15/2022
CS 152 Operating Systems and You: Becoming a Power User	10/3/2023		02/15/2022
CS 153 System Administration and IT Infrastructure Services	10/3/2023		02/15/2022
CS 154 IT Security: Defense against the digital dark arts	10/3/2023		02/15/2022

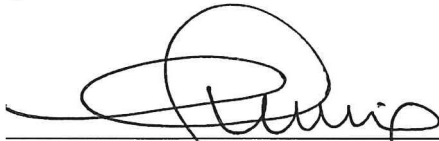
Lassen Community College
Status of Curriculum Reviews

Programs	Curriculum Committee Review Completed		Program PSLO mapping Curriculum Committee reviewed
GIS Certificate of Achievement	10/3/2023		04/19/2022
Computer Support Specialist Certificate of Achievement	9/19/2023		9/19/2023
Computer Information Systems AS Degree	New degree 9/19/2023		9/19/2023
IT Support COC	9/19/2023		9/19/2023




Melinda Duerksen, Subject Area Faculty Signature

11/1/2023
Date



Tom Downing, Curriculum and Academic Standards Committee Chair
Signature

10/30(202-3
Date



Michen Williams, Dean of Instructional Services

10/31/2023
Date

Lassen Community College
Status of Curriculum Reviews