FY 2023

ANNUAL ACADEMIC PROGRAM ASSESSMENT REVIEWS

UNIVERSITY ASSESSMENT COMMITTEE REPORT

LAKE SUPERIOR STATE UNIVERSITY

Contents

COLLEGE OF ARTS & SCIENCES

Creative Writing: Annual Program Assessment Update Report 4
English / Language Arts: Annual Program Assessment Update Report 7
Political & Social Sciences: Annual Program Assessment Update Report 10
Biochemistry: Annual Program Assessment Update Report 13
Biology: Annual Program Assessment Update Report 16
Cannabis Chemistry: Annual Program Assessment Update Report 19
Chemistry: Annual Program Assessment Update Report 22
Environmental Science: Annual Program Assessment Update Report 25
Forensic Chemistry: Annual Program Assessment Update Report 29
Geology: Annual Program Assessment Update Report 32

COLLEGE OF HEALTH & EMERGENCY RESPONDERS

Kinesiology: Annual Program Assessment Update Report 36
Psychology: Annual Program Assessment Update Report 44
Nursing: Annual Program Assessment Update Report 57
Criminal Justice: Annual Program Assessment Update Report 73
Fire Science: Annual Program Assessment Update Report 79

COLLEGE OF BUSINESS, ENGINEERING, COMPUTER SCIENCE & MATHEMATICS

Accounting: Annual Program Assessment Update Report 85
Business Administration: Annual Program Assessment Update Report 89
Cannabis Business: Annual Program Assessment Update Report 93
Entrepreneurship: Annual Program Assessment Update Report 96
Finance & Economics: Annual Program Assessment Update Report 98
International Business: Annual Program Assessment Update Report 100
Management: Annual Program Assessment Update Report 104
Marketing: Annual Program Assessment Update Report 108

AS-Small Business Administration: Annual Program Assessment Update Report 111
A-Technical Accounting: Annual Program Assessment Update Report 114
Computer Engineering: Annual Program Assessment Update Report 118
Data Science: Annual Program Assessment Update Report 122
Mathematics: Annual Program Assessment Update Report 158

College of Arts and Sciences

Creative Writing: Annual Program Assessment Update Report

Person Submitting: *Chad Barbour*

Date: *Date of Annual Assessment Update Meeting*

Academic Program: *Creative Writing*

Annual Update – Year Being Reported: *2022*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive,

(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments:

Freshmen: *3*

Sophomores: *1*

Juniors: *6*

Seniors: *1*

Retention Numbers:

Freshmen: *1*

Sophomores: *5*

Juniors: *5*

Degrees Conferred: *1*

High Impact Practices Applied:

Significant Data Trends:

Analysis:

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Assessment is occurring on the course level, but Nuventive is not connecting those results to the program report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Only one faculty member (Julie Barbour) is currently teaching courses in the Creative Writing program.

- Students are meeting the desired goal for the Creation outcome.
- Students meet the desired goal for knowledge of publishing pathways.
- Students perform adequately for the Literature claim, but could show improvement in the area of analysis.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

- *Border Crossing* will be moving to short forms to better facilitate student understanding in the internships
- For creative writing portfolio, continue reading craft essays in the student's chosen genre
- Increasing representation of diverse voices in syllabi
- Exploring opportunities to build community among majors and minors in the program through writing retreats

■

■ **Required attachment:** Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

English / Language Arts: Annual Program Assessment Update Report

Person Submitting: *Chad Barbour*

Date: *Date of Annual Assessment Update Meeting*

Academic Program: *English Language and Literature*

Annual Update – Year Being Reported: *2022*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive,

(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments:

Freshmen: *1*

Sophomores: *1*

Juniors: *5*

Seniors: *1*

Retention Numbers:

Freshmen: *1*

Sophomores: *5*

Juniors: *1*

Degrees Conferred:

High Impact Practices Applied:

Significant Data Trends:

Analysis:

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Assessment is occurring on the course level, but Nuventive is not connecting those results to the program report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Only one faculty member (Chad Barbour) is currently teaching the majority of ENGL courses in the program.

- Textual Analysis in the literature courses tends to be the weaker skill for students. Most students are able to demonstrate comprehension of the texts (on a plot or summary level), but do not sufficiently develop higher order skills of synthesis or development of analysis.
- Students demonstrate proficiency in knowledge of context and considering the relationships between texts and historical and social contexts.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

- Provide more direct instruction in analysis and interpretation of texts
- Preparing for transition to new program, grade 5-12 band

i.

ii. **Required attachment:** Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active*.

LAKE SUPERIOR STATE UNIVERSITY

Political Science / Social Science: Annual Program Assessment Update Report

Person Submitting: *Melissa Shaffer-O'Connell, James Schaefer*
Date: *10/13/2023*
Academic Program: *Political Science, Social Science*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost for Accreditation & Assessment and your Dean before 3:00pm on Friday of Week 6 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

With approval of the Dean, academic programs with an enrollment of less than 10 may present their data in a combined Within-School Annual Program Assessment Update Report.

Annual Program Data – Combined Reporting for Programs Within Schools with < 10 Enrollment

Program Enrollment Data (Primary Major) – programs with < X students				
	Program Name: Political Science	*Program Name:* Social Science	*Program Name:*	*Program Name:*
Freshmen	5	1		
Sophomores	1	4		
Juniors	1	4		
Seniors	2	8		

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

Retention Numbers for Primary Major within Programs with < X students				
	Program Name: Political Science	*Program Name:* Social Science	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	50%	100%		

2nd Year Students (prior) Retained to 3rd Year	0%	50%		
3rd Year Students (prior) Retained to 4th Year	100%	100%		
4th Year Students (prior) Retained to 5th Year (if any)	0%	83%		

Still Attending LSSU, but changed major:
(Data for annual Institutional retention reporting)

Retention Numbers for Programs with < X students				
	Program Name: Political Science	*Program Name:* Social Science	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	50%	0%		
2nd Year Students (prior) Retained to 3rd Year	100%	25%		
3rd Year Students (prior) Retained to 4th Year	0%	0%		
4th Year Students (prior) Retained to 5th Year (if any)	0%	0%		

Degrees Conferred: *Unclear*

High Impact Practices (HIPs) Applied *(specify HIPs applied in specific program(s)***:** Writing intensive, senior research

Significant Data Trends: *NA*

Analysis: *Data was unclear*

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments. Include each program being reported on this form.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments for each program being reported on this form.

Annual Assessment Meeting Minutes – Analysis of Results

3. Combined Annual Assessment Meetings may be conducted for programs with < **X** students enrolled. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Combined Annual Assessment Meetings may be conducted for programs with < **X** students enrolled. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken for each program being reported on this form.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program(s) from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active*.

Biochemistry: Annual Program Assessment Update Report

Person Submitting: *Thu Nguyen*

Date: *9/8/2023*

Academic Program: *Biochemistry*
Annual Update – Year Being Reported: *Fall 2022-Spring 2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive, *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments:

Freshmen: *1*

Sophomores: *3*

Juniors: *4*

Seniors: *4*

Retention Numbers:

Freshmen: *1*

Sophomores: *2*

Juniors: *4*

Degrees Conferred: *3*

High Impact Practices Applied: First-Year Seminar and Experiences, Undergraduate Research, Capstone Courses

Significant Data Trends: *There are no significant data trends to report.*

Analysis: *The total number of biochemistry students did not change significantly.*

Annual Assessment Reporting

5. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

6. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

7. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

a. Although students regularly achieve course and institutional learning outcomes in the capstone course, the quality of products has decreased as some students have no interest in completing a senior project
b. Discussions were made in school meetings to make senior research/seminar an option-this went to, and was passed at curriculum for incoming students
c. Changing to a research/course option will additionally alleviate the burden on faculty of having too many research students. Faculty can now spend more time with each student and product more quality research and student success as well as satisfaction.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

8. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

- With the change in research/course option, we intend to assess student satisfaction in:
  - Autonomy in course/research selection
  - Quality of research/faculty interaction

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Biology: Annual Program Assessment Update Report

Person Submitting: *Martha Hutchens*

Date: *8/30/2022, 9/13/2022*

Academic Program: *Biology*
Annual Update – Year Being Reported: *Enrollment and retention data are current as of Fall 2022. Assessment data are from the 2021-2022 AY.*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive, *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments:

Freshmen: *11*

Sophomores: *21*

Juniors: *19*

Seniors: *24*

Retention Numbers:

Freshmen: *30*

Sophomores: *31*

Juniors: *22*

Degrees Conferred: *9*

High Impact Practices Applied: First-Year Seminar and Experiences, Undergraduate Research, Capstone Courses

Significant Data Trends: *There are no significant trends observed from the prior academic year.*

Analysis: *There are no significant trends. The increase in freshmen and sophomore retention may be due to students changing majors from other areas to biology. The number of degrees conferred is decreased from last year (17). The number is expected to increase with the current class of juniors that were retained.*

Annual Assessment Reporting

9. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

See attached Program 4-column Report

Annual Assessment Results

10. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

See attached Program 4-column Report

Annual Assessment Meeting Minutes – Analysis of Results

11. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When

appropriate, note faculty member names).

Outcomes related to professionalism and post graduate surveys had a lower than desired response rate in BIOL 399 and BIOL 499, as there is no common meeting time for these courses.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

12. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

A discussion (over email) was had in an attempt to improve response rate. Suggestions included having a common meeting time at the end of the semester to distribute the survey, or having the students complete the survey before releasing final project (poster/presentation) grades.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Cannabis Chemistry: Annual Program Assessment Update Report

Person Submitting: : Thu Nguyen

Date: *9/8/2023*

Academic Program: *Cannabis Chemistry*
Annual Update – Year Being Reported: *Fall 2022-Spring 2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive, *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments:

Freshmen: *14 (BS), 2 (AS)*

Sophomores: *11*

Juniors: *12*

Seniors: *9*

Retention Numbers:

Freshmen: *9 (BS),*

Sophomores: *14 (BS), 1 (AS)*

Juniors: *4 (BS)*

Degrees Conferred: *6 (BS), 0 (AS), 3 (certificate)*

High Impact Practices Applied: First-Year Seminar and Experiences, Undergraduate Research, Capstone Courses

Significant Data Trends: *There was an increase in freshmen enrollment.*

Analysis: *Changes do not seem to be significant.*

Annual Assessment Reporting

13. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

14. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

15. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

a. Although students regularly achieve course and institutional learning outcomes in the capstone course, the quality of products has decreased as some students have no interest in completing a senior project
b. Discussions were made in school meetings to make senior research/seminar an option-this went to, and was passed at curriculum for incoming students
c. Changing to a research/course option will additionally alleviate the burden on faculty of having too many research students. Faculty can now spend more time with each student and product more quality research and student success as well as satisfaction.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

16. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

- With the change in research/course option, we intend to assess student satisfaction in:
  - Autonomy in course/research selection
  - Quality of research/faculty interaction

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Chemistry: Annual Program Assessment Update Report

Person Submitting: *Thu Nguyen*

Date: *8/31/2023*

Academic Program: *Chemistry*
Annual Update – Year Being Reported: *Fall 2022-Spring 2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive, *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments:

Freshmen: *2*

Sophomores: *1*

Juniors: *0*

Seniors: *1*

Retention Numbers:

Freshmen: *1*

Sophomores: *0*

Juniors: *1*

Degrees Conferred: *1*

High Impact Practices Applied: First-Year Seminar and Experiences, Undergraduate Research, Capstone Courses

Significant Data Trends: *There are no significant data trends to report.*

Analysis: *Analysis cannot be completed with such a small number of students.*

Annual Assessment Reporting

17. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

18. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

19. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

- Although students regularly achieve course and institutional learning outcomes in the capstone course, the quality of products has decreased as some students have no interest in completing a senior project
- Discussions were made in school meetings to make senior research/seminar an option- this went to, and was passed at curriculum for incoming students
- Changing to a research/course option will additionally alleviate the burden on faculty of having too many research students. Faculty can now spend more time with each student and product more quality research and student success as well as satisfaction.
- With course cancellations due to low enrollment caused by small numbers of chemistry students, we updated the chemistry degree program to allow student to take 10 credits of

upper division chemistry or cannabis chemistry courses. This will be in line with American Chemical Society accreditation and allows us to offer courses on an as-needed basis. This will also reduce student frustration with course offerings and substitution/waivers.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

20. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

- With the change in research/course option, we intend to assess student satisfaction in:
  - Autonomy in course/research selection
  - Quality of research/faculty interaction

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active*.

Environmental Science: Annual Program Assessment Update Report

Person Submitting: *Steven Johnson and Derek David Wright*

Date: *10/2/2023*

Academic Program: *Environmental Science*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive, *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments:

Freshmen: *3*

Sophomores: *10*

Juniors: *8*

Seniors: *14*

Retention Numbers:

Freshmen: *8*

Sophomores: *5*

Juniors: *8*

Degrees Conferred: *6*

High Impact Practices Applied:

Significant Data Trends: *Note any significant data trends, such as high D/F/W rates in specific courses, or declining enrollment or completion rates compared to the previous year, etc.*

Analysis:

Annual Assessment Reporting

Please see attached Program-level Four Column Report with updated data.

Annual Assessment Results

Please see attached Program-level Four Column Report with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

Drs. Wright, Kandel, Kelso, and Ranasinghe on 9.21.23 and 10.5.23. Course & program assessment data was reviewed, as well as the results of a focus session with environmental science students held by the Provost in August 2023.

Summary of Findings:

1. The majority of environmental science graduates over the past 10 years are employed in public health. Environmental Science graduates have outstanding employment opportunities. The program is achieving student learning goals in employability, technical skills, and graduate school preparation, but curriculum needs are evolving as various subdisciplines change.

2. Students who attended the focus session with the Provost in August 2023 expressed significant interest in academic programs focused on environmental chemistry/biogeochemistry.

3. Student learning outcomes would benefit from additional coursework in paleoclimate studies, microbiology, genetics, and soil pedogenesis/erosion.

4. The senior research sequence needs revision. The student learning outcomes are being met, but the outcomes are extremely time intensive to achieve. Other programs such as

geology and chemistry may have more efficient ways of achieving the same outcomes.

5. Facilities for environmental science and earth science have improved significantly due to two consecutive MRI awards and a multimillion-dollar award from MI-DHHS. We should leverage this opportunity as we revise program content.

6. The 7 week format in EVRN 211 is too compressed, and is leaving insufficient time for data analysis.

7. The current format of EVRN 389 is no longer practical due to pandemic related issues related to field travel, changes in faculty, and the excessive financial burden on students.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

1. Develop new academic programs in Biogeochemistry and Environmental Chemistry. Nearly all of the required coursework is already in place, we have sufficient faculty expertise, and this will help leverage our significant improvement in facilities.

2. Revise EVRN 211 to a 15 week format to allow sufficient time for data analysis.

3. Revise EVRN 389 to a 1,3 format, with a CURE style research design

4. Add a new course EVRN 390 (Research Methods in Biogeochemistry; 1,3) with a CURE style research design. We have adequate resources and expertise to offer this.

5. Make the current senior research sequence optional, and aimed primarily at graduate school bound students. All students will complete at least 3 CURE style research intensive courses (EVRN 341, EVRN 389, and EVRN 390)

6. Add 1 cr. Topics courses (1,0) in paleoclimate methods and Soil Pedogenesis and Erosion. We have adequate resources and expertise to offer these.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the

report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under “Filter,” select *Goal Status – Active*.

Forensic Chemistry: Annual Program Assessment Update Report

Person Submitting: *Thu Nguyen*

Date: *9/8/2023*

Academic Program: *Forensic Chemistry*
Annual Update – Year Being Reported: *Fall 2022-Spring 2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive, *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments:

Freshmen: *10*

Sophomores: *6*

Juniors: *5*

Seniors: *4*

Retention Numbers:

Freshmen: *5*

Sophomores: *5*

Juniors: *4*

Degrees Conferred: *2*

High Impact Practices Applied: First-Year Seminar and Experiences, Undergraduate Research, Capstone Courses

Significant Data Trends: *The number of freshmen enrollment doubled. Retention seems consistent.*

Analysis: *The number of degrees in forensic chemistry is lower than anticipated. This could be due to students switching majors to another area of chemistry (cannabis or traditional), or to criminalistics (less chemistry focus).*

Annual Assessment Reporting

21. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

22. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

23. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

a. Although students regularly achieve course and institutional learning outcomes in the capstone course, the quality of products has decreased as some students have no interest in completing a senior project
b. Discussions were made in school meetings to make senior research/seminar an option-this went to, and was passed at curriculum for incoming students

c. Changing to a research/course option will additionally alleviate the burden on faculty of having too many research students. Faculty can now spend more time with each student and product more quality research and student success as well as satisfaction.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

24. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

With the change in research/course option, we intend to assess student satisfaction in:

a. Autonomy in course/research selection
b. Quality of research/faculty interaction

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Geology: Annual Program Assessment Update Report

Person Submitting: *Steven Johnson and Paul Kelso*

Date: *10/2/2023*

Academic Program: *Geology*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive, *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments:

Freshmen: *3*

Sophomores: *2*

Juniors: *7*

Seniors: *9*

Retention Numbers:

Freshmen: *4*

Sophomores: *5*

Juniors: *10*

Degrees Conferred: *4*

High Impact Practices Applied: First-Year Seminar, Undergraduate Research, Capstone Courses

Significant Data Trends: *There are no significant data trends to report.*

Analysis: Graduates were successful getting accepted to graduate school or finding geology related employment.

Annual Assessment Reporting

Please see attached Program-level Four Column Report with updated data.

Annual Assessment Results

Please see attached Program-level Four Column Report with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

25. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

a. Faculty expertise related to climate, sedimentary processes and the environment is needed to support geology and environmental science programs
b. Need dedicated funds to purchase equipment to support program
c. GEOL122 course with no perquisite requires discussion of introductory geologic concepts limiting time for more advanced concepts and discussion

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

26. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

a. Complete a successful search for a faculty with an expertise related to climate, environment and sedimentary processes
b. New faculty will offer students course work and research opportunities related to climate, environment and/or sedimentary processes

c. Recommend student program fees are returned to programs to support programs with equipment and other purchases and support.
d. Consider adding a prerequisite to GEOL122 so more time in this course can focus on higher level concepts

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active*

College of Health and Emergency Responders

Kinesiology: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Kinesiology: Annual Program Assessment Update Report

Person Submitting: *Joseph D. Susi II and Dr. Kathy Berchem Dean*
Date: *9/26/2022*
Academic Program: *Kinesiology*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (Primary Major):
Freshmen: *Fall Enrollment 14*
Sophomores: *Fall Enrollment 10*
Juniors: *Fall Enrollment 10*
Seniors: *Fall Enrollment 21*

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
Retained to 2nd Year 6 of 12 (50%)
2nd Year Students (from prior year) returned this year:
Retained to 3rd Year 6 of 7 (85%)
3rd Year Students (from prior year) returned this year:
Retained to 4th Year 12 of 14 (85%)
If applicable, 4th Year Students returned for 5th Year:
Retained to 5th Year 9 of 36 (25%)

Still Attending LSSU:
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
Retained to 2nd Year 8 of 12 (66%)
2nd Year Students (from prior year) returned this year:
Retained to 3rd Year 7 of 7 (100%)
3rd Year Students (from prior year) returned this year:
Retained to 4th Year 14 of 14 (100%)
If applicable, 4th Year Students returned for 5th Year:
Retained to 5th Year 9 of 36 (25

Degrees Conferred: *Number*

High Impact Practices Applied: The Kinesiology (KINS) Program at LSSU continues to utilize several High Impact Practices (HIP) as identified by the Association of American Colleges and Universities within it's curriculum. HIP consist of 11 topic areas: 1) First Year Experience, 2) Common Intellectual Experience, 3) Learning Communities, 4) Writing Intensive Courses, 5) Collaborative Assignments and Projects, 6)

Undergraduate Research, 7) Diversity and Global Learning, 8) E-Portfolio's, 9) Service Learning/Community Based Learning, 10) Internships and 11) Capstone Courses and Projects. The application of HIP is demonstrated in the following ways:

1) First Year Experience – The KINS Program supports a First Year Experience Seminar (USEM 101) with a section specific to KINS students.
2) Common Intellectual Experience – The KINS program implements this HIP by utilizing a common core of classes that all KINS students must take. The students then select a concentration area (Human Performance, Rehabilitation Sciences or Sports and Fitness Management)
3) Learning Communities –
4) Writing Intensive Courses – The HIP in this area are seen in KINS 358 Research Methods and KINS 428 Psychological Aspects of Exercise and Rehabilitation where students research and compose professional papers.
5) Collaborative Assignments and Projects –
6) Undergraduate Research –
7) Diversity and Global Learning – All KINS students are required to take a Diversity course prior to graduation.
8) E – Portfolio's – While "e-portfolio's" are not used all KINS students create a professional portfolio in KINS 481 which include the establishment of professional goals and objectives, development of a resume and cover letter and a personal philosophy essay.
9) Service Learning/Community Based Learning – KINS students regularly gain experience in this area. Activities working with LSSU Athletics in strength and conditioning, athletic training and game management occur quite frequently. Students have opportunities to work with clients with physical ailments such as autism and cerebral palsy as well as regular interaction with Michigan Special Olympics.
10) Internships – All LSSU KINS students are required to complete one internship and may either complete a second internship or complete a senior project.
11) Capstone Courses and Projects -

Significant Data Trends: *Note any significant data trends, such as high D/F/W rates in specific courses, or declining enrollment or completion rates compared to the previous year, etc.*
The document titled "LSSU Student Count Fall 2023 – Spring 2022 demonstrates 62 students enrolled in KINS for Spring 2022, Fall 2022 shows an enrollment of 55 which matches the numbers presented on page 1 of this document. Spring 2023 shows an increase to 57 students which could be accounted for by way of transfer students. The 2023 LSSU Commencement Program continues to support the Bachelor of Science Degree in Kinesiology as one of the top degrees awarded with 21, placing it as the fourth largest graduating class for a degree.

Analysis: *Analysis of Retention data*
It appears that students once in the KINS program elect to stay in the program. First year students are always a wildcard as they adapt to college life and are exposed to different courses, programs and job opportunities. In the Fall of 2020 as LSSU was coming out of the COVID pandemic, arrangements were made to teach many of the KINS classes online as it was difficulty for Canadian students to freely cross the border. At this time there were approximately 18 KINS students that were Canadian. This restriction it is felt may have acted as a limiter for Canadian students to enroll, which may have led to a decrease in enrollment for the KINS program. Fall 2022 had two Canadian students from Sault College continue their education at LSSU. It is felt that since the border restriction has been eliminated that talks with the Health and Fitness Program the OTA/PTA Program and the Sport Management Program should be established to draw from this pool of potential students.

Annual Assessment Reporting

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments. Please refer to the 2022-2023 Nuventive Report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names). Please refer to attached Kinesiology Department Minutes 9/26/2022.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessment results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.
   Faculty within the LSSU KINS program met every week during the 2022-2023 Academic year. The Curricular Sub-Committee was re-arranged with the substitution of one of the members. Curricular work was continued and progress was made, however not to the point of completion. Faculty created a new course KINS 202 Diversity and Equity in Sport which was approved by the Curriculum Committee and plans were established to gain approval of this course as a General Education "Diversity" elective.

   Again, there was turnover at on-campus Internship sites at the end of the academic year which saw two athletic trainers leave and one strength coach leave. One of the athletic trainers had a personal issue which required them to be away from the University for an extended period of time. Again it is difficult to develop a curricular plan with the constant turnover in this area.

   The "Professional Transition Ceremony" has begun to be referred to as "Senior Send-Off." This year's keynote speaker was Ms. Nikki Brown ATC, PTA.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

LSSU STUDENT COUNT
FALL SEMESTER 2023, SPRING SEMESTER 2023, FALL SEMESTER 2022 AND SPRING SEMESTER 2022

As of 8-17-23

College/School/Department	Fall 2023	Spring 2023	Fall 2022	Spring 2022
School of CJ/Fire Science & EMS				
Criminal Justice	105	101	106	121
Fire Science	33	37	42	41
Emergency Management	1	0	0	0
Paramedic Technology/Training	11	11	12	13
-10	**150**	**149**	**160**	**175**
School of Nursing				
Nursing	108	112	119	121
Pre-Nursing	50	37	56	50
-17	**158**	**149**	**175**	**171**
School of Business				
Business Administration/Small Bus. Admin	115	129	136	132
Cannabis Business	19	21	24	30
Culinary Arts (Program Discontinued F22)	0	0	0	5
Accounting/Technical Accounting (1)	29	28	29	38
E-Marketing	0	1	1	1
Finance/Economics	17	18	19	18
-29	**180**	**197**	**209**	**224**
School of Education				
Elementary Education/Spec. Ed.	19	30	44	55
Early Childhood Education	16	12	23	24
Teacher Education	53	41	26	6
-5	**88**	**83**	**93**	**85**
School of Engineering & Technology				
Electrical Engineering/Eng. Tech.	25	24	25	22
General Engineering	4	2	4	2
Mfg. Eng. Technology	8	9	12	17
Mechanical Engineering	50	55	62	74
Robotic Engineering	29	26	25	24
Mechatronics	7	8	8	0
Computer Engineering	14	15	19	15
-18	**137**	**139**	**155**	**154**
School of Kinesiology & Behavioral Sciences				
Sport/Recreation Management	0	0	0	1
Kinesiology	50	57	55	62
Health/Fitness Specialist	2	2	1	2
Psychology	43	53	58	56
Sociology (including social services)	0	0	0	0
Substance Abuse Prev./Treatment	1	1	1	1
Social Work	6	7	8	6
Political Science	7	9	12	11

Items for Department Meeting 9/26/2022

1, BMCC
2. GVSU Public Health Affiliation
3. Student Total Wellness Fair 10/6 (Derric Knight)
4. Yoga Class Expedited Proposal

5. RPT

6. Asked Abby about sponsorship on the new game board
7. Inquired about AKA led discussion on curriculum (may be a two day workshop to hammer this out) (Steve Elmer MTU????)
8. Curriculum Discussion
   a. Which KSA's or a combination of them
   b. Can skills be added into the classes not just create new classes
   c. Where is methodology in S/C occurring
   d. What certifications do we want to guide us
   e. Group Instruction/ Individual Instruction —Methods
   f. Weight Training, C-V conditioning, SAQ, Core, Flexibility Methods??
   g. 270 Sales what's in it
   h. KINS 170/KINS 105 Need a class in program development 105 and 295 combined
   i. It is hard to place students
   j. KINS 130 Equipment maintainance and cleaning
   k. KINS 295 Open Lab, Mock assessments, Plan an event — CPR certification maybe in KINS 130 and again junior year 401 take CPR or show proof of CPR
   l. 381 1 credit in Fall, 1 credit in spring (future prep, available careers, job posting, Pecha Kucha)
   m. Cultural Diversity in Sport and Exercise, for Core and General Education; Diversity and Inclusion in Exercise and Sport (Class to add)
   n. Need or want for Research

KINS 101 -Add resume and more job focus

KINS 105 - Leadership

KINS 130 - Risk Management- equipment maintainence, cleaning

KINS 140 - Developmental Stages Tanner's

KINS 232 - Medical Appraisal (Skills in Physicals among others) (skills to assist in placements, medical hx, paperwork, etc, CPR cert)

KINS 241 - KINS 141

KINS 248 - Psyc of Coaching and practice planning

KINS 262 - Group Instruction, Teaching Methodolgies class? Cert? Skills/conditioning groups and athletes

KINS 265 - Skills, methods How to do it (somewhere in KINS 262 and/or KINS 265 basic lifting methods

KINS 268 - Fitness Eval I

KINS 270 - More information on Sales and selling yourself to people

KINS 275 - Nutrition

How do we split up KINS 452 and 482 should one be Leadership?

The Human Performance side really isn't changing that much. The Management side is with the addition of courses that Dr. Williams was asked to investigate

We need 20, 3 credit classes per term to get us to 12 credits each: 40 for the year. The creation of the "Diversity and Inclusion in Exercise and Sport Class" if accepted as a Gen ED, may prove to need to be offered each term.

We are not taking the technique skills out of classes and may actually be adding more in as identified by a combination of KSA's that may be used

Academic Program (HFIT): Associate of Health/Fitness Specialist

Enrollments (Primary Major): 1

Freshmen 1

Sophomores 0

Juniors 0

Seniors 0

Retention Numbers within this Academic Program:

(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:

1 of 1 100%

2nd Year Students (from prior year) returned this year:

0 of 1 0%

3rd Year Students (from prior year) returned this year:

N/A

4th Year Students (from prior year) returned this year:

N/A

Still Attending LSSU:

(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:

1 of 1 100%

2nd Year Students (from prior year) returned this year:

0 of 1 0%

3rd Year Students (from prior year) returned this year:

N/A

4th Year Students (from prior year) returned this year:

N/A

Degrees Conferred: XX

Academic Program (KINS): Bachelor of Kinesiology

Enrollments (Primary Major): 55

Freshmen 14

Sophomores 10

Juniors 10

Seniors 21

Retention Numbers within this Academic Program:

(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:

6 of 12 50%

2nd Year Students (from prior year) returned this year:

6 of 7 85%

3rd Year Students (from prior year) returned this year:

12 of 14 85%

4th Year Students (from prior year) returned this year:

9 of 36 25%

Still Attending LSSU:

(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:

8 of 12 66%

2nd Year Students (from prior year) returned this year:

7 of 7 100%

3rd Year Students (from prior year) returned this year:

14 of 14 100%

4th Year Students (from prior year) returned this year:

9 of 36 25%

Degrees Conferred: XX

Psychology: Annual Program Assessment Update Report

Person Submitting: ***H. Russell Searight, Ph.D., MPH (I am not a Chair nor a University administrator)***
Date: *Date of Annual Assessment Update Meeting* **9-14-23–**
)
Annual Update – Year Being Reported: ***2022-23***

DUE: Email this form to the Vice-Provost for Accreditation & Assessment and your Dean before 3:00pm on Friday of Week 6 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

With approval of the Dean, academic programs with an enrollment of less than 10 may present their data in a combined Within-School Annual Program Assessment Update Report.

Annual Program Data – Combined Reporting for Programs Within Schools with < 10 Enrollment

-This information provided by Chair of the School of Kinesiology and Behavioral Science. Total Reported Majors (2022-23) 47

Program Enrollment Data (Primary Major) – programs with < X students				
	Program Name:	*Program Name:*	*Program Name:*	*Program Name:*
Freshmen	2			
Sophomores	8			
Juniors	8			
Seniors	25			

(Data for Program retention reporting)
Note: This information was provided by the Chair of the School of Kinesiology and Behavioral Sciences

Retention Numbers for Primary Major within Programs with < X students				
	Program Name:	*Program Name:*	*Program Name:*	*Program Name:*

1st Year Students (prior) Retained to 2nd Year	2 of 3 (66%)			
2nd Year Students (prior) Retained to 3rd Year	8 of 9 88%			
3rd Year Students (prior) Retained to 4th Year	10 of 15 66%			
4th Year Students (prior) Retained to 5th Year (if any)	10 of 18 55%			

Still Attending LSSU, but changed major: I (HRS) do not have access to this information
(Data for annual Institutional retention reporting)

Students still attending Lake State –This information provided by Chair of the School of Kinesiology and Behavioral Science

Retention Numbers for Programs with < X students				
	Program Name:	*Program Name:*	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	2 of 3 66%			
2nd Year Students (prior) Retained to 3rd Year	9 of 9 100%			
3rd Year Students (prior) Retained to 4th Year	12 of 15 88%			
4th Year Students (prior) Retained to 5th Year (if any)	12 of 18 66%			

Degrees Conferred: Spring 2023: 20 (Based on Graduation Program) (At least one double major—CJ and Psychology)

High Impact Practices (HIPs) Applied *(specify HIPs applied in specific program(s)*:

Psychology B.S

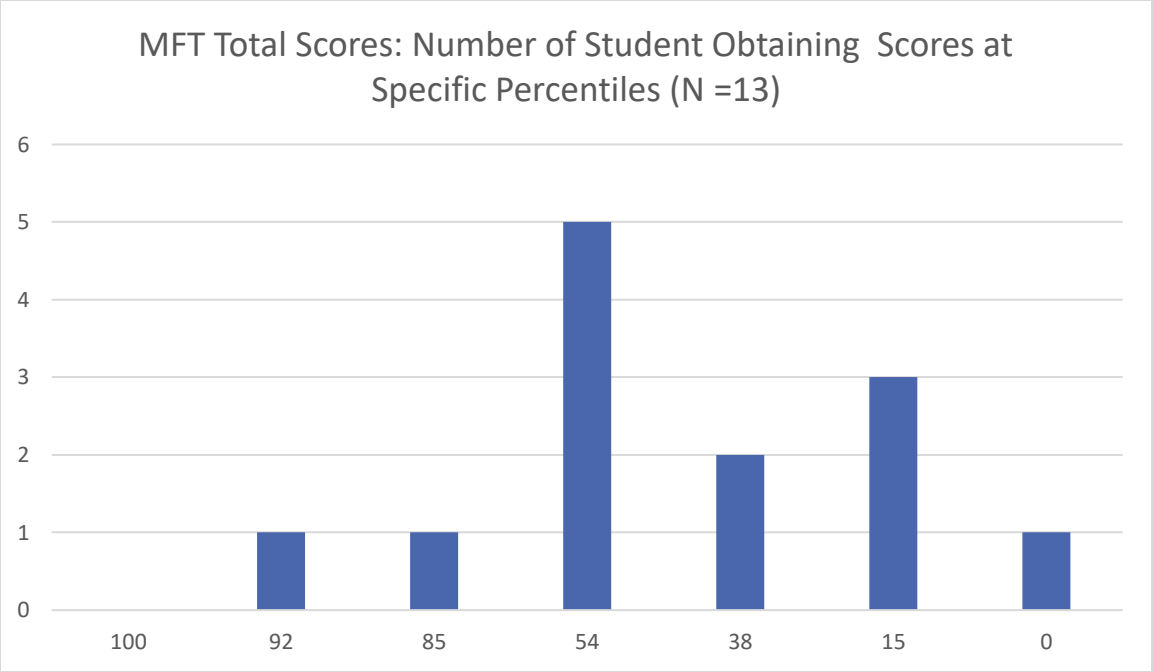
- **Senior Thesis (year long research project) (Psychological Science)**
- **Independent Research Paper in Psychology (General Psychology)**
- **Integrative paper (General Psych)**

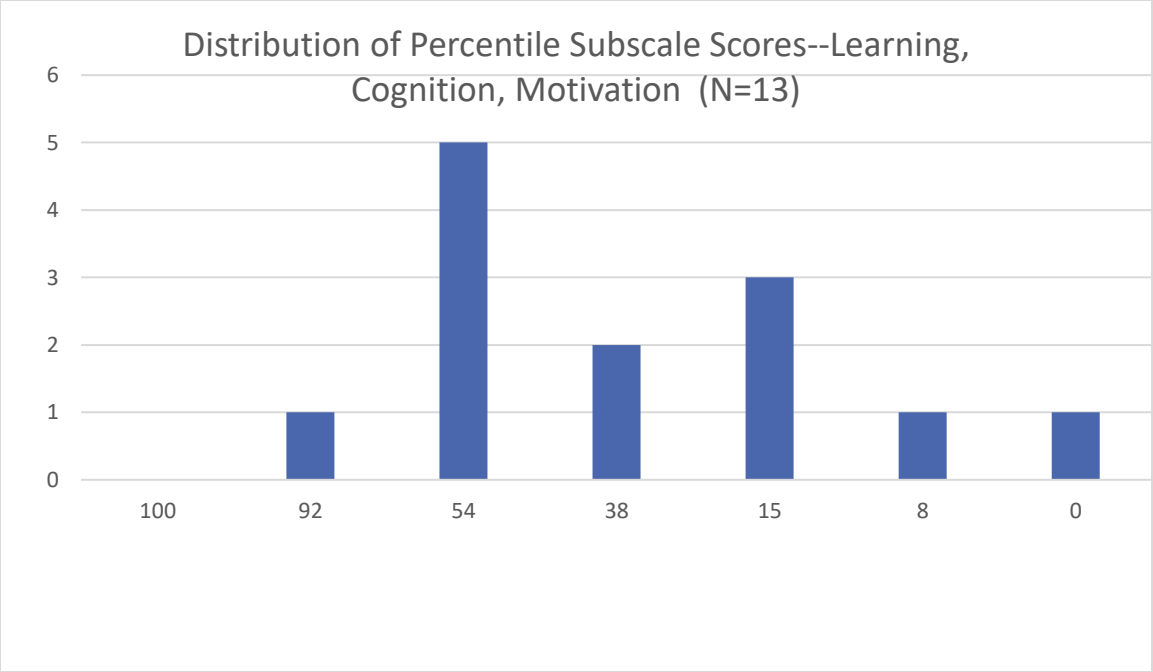
- **Community Engagement (visiting local schools—Prof. Spray's Psych 301 class)**
- **Applied Psychology Practicum (Psych 305)—community-based placement in mental health-related agency**
- **Psychology Mentor Program (upper level students assisting less advanced students)—Note: This program was presented as a paper at a national conference in Psychology Education in January, 2023**
- **Working with Faculty on Research/Scholarly Projects (Psych 306)**
- **Enhanced Laboratory Experiences in Psychology 311 and Psychology 457**

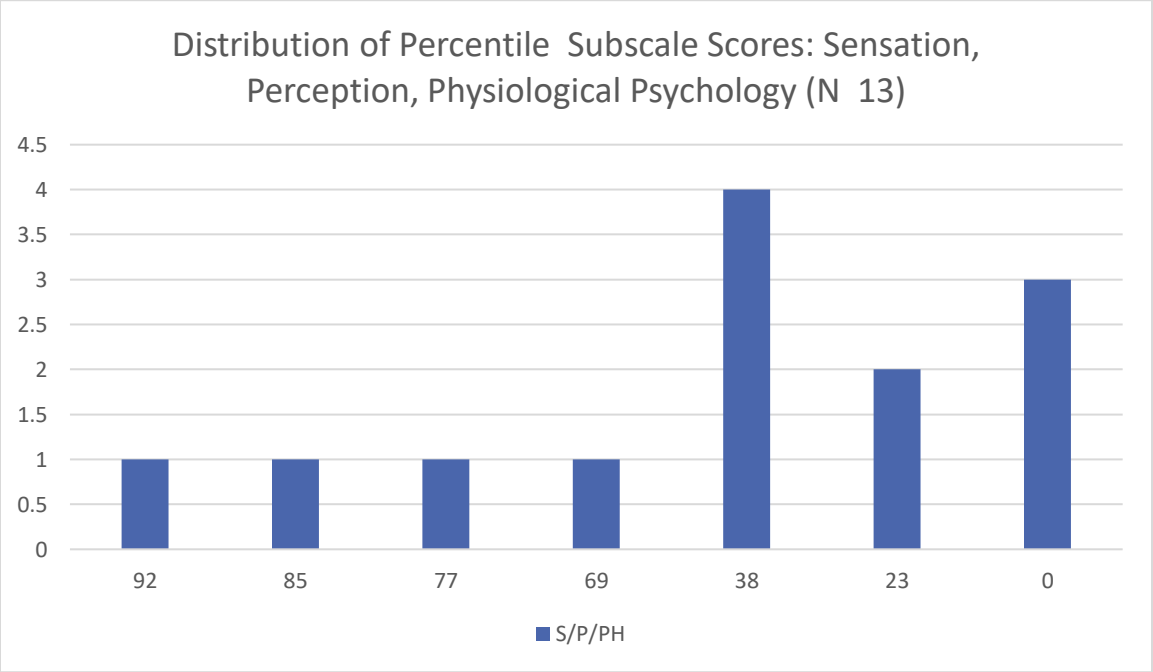
Significant Data Trends: *Note any significant data trends, such as high D/F/W rates in specific courses, or declining enrollment or completion rates compared to the previous year, etc.*

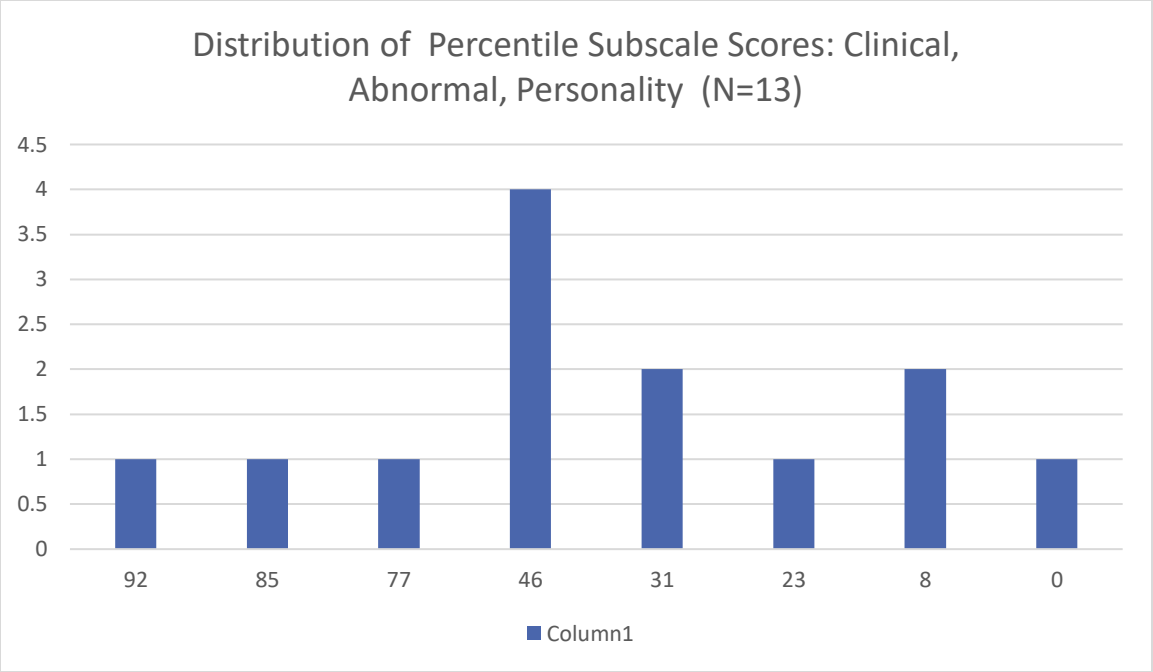
The Major Field Test in Psychology (Educational Testing Service) is a national examination assessing students' knowledge base within the discipline. The Major Field Test provides a Total score as well as scores in four related subfields of the discipline. The data are displayed graphically below

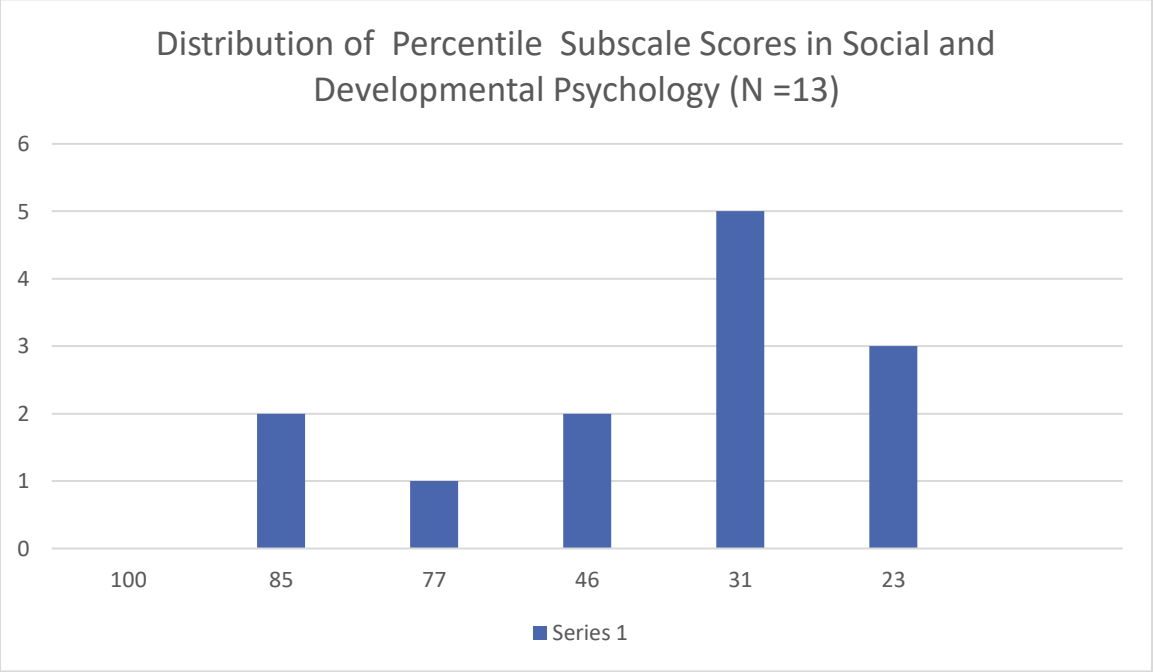
The Major Field Test Mean Score of 146 (SD =8) translates to the 54th percentile. However, students' scores ranged from 0 percentile to 92nd percentile (This pattern of a substantial range of scores is generally consistent with past LSSU Psychology Major Field Test results).
The variability of student performance on the MFT was a factor in developing two tracks in the Psychology Major.

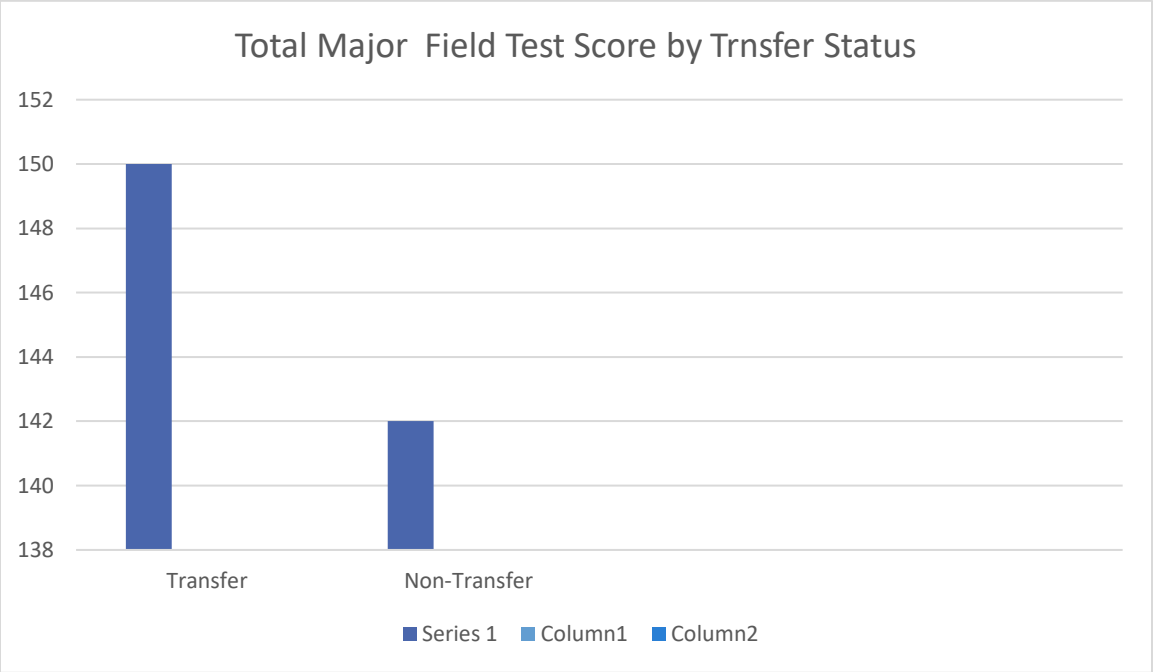

MFT Total Scores: Number of Student Obtaining Scores at Specific Percentiles (N =13)
6
5
4
3
2
1
0
100
92
85
54
38
15
0


Distribution of Percentile Subscale Scores--Learning, Cognition, Motivation (N=13)
6
5
4
3
2
1
0
100
92
54
38
15
8
0


Distribution of Percentile Subscale Scores: Sensation, Perception, Physiological Psychology (N 13)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
92
85
77
69
38
23
0
S/P/PH


Distribution of Percentile Subscale Scores: Clinical, Abnormal, Personality (N=13)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
92
85
77
46
31
23
8
0
Column1


Distribution of Percentile Subscale Scores in Social and Developmental Psychology (N =13)
6
5
4
3
2
1
0
100
85
77
46
31
23
Series 1



Analysis

Analysis of Major Field Test Results

The Psychology Program would certainly prefer that the mean score of our graduating seniors on the Major Field Test fall well above the 50th percentile. However, while not based upon evidence, it is the opinion of the writer (HRS) that the following would be necessary 1. Improvement in high school education in basic academic skills such as reading, mathematics and writing—it is noted that the majority (exact percentages vary) of students entering LSSU in recent years have required developmental courses—particularly in Mathematics; 2. Additional tutoring and mentoring support -- Dr Olson-Pupek did initiate a mentoring program in which upper level students provide tutoring and informal academic support to less-advanced students. Student-Instructors (SIs) have been providing assistance with statistics; 3. For many of our students to afford to attend LSSU, it is necessary for them to be employed –often up to 30 to 40 hours per week. The time commitment of employment understandably presents obstacles to

devoting adequate time for coursework and utilizing academic support such as tutoring in statistics. At the University level, additional financial aid could potentially allow students to reduce their hours of employment. At the national level, possible future legislative activity (e.g., see Senator Bernie Sander's proposal for free college tuition—"College for All" Amendment to the Higher Education Act), would likely be associated with improved MFT scores if implemented since it would likely reduce students' employment hours.

The areas with the highest scores are in areas that are required courses in the "core" of the major—Learning, Cognition, and Physiological Psychology. The lower scores are in areas in which students can select from options and possibly not take a course devoted solely to the topic (Social, Developmental, Personality and Abnormal Psychology). The program does not offer an undergraduate course in Clinical Psychology. As noted below, if we were able to increase our faculty numbers, more course offerings would be available.

For students scoring below the 25th percentile, our past experience was that they, in particular, struggled with the year-long process of designing and carrying out a year long quantitative research project. Prior to initiating a change in our program and offering an option in which an evidence-based library-style research paper could be completed in lieu a year long investigative project, students performing below the 25th percentile on the MFT would have been directed to a General/Liberal Studies degree which some students disliked.

The higher score obtained by Transfer students is noted. This may reflect a stronger overall academic background among transfer students.

Analysis of Retention and Enrollment data:
We have little data about the reasons that students who are in good academic standing leave Lake State. A protocol for obtaining this information has been described and presented intermittently over the past five years. I do not believe this protocol has been implemented. If it has, we have yet to see results –this would be a very helpful form of assessment and could provide a quantitative evidence base for program improvement—not just for the Psychology program but for the University as a whole.

As the overall enrollment numbers for the University decline, the number of students majoring in Psychology has declined somewhat. The Psychology program's website needs updating.

In the past several years, relevant information for marketing purposes has been provided to LSSU marketing staff, the results have not been evident. As apparent from the number of High Impact Practices reported above, there are multiple program components that provide engaging marketing material.

Annual Assessment Reporting

27. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program

assessments. Include each program being reported on this form.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).
Please see Nuventive attachments

Annual Assessment Results

28. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments for each program being reported on this form.
Please see Nuventive attachments.

Annual Assessment Meeting Minutes – Analysis of Results

29. Combined Annual Assessment Meetings may be conducted for programs with < **X** students enrolled. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Note –Please see below—Action Plans and Analysis of Results have been summarized
Minutes of Meeting Attached

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

30. Combined Annual Assessment Meetings may be conducted for programs with < **X** students enrolled. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken for each program being reported on this form.

A. As recommended by the Higher Learning Commission and requested in two previous 5 year Program Reviews, a program assessment conducted by an external team of experts on undergraduate education in psychology (see https://teachpsych.org/page-1603015) is recommended. The most recent external program review on record for the Psychology Program was conducted in 1995.
(Action: We continue to await an affirmative administrative response to this request which is an HLC recommendation).

B. The requirement for assessment documentation at Lake State University has been on the rise. For example, not only do faculty who teach General Education courses have to complete and report results of assessment of specific course objectives, they are faculty members juggling course loads, committee obligations, advising tasks, and collaborative research involving students, there's a discernible issue emerging. The author of this report (HRS) is grappling with the escalating assessment demands that are gradually encroaching upon Lake State University's primary mission as a teaching-focused institution **("We equip our graduates with the knowledge, practical skills, and inner strength to craft a life of meaningful employment, personal fulfillment, and generosity of self within an inclusive atmosphere, all while enhancing the quality of life of the Great Lakes region and the world.")**

In the realm of higher education assessment and accreditation, there is growing concern about the demands placed on faculty on faculty by perceived assessment requirements The National Advisory Committee on Institutional Quality and Improvement (NACIQI), established by the U.S. Department of Education, has recently been evaluating the relationship between assessment and accreditation. Notably, the NACIQI has observed the presence of excessively intricate and standardized assessment methodologies. These practices, despite their intentions, have been flagged as potentially burdensome and as providing information of questionable value:

> "…extra grading, data curation, and report-writing can add significantly to an institution's administrative load, often requiring extra staff, budget increases, and time commitments by faculty and administrators
>
> "… the expectations of some peer reviewers to see "measurement of learning" is not always realistic given the difficulty of this task, the small enrollments in many programs, and a lack of expertise in educational measurement methods"
>
> As David Eubanks, Assistant Vice President for Institutional Assessment and Effectiveness at Furman University and a member of the NACIQI has noted, "… assessment offices churn out dozens or hundreds of reports a year, most with small samples of poor or untested data that are subjected to rudimentary analysis" (Eubanks, 2021; p. 2)
>
> We are in agreement with the NACIQI that assessment requirements have added to faculty's administrative load— an example being the generation of this report. The reliability and validity of the numerical data generated in these reports, as noted by Eubanks (2020, 2021) is questionable.

The Psychology program does not have a program-specific administrator so the reporting requirements fall to teaching faculty who are typically on "overload" status. In many universities in the U.S., a faculty member is designated as the assessment coordinator for a specific program or department. The designated faculty member has reduced teaching, service or research responsibilities and/or is compensated ("Special Project" Compensation for conducting Program Reviews at LSSU has occurred intermittently in the past.**)**

Action Item: 1. It is recommended that assessment requirements for our program be re-evaluated in light of the growing professional literature raising questions about current practices 2.If current LSSU assessment practices continue, it t is recommended that in addition to hiring a 4th psychology faculty member that release time be given to faculty to produce assessment reports. Again, it would be valuable to receive information from external reviewers regarding this issue.

C. **Program Staffing and Assessment:** During the 2022-23 academic year, Dr. Searight was on sabbatical. Dr. Hu was notified early in the academic year that his contract was not being renewed. This left Dr. Olson-Pupek as the sole faculty member addressing assessment requirements while being on overload teaching status as well as covering advising for most of our student majors Given the circumstances, assessment data are understandably somewhat limited (Again—the reader's attention is directed to "B" above). This situation is noted by the NACIQI report referenced above.
Action Item : We have successfully hired Prof. Stephanie Spray who is teaching both Introductory Psychology, courses in the Major as well as courses in the Counseling minor. Prof. Spray is in her first year but would likely be taking on advising responsibilities during the 2024-25 academic year and may provide limited advising during the current academic year.

D. While the Psychology Program is interested in increasing course offerings, doing so would likely increase student enrollment –particularly if widely marketed (e.g., Forensic Psychology Course; Applied Behavioral Analysis Certificate Program; undergraduate level course in School/Educational Psychology), current staffing does not permit expansion.

Action Item: 1. We would welcome the perspective of an external review team on program expansion 2.Continue to request a 4th Full Time faculty member); 3.Address issues of salary and workload that hinder hiring and retaining faculty.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program(s) from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Psychology Faculty Metting –Minutes

Date: 9-14-23

Present: Dr Searight, Dr Olson-Pupek, Prof.Spray

Secretary: Dr Searight

I. Assessment Reports
   A. Reviewed Draft of 22-23 Assessment Report
   B. Discussed 21-22 Report—information about the delay in submitting the report will included in the report
   C. Reviewed 20-21 report—It was completed by Dr Susi based on information provided by Dr. Searight
   D. Received data today to add to 22-23 report
II. Course Fees
   A. Discussed distinction between program fees and course fees
   B. Current Program and Course Fees Reviewed

C. It would be helpful to have summary information about collected course fees earlier in the semester versus the end of the semester
D. Some Approved course fees not appearing in class schedule
E. Approved curriculum change forms (2020) included course fees but these are not consistently reflected in course schedule or the summary report of fees collected and spent
F. Agreed on a $30.00 per student course fee for Psych 199
G. Courses such as PSYCH 456, 457 and 311 would benefit from a Program fee of $50.00 and Course Fee of $25.00

III. Course Coverage
A. Discussed adjuncts for specific course such as PSYC 357—consider the possibility of a national search for part time faculty who would teach online
B. Discussed issues with PSYCH 101 online for dual enrolled students

Meeting Adjourned at 10:00 am

Nursing: Annual Program Assessment Update Report

Person Submitting: *Charlotte Kostelyk MSN, RN, CNE, Chair*

Date: *8/30/2023*

Academic Program: *Bachelor of Science Nursing*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments (Primary Major):

Freshmen: *32*

Sophomores: *27*

Juniors: *41*

Seniors: *75*

Retention Numbers within this Academic Program:

(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:

22 at 68.75%

2nd Year Students (from prior year) returned this year:

24 at 88.9%

3rd Year Students (from prior year) returned this year:

37 at 90.24%

If applicable, 4th Year Students returned for 5th Year:

Not Applicable

Still Attending LSSU:

(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:

20 of 30 66%

2nd Year Students (from prior year) returned this year:

24 of 26 92.3%

3rd Year Students (from prior year) returned this year:

28 of 31 90.3%

If applicable, 4th Year Students returned for 5th Year:

Not Applicable

Degrees Conferred: *Fall 22:16 conferred. Spring 23: 22 conferred; 38 for the 2022-2023 AY*

High Impact Practices Applied:

- *First year seminars-USEM: where students learn skills to build on career interests, orientation to LSSU resources, communication to advisors and student led clubs and connect with a Simulation family.*
- *Curricular and co-curricular options: Students expanding their knowledge and obtaining minors in Psychology, public health, and nutrition.*
- *Project or lab-based learning: Hands on skills performed in each level of the Nursing Curriculum NURS 212, 213, 325, 326, 327, 431, 432, 433. (Each of these courses contains a clinical component).*
- *Internships- RN Intern flyer distributed Oct 26, 2022. Students build on their skills by employment through My Michigan Sault Medical Center during their Junior and Senior Semesters. Career fairs were held on campus:10.20.2022; 02.15.2023.*

- *Service or community-based learning- LSSNA community blood drives, NURS 325 community baby shower, NURS 432-Lets taco-about Sex Title nine training educational sessions, Community wide drills with Coast Guard, Veterans Projects. HLTH 328 (encompasses majority of Nursing majors): Service-learning engagement project is integrated into their curriculum.*
- *Capstone projects, research, or student teaching: NURS 435 Presentation on Business plan serving the community, NURS 431 Change project collaboration with involvement of Hospital staff and instructors. NURS 434 Senior Research symposium in the spring, poster presentation each semester in the library where students can interact and share knowledge with campus wide community.*
- *Diversity/Global Learning- Study abroad to Ireland (HLTH 200) special topics class that engaged students in understanding healthcare from another point of view. Students were able to obtain Humanities and Diversity credit for this course. Faculty led instructors currently teaching in the Nursing program enriched their experience and improved the connection of Faculty relations.*

Significant Data Trends: *Significant trends are noted in decrease enrollment data shared by Dean of Health and Behavior across the respective sized Nursing programs in Michigan. Local to LSSU's Nursing we have a higher enrollment in the fall versus spring semesters. Conferred rates mirror from the previous year at 38, there were no BSN completion graduates.*

Analysis: *The retention data is combined including data from Pre-Nursing and BSN program.*

Annual Assessment Reporting

- See attached Program-level Four Column report for updated data.

Annual Assessment Results

- See attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

The following excerpts from Nuventive data submission, discussion, and minutes from the School of Nursing faculty meetings on 01/18/2023& 8/30/2023 that included discussion of the analysis of assessment and use of results during the 2022-2023 AY.

Leadership-

Fall 2022 data.

- NURS 431 Adult II Medical-Surgical-100% of the students achieved 85% or greater on the Clinical Environmental Change project that determined quality improvement and patient safety within their clinical organization. This assignment will continue for spring 2023.

- NURS 435 Nursing Management-100% of students created, evaluated, and presented a mini scholarly inquiring identifying 5 quality and safety issues providing an evidence-based solution. For spring 2023 the course will continue to be online asynchronous.

Spring 2023 data

- NURS 431 Adult II Medical-Surgical- 47% of students achieved a minimum final grade of 85% or higher on their clinical environment Change Project. This assignment will continue for Fall of 2023 with adjustments in structuring times for students to submit their work.

- NURS 435 Nursing Management-100% of students created, disseminated, and presented a mini-Scholarly inquiry that identified 5 quality and safety issues providing an evidence-based solution. Incorporated were National Patient Safety Goals, Quality and safety standards and a management or leadership philosophy. For Fall 2023 the course will be hybrid format keeping the current assessment method.

Interprofessional Communication:

Fall 2022 data.

- NURS 433 Community Mental Health Nursing-100% of students successfully completed 2 pre-clinical simulation activities including pre-simulation, virtual simulation, Docucare and pre-preparation activities related to focused mental health assessments. Two students had to participate via Zoom for the Thought disorders simulate, which mimicked closely, and interview conducted over Tele Med. This assignment will continue for spring 2023.

- NURS 431 Adult II Medical-Surgical-100% of students achieved a satisfactory on their final 8-week clinical evaluation to demonstrate the use of report including situation, background, assessment, and recommendation (SBAR) when completing patient hand-offs.

Spring 2023 Data:

- NURS 433 Community Mental Health Nursing- 100% of students (n=22) successfully completed all aspects of both (two) pre-clinical simulation activities satisfactorily which

included: pre-Simulation v-Sim, pre-simulation Docucare & pre-preparation activities, Simulation(s) prebriefed, safety Simulation(s), focused mental health assessment(s), Simulation (s) debriefing and post Simulation(s) care plan activities. Two students, for the second Thought Disorders simulation, had to participate via Zoom, which mimicked closely an interview conducted over Tele-Med. Both were able to successfully complete the patient assessment.

- NURS 431 Adult II Medical-Surgical-100% of students (n=15) achieved a satisfactory on their final 8-week clinical evaluation to demonstrate the use of report including situation, background, assessment, and recommendation (SBAR) when completing patient hand-offs.

Scholarship:

Fall 2022 data.

- NURS 436 Contemporary Issues in Nursing-100% of students (n=16) submitted the critical analysis paper that solved, and student identified problem that is unique to nursing care. The ILO #5 intercultural competence was incorporated into this assignment analyzing issues related to nursing including two points of view, a personal point of view ethical issues surrounding the problem.

Spring 2023 Data:

- NURS 436 Contemporary Issues in Nursing-100% of students used current editions of the Nursing Scope and Standards of Practice and the ANA Code of Ethics to support the positions on the critical analysis paper "rolling discussion board." Further meeting the objective of evaluating research for potential application, and Evidence-based practice. Current assessment method working well.

Liberal Education:

Fall 2022 data.

- NURS 436 Contemporary Issues in Nursing-100% (16 students) scored above 90% on their critical analysis paper demonstrating the ability to analyze a complex nursing topic and issue. In addition, they synthesized both the scope of practice and ethical issues surrounding the topic to make recommendations to solve the problem.

Spring 2023 Data:

- NURS 436 Contemporary Issues in Nursing-100% (22 students) The students were presented with the option to use the components of the critical analysis paper as a "rolling discussion board" rather than writing the paper. The in-depth analysis of the ethical issues, the scope of practice discussion and the evaluation of all these points to form and opinion and make a recommendation to resolve the issue were all maintained. All the students in the critical analysis paper demonstrate the ability to analyze a complex nursing topic and issue. In addition, they synthesized both the scope of practice and ethical issues surrounding the topic to make recommendations to solve the problem.

Information Management

Fall 2022 data.

- NURS 431 Adult II Medical-Students did not participate in a face-to-face simulation due to the incorporation of a new learning platform ATI. However, they did participate in a virtual simulation (ATI) virtual RN-real-life module 4.0 to provide care for a patient with chronic kidney disease during campus lab.

Spring 2023 Data:

- NURS 431 Adult II Medical-Students (N 15) 100 % participated in a face-to-face Intra-professional multi-vehicle simulation, but less than 30% of students documented in the patient care electronic medical record. Fall 2023 will use ATI virtual products to assess this outcome.

Policy & Regulation:

Fall 2022 data.

- NURS 435 Nursing Management-90% of students achieved a minimum of 80% on the completion of a mini scholarly inquiry that includes the financial implications related to nursing care. 90% of the students were successful in completing the outcome, therefore it is recommended that that the assignment remain as an independent assignment versus being in a group.

Spring 2023 Data:

- NURS 435 Nursing Management- (N=15)100% of students achieved a minimum of 80% on the completion of a mini scholarly inquiry that includes the financial implications related to nursing care.

Health Promotion:

Fall 2022 data.

- NURS 432 Nursing Population-100% of students participated in a Veterans teaching project. Students taught at Bay Mills in Brimley Michigan, veterans how to use an automated external defibrillator. For the spring 2023 semester students will also be working the Veterans on a new chosen project once a specific need in the community is identified.

- NURS 433 Community Mental Health-94% of students attained 85% or higher on a family assessment assignment. One student has an incomplete with this assignment, currently. Most points were lost for the assignment that centered on the OMAHA care plan and not following the guidelines for interventions to be written as nurse driven. A pattern of this occurring has been noted over the last few semesters.

Spring 2023 Data:

- NURS 432 Nursing Population- No data was entered. The course is reassigned to another instructor who will evaluate after the close of the semester.

- NURS 433 (N 20/22) student attained 85% higher on family assessment assignment. 1 Student attained 80% and 1 student attained 75%.

Professionalism:

Fall 2022 data.

- NURS 431 Adult II Medical-Surgical-100% of students demonstrated satisfactory on their final clinical evaluation in alignment that their professional behavior adhered to the current ANA Code of Ethics for nurses. Continue this assessment for spring 2023.

Spring 2023 Data:

- NURS 431 Adult II Medical-Surgical-100% of students demonstrated satisfactory on their final clinical evaluation to adhere to the current ANA Code of Ethics for nurses. Continue this assessment for Fall 2023.

Nursing Practices:

Fall 2022 Data.

- NURS 432 Nursing Population-fall 2022 89% of students demonstrated competency in nursing care measured by the NURS 432 clinical evaluation tool to provide home health assessment and nursing care. Noted were two students have incompletes.

Spring 2023 Data:

- NURS 432 Nursing Population- No data was entered. The course is reassigned to another instructor who will evaluate after the close of the semester.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

Use of results

For the spring 2023 academic semester the use of the result for the following courses will apply.

- **Leadership**-NURS 431 Adult Nursing II-Continue with current instruction and assessment for spring 2023 with the addition of providing the students with the option to create their project from either a pre-determined topic addressing a current assessed quality improvement need in their clinical site or seek approval for a topic that they assess is a current need to address.
- **Leadership**-NURS 435 Nursing Management-. For spring 2023 the course remains online asynchronous and the current assessment method for this outcome is working well, with no foreseeable need to change.
- **Interprofessional Communication**-NURS 433 Mental Health Nursing-Continue with current instruction and assessment unless future assessment indicates need for change.
- **Interprofessional Communication**-NURS 431 Adult II Medical Surgical-continue with current instruction and assessment unless future assessment indicates need for change.
- **Scholarship and Liberal Education**-NURS 436 Contemporary Issues in Nursing-the current method for assessment of the outcome is working well, no foreseeable need to change assessment methodology.
- **Information Management**-NURS 431 Adult Nursing II- For spring 2023 students will actively participate in an intra-professional (IP) simulation on campus that focuses on a mass casualty multiple vehicle accident. Prior to the simulation students will complete (ATI) online module that addresses critical thinking, critical reasoning, clinical judgement, mass casualty/disaster management.
- **Policy and Regulation**-for spring 2023 the course remains online asynchronous, and the current assessment method is working well for this outcome, with no foreseeable need for a change.
- **Health Promotion**-NURS 432 Nursing of Populations- For fall 2022 Lets taco about sex is the senior health fair project. NURS 433 Community Mental Health-the current assessment method is working well with no foreseeable change for spring 2023.
- **Professionalism**-NURS 431 Adult Nursing II- current instruction and assessment to be utilized for spring 2023 unless future assessment indicates need for change.
- **Nursing Practices**-NURS 432 Nursing of Populations- For spring 2023 students will continue to work with the Veterans to promote education and screening for this population.

Use of results

For the Fall 2023 academic semester the use of the result for the following courses will apply.

- **Leadership Outcome** – NURS 431 Adult Nursing II- Continue to use the assessment method. For Fall 2023 alterations in checkpoints of the project for the students to provide more in-depth information.
- **Leadership Outcome**- NURS 435 Nursing Management – For fall of 2022 will continue to use the assessment method.
- **Interprofessional Communication** – NURS 433 Mental Health Nursing – continue to use this assessment.
- **Scholarship** – NURS 436 Contemporary Issues in Nursing – Will continue to use the Critical Analysis Project to evaluate this objective.
- **Liberal Education** – NURS 436 Contemporary Issues in Nursing – will continue to use the Critical Analysis Project to evaluate this objective.
- **Information Mgt.** – NURS 431 Adult Nursing II – will continue using virtual products and simulation to support the objective.
- **Policy and Regulation** NURS 435 Nursing Management – will continue to use the established assessment method.
- **Health Promotion** - NURS 432 Nursing of Populations –Course is reassigned to another instructor who will evaluate after the close of the semester. NURS 433 – will continue to promote deeper leaning on the care planning aspect of health promotion.
- **Professionalism** – NURS 431 Adult Nursing II – will continue to use the established clinical evaluation tool.
- **Nursing practices** – NURS 432 Nursing of Populations - Course is reassigned to another instructor who will evaluate after the close of the fall 2023 semester.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

The following excerpts from Nuventive data submission, discussion, and minutes from the School of Nursing faculty meeting on 8/30/2023 that included discussion of the analysis of assessment and use of results during the Spring of 2023.

Leadership-
Spring 2023 data

31. NURS 431 Adult II Medical-Surgical- 47% of students achieved a minimum final grade of 85% or higher on their clinical environment Change Project. This assignment will continue for Fall of 2023 with adjustments in structuring times for students to submit their work.

32. NURS 435 Nursing Management-100% of students created, disseminated, and presented a mini-Scholarly inquiry that identified 5 quality and safety issues providing an evidence-based solution. Incorporated were National Patient Safety Goals, Quality and safety standards and a management or leadership philosophy. For Fall 2023 the course will be hybrid format keeping the current assessment method.

Interprofessional Communication:
Spring 2023 Data:

- NURS 433 Community Mental Health Nursing- 100% of students (n=22) successfully completed all aspects of both (two) pre-clinical simulation activities satisfactorily which included: pre-Simulation v-Sim, pre-simulation Docucare & pre-preparation activities, Simulation(s) prebriefed, safety Simulation(s), focused mental health assessment(s), Simulation (s) debriefing and post Simulation(s) care plan activities. Two students, for the second Thought Disorders simulation, had to participate via Zoom, which mimicked closely an interview conducted over Tele-Med. Both were able to successfully complete the patient assessment.

- NURS 431 Adult II Medical-Surgical-100% of students (n=15) achieved a satisfactory on their final 8-week clinical evaluation to demonstrate the use of report including situation, background, assessment, and recommendation (SBAR) when completing patient hand-offs.

Scholarship:

Spring 2023 Data:

33. NURS 436 Contemporary Issues in Nursing-100% of students used current editions of the Nursing Scope and Standards of Practice and the ANA Code of Ethics to support the positions on the critical analysis paper "rolling discussion board." Further meeting the objective of evaluating research for potential application, and Evidence-based practice. Current assessment method working well.

Liberal Education:

Spring 2023 Data:

34. NURS 436 Contemporary Issues in Nursing-100% (22 students) The students were presented with the option to use the components of the critical analysis paper as a "rolling discussion board" rather than writing the paper. The in-depth analysis of the ethical issues, the scope of practice discussion and the evaluation of all these points to form and opinion and make a recommendation to resolve the issue were all maintained. All the students in the critical analysis paper demonstrate the ability to analyze a complex nursing topic and issue. In addition, they synthesized both the scope of practice and ethical issues surrounding the topic to make recommendations to solve the problem.

Information Management

Spring 2023 Data:

35. NURS 431 Adult II Medical-Students (N 15) 100 % participated in a face-to-face Intra-professional multi-vehicle simulation, but less than 30% of students documented in the patient care electronic medical record. Fall 2023 will use ATI virtual products to assess this outcome.

Policy & Regulation:

Spring 2023 Data:

36. NURS 435 Nursing Management- (N=15)100% of students achieved a minimum of 80% on the completion of a mini scholarly inquiry that includes the financial implications related to nursing care.

Health Promotion:

Spring 2023 Data:

- NURS 432 Nursing Population- No data was entered. The course is reassigned to another instructor who will evaluate after the close of the semester.

- NURS 433 (N 20/22) student attained 85% higher on family assessment assignment. 1 Student attained 80% and 1 student attained 75%.

Professionalism:

Spring 2023 Data:

37. NURS 431 Adult II Medical-Surgical-100% of students demonstrated satisfactory on their final clinical evaluation to adhere to the current ANA Code of Ethics for nurses. Continue this assessment for Fall 2023.

Nursing Practices:

Spring 2023 Data:

38. NURS 432 Nursing Population- No data was entered. The course is reassigned to another instructor who will evaluate after the close of the semester.

Use of results

For the Fall 2023 academic semester the use of the result for the following courses will apply.

- **Leadership Outcome** – NURS 431 Adult Nursing II- Continue to use the assessment method. For Fall 2023 alterations in checkpoints of the project for the students to provide more in-depth information.
- **Leadership Outcome**- NURS 435 Nursing Management – For fall of 2022 will continue to use the assessment method.
- **Interprofessional Communication** – NURS 433 Mental Health Nursing – continue to use this assessment.
- **Scholarship** – NURS 436 Contemporary Issues in Nursing – Will continue to use the Critical Analysis Project to evaluate this objective.
- **Liberal Education** – NURS 436 Contemporary Issues in Nursing – will continue to use the Critical Analysis Project to evaluate this objective.
- **Information Mgt.** – NURS 431 Adult Nursing II – will continue using virtual products and simulation to support the objective.
- **Policy and Regulation** NURS 435 Nursing Management – will continue to use the established assessment method.
- **Health Promotion** - NURS 432 Nursing of Populations –Course is reassigned to another instructor who will evaluate after the close of the semester. NURS 433 – will continue to promote deeper leaning on the care planning aspect of health promotion.
- **Professionalism** – NURS 431 Adult Nursing II – will continue to use the established clinical evaluation tool.
- **Nursing practices** – NURS 432 Nursing of Populations - Course is reassigned to another instructor who will evaluate after the close of the fall 2023 semester.

09/22/2023-CK

The following excerpts from Nuventive data submission, discussion and minutes from the School of Nursing Spring 2023 faculty meeting 1/18/2023 that included discussion of the analysis of assessment and use of results

Leadership:

39. NURS 431 Adult II Medical-Surgical-100% of the students achieve 85% or greater on the Clinical Environmental Change project that determined quality improvement and patient safety within their clinical organization. This assignment will continue for spring 2023.

40. NURS 435 Nursing Management-100% of students created, evaluated and presented a mini scholarly inquiring identifying 5 quality and safety issues providing an evidence-based solution. For spring 2023 the course will continue to be online asynchronous.

Interprofessional Communication:

41. NURS 433 Community Mental Health Nursing-100% of students successfully completed 2 pre-clinical simulation activities including pre-simulation, virtual simulation, Docucare and pre-preparation activities related to focused mental health assessments. Two students had to participate via Zoom for the Thought disorders simulate, which mimicked closely and interview conducted over Tele Med. This assignment will continue for spring 2023.

42. NURS 431 Adult II Medical-Surgical-100% of students achieved a satisfactory on their final 8 week clinical evaluation to demonstrate the use of report including situation, background, assessment and recommendation (SBAR) when completing patient hand-offs.

Scholarship:

43. NURS 436 Contemporary Issues in Nursing-100% of students (n=16) submitted the critical analysis paper that solved and student identified problem that is unique to nursing care. The ILO #5 intercultural competence was incorporated into this assignment analyzing issues related to nursing including two points of view, a personal point of view ethical issues surrounding the problem.

Liberal Education:

44. NURS 436 Contemporary Issues in Nursing-100% (16 students) scored above 90% on their critical analysis paper demonstrating the ability to analyze a complex nursing topic and issue. In addition they synthesized both the scope of practice and ethical issues surrounding the topic to make recommendations to solve the problem.

Information Management

45. NURS 431 Adult II Medical-Students did not participate in a face to face simulation due to the incorporation of a new learning platform ATI. However they did participate in a virtual simulation (ATI) virtual RN-real-life module 4.0 to provide care for a patient with Chronic Kidney Disease during campus lab.

Policy & Regulation:

46. NURS 435 Nursing Management-90% of students achieved a minimum of 80% on the completion of a mini scholarly inquire that includes the financial implications related to nursing care. 90% of the students were successful completing the outcome, therefore it is recommended that that the assignment remain as an independent assignment versus being in a group.

Health Promotion:

47. NURS 432 Nursing Population-100% of students participated in a Veterans teaching project. Students taught at Bay Mills in Brimley Michigan, veterans how to use an automated external defibrillator. For the spring 2023 semester students will also be working the Veterans on a new chosen project once a specific need in the community is identified.

48. NURS 433 Community Mental Health-94% of students attained 85% or higher on a family assessment assignment. One student has an incomplete with this assignment, currently. Most points were lost for the assignment that centered on the OMAHA care plan and not following the guidelines for interventions to be written as nurse driven. A pattern of this occurring has been noted over the last few semesters.

Professionalism:

49. NURS 431 Adult II Medical-Surgical-100% of students demonstrated satisfactory on their final clinical evaluation in alignment that their professional behavior adhered to the current ANA Code of Ethics for nurses. Continue this assessment for spring 2023.

Nursing Practices:

50. NURS 432 Nursing Population-fall 2022 89% of students demonstrated competency in nursing care measured by the NURS 432 clinical evaluation tool to provide home health assessment and nursing care. Noted were two students have incompletes.

Use of results

For the spring 2023 academic semester the use of the result for the following courses will apply;

- **Leadership**-NURS 431 Adult Nursing II-Continue with current instruction and assessment for spring 2023 with the addition of providing the students with the option to create their project from either a pre-determined topic addressing a current assessed quality improvement need in their clinical site or seek approval for a topic that they assess is a current need to address.
- **Leadership**-NURS 435 Nursing Management-. For spring 2023 the course remain online asynchronous and the current assessment method for this outcome is working well, with no foreseeable need to change.
- **Interprofessional Communication**-NURS 433 Mental Health Nursing-Continue with current instruction and assessment unless future assessment indicates need for change.
- **Interprofessional Communication**-NURS 431 Adult II Medical Surgical-continue with current instruction and assessment unless future assessment indicates need for change.
- **Scholarship and Liberal Education**-NURS 436 Contemporary Issues in Nursing-the current method for assessment of the outcome is working well, no foreseeable need to change assessment methodology.
- **Information Management**-NURS 431 Adult Nursing II- For spring 2023 students will actively participate in an intra-professional (IP) simulation on campus that focuses on a mass casualty multiple vehicle accident. Prior to the simulation students will complete (ATI) online module that addresses critical thinking, critical reasoning, clinical judgement, mass casualty/disaster management.
- **Policy and Regulation**-for spring 2023 the course remains online asynchronous and the current assessment method is working well for this outcome, with no foreseeable need for a change
- **Health Promotion**-NURS 432 Nursing of Populations- For fall 2022 Lets taco about sex is the senior health fair project. NURS 433 Community Mental Health-the current assessment method is working well with no foreseeable change for spring 2023.
- **Professionalism**-NURS 431 Adult Nursing II- current instruction and assessment to be utilized for spring 2023 unless future assessment indicates need for change.
- **Nursing Practices**-NURS 432 Nursing of Populations- For spring 2023 students will continue to work with the Veterans to promote education and screening for this population.

1/18/2023-KLV

Criminal Justice: Annual Program Assessment Update Report

Person Submitting: *Professor Herbert Henderson, Chair*

Date: *8/23/2023*

Academic Program: *Bachelor of Criminal Justice*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments (Primary Major):

Freshmen: *21*

Sophomores: *25*

Juniors: *25*

Seniors: *27*

Retention Numbers within this Academic Program:

(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:

15 of 31; 48% Retained

2nd Year Students (from prior year) returned this year:

14 of 18; 77% retained

3rd Year Students (from prior year) returned this year:

17 of 21; 80% Retained

If applicable, 4th Year Students returned for 5th Year:

16 of 56; 28% Retained

Still Attending LSSU:

(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:

17 of 31; 54%

2nd Year Students (from prior year) returned this year:

15 of 18; 83%

3rd Year Students (from prior year) returned this year:

18 of 21; 85%

If applicable, 4th Year Students returned for 5th Year:

17 of 56; 30%

Degrees Conferred: *23r*

High Impact Practices Applied:

The core Criminal Justice courses are rigorous and students are exposed to the new first-year freshman seminar two course series (CJUS 198 and CJUS 199), writing-intensive courses with writing threaded throughout the courses of the degree. Students are exposed and expected to work collaboratively on group assignments and projects. The students all complete undergraduate research prior to their final capstone research project. Students experience a diverse global learning community with a service learning focus built around the senior level internships and capstone course.

Significant Data Trends: *The number of incoming freshman has decreased significantly over the past three years. Transfer student numbers have also declined including a sharp decrease in Canadian transfer students from Sault College. This Canadian transfer student trend does appear to be changing as we did have a resurgence in summer of 23 for fall of 2023. However, the Provence of Ontario in the*

summer of 2023 removed the requirement for a Bachelor's degree to be accepted into their Police College so this trend may again change.

Analysis: *Analysis of Retention data*

Possible reasons for the decline in incoming freshman students continue to include minimal promotion/marketing efforts by LSSU and outdated website of the School of CJ, FS and EMS. In addition, the Covid-19 pandemic still has many people concerned about being in the field of CJ with the required human interaction. The School of CJ, FS and EMS has attempted to update and improve the School website with little change. Updating the website will help reach the future university student population in a media that they can understand and relate to. There is a new push towards a third party provider for a NEW website which should greatly improve overall prospective student responses. Professor Henderson continues to recruit students across all majors in a "Grass-Roots" marketing of the program (and other LSSU Programs) in the regional high schools and career and technical center which has continued to create positive student growth from the regional high schools while still having a decline overall. Professor Henderson has met informally with the VP of Marketing and Admissions staff about the program and will request representatives from LSSU Admissions/Marketing to meet with the College of CJ, FS and EMS faculty to discuss ways of promoting the programs. The seminar series of courses that we added in Fall of 2022 focus on integrating students to university life, retention and improved writing skills. These courses start as the freshman seminars CJUS/FIRE 198 (Fall semester) and CJUS/FIRE 199 (Spring semester) with CJUS/FIRE 299 Sophmore seminar and CJUS/FIRE 399 Junior seminar. These seminar courses should improve overall student success, which should show in improved retention.

Annual Assessment Reporting

51. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

See the attached report printed from Nuventive.

Annual Assessment Results

52. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

See the attached report printed from Nuventive.

Annual Assessment Meeting Minutes – Analysis of Results

53. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

54. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

On August 23rd 2023 the School of Criminal Justice, Fire Science and EMS held a school meeting to review the school annual assessment. Present during this meeting Professor Henderson, Associate Professor Westrick, Assistant Professor Clegg, Assistant Professor Fuller, Assistant Professor Strait, and, and Assistant Professor Vaught. The topics of discussion were enrollment and retention concerns, Curriculum Changes and needs, Internship Experiences and opportunities, and Marketing of the programs.

Enrollment and retention was discussed and the concern over the lack of marketing of our programs being the driving force behind the lack of enrollment. Additionally, the outdated Website continues to be a concern. The retention concern was driven by a shift in the State of Michigan as many agencies in our fields are now hiring students without degrees and certification in hand and paying them to attain the required state licensure as different locations. Mostly Community College based programs. The faculty felt that if we could get help with marketing our programs and updating our website the enrollment issue would be lessened. The re-connection with Sault College was discussed as the fall transfer students in the Bridge program a 3+1 transfer agreement between LSSU CJ and Sault College CJ has started to return. The Covid-19 pandemic did have an impact on this relationship and it continues to have an impact.

Action Plan: Seek out improved Marketing for the program and improved website.

Curriculum changes that Professor Henderson finalized last Fall with the new seminar series for both CJUS and FIRE have been received well by students and should over time show improved retention and student achievement.

A new Degree option of BS Cybersecurity was brought forward by Professor Henderson. This new degree included four new classes and revising a current class that had not been updated since 1992. These courses and degree option were thoroughly discussed and voted on each item and then the degree option all passing unanimously. The new degree is an across discipline degree with computer science making it qualify as a STEM degree. This degree will fill the need for Cybersecurity professionals across Michigan and the Nation. Hence, this degree has a great potential for a sudden increase in enrollment.

Action Plan: Submit all curriculum forms to the Curriculum Committee for approval. Seek out increased marketing for an enrollment push.

Internships and the amount of potential paid internships has increased. These are positive for our students and the potential hiring agencies. Specifically, Sault Fire Dept. continues to allow FS and EMED Interns who complete their internship with Sault Fire Dept. then apply and are hired by Sault Fire Dept. the students get to include their internship time as part of their probationary 1st year of employment allowing the student to pass the probationary period more quickly and achieve a pay raise months sooner than traditional hires. Professor Henderson has been working with Chief Beirling of the Sault City Police Dept. on a new City Policy that would allow the City Police Department to sponsor new employees (pay their tuition/fees) to then attend our MCOLES program part of the overall BS program.

Action Plan: Continue to work with agencies to get high quality student placements. Continue to work with any agency that may want to sponsor students to LSSU.

Marketing has been a concern for the School of CJ, FS and EMS for many years. The faculty does not feel that the university markets our programs as rigorously as many other programs across the university. It was noted by Faculty that we could not get 1 page flyers printed last academic year first because of a lack of funding then the Director of Marketing stopped the flyers due to potential errors and a lack of copy right licenses. Additionally, the University as a whole does not have a good social media presence as compared to the other public and private universities in Michigan.

Action Plan: Attempt to work with LSSU Marketing Director to discuss potential improvements in the marketing of our programs.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.

- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under “Filter,” select *Goal Status – Active.*

Fire Science: Annual Program Assessment Update Report

Person Submitting: *Professor Herbert Henderson, Chair*

Date: *8/23/2023*

Academic Program: *Bachelor of Fire Science*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

Annual Program Data

Enrollments (Primary Major):

Freshmen: *12*

Sophomores: *10*

Juniors: *10*

Seniors: *14*

Retention Numbers within this Academic Program:

(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:

4 of 7; 57% Retained to 2nd Year

2nd Year Students (from prior year) returned this year:

5 of 7; 71% Retained to 3rd Year

3rd Year Students (from prior year) returned this year:

10 of 11; 90% Retained to 4th Year

If applicable, 4th Year Students returned for 5th Year:

25 of 47; 53% Retained to 5th Year

Still Attending LSSU:

(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:

4 of 7; 57% Retained to 2nd Year

2nd Year Students (from prior year) returned this year:

6 of 7; 85% Retained to 3rd Year

3rd Year Students (from prior year) returned this year:

10 of 11; 90% Retained to 4th Year

If applicable, 4th Year Students returned for 5th Year:

6 of 22; 27% Retained to 5th Year

Degrees Conferred: *11*

High Impact Practices Applied:

The core Criminal Justice courses are rigorous and students are exposed to the new first-year freshman seminar two course series (FIRE 198 and FIRE 199), writing-intensive courses with writing threaded throughout the courses of the degree. Students are exposed and expected to work collaboratively on group assignments and projects. The students all complete undergraduate research prior to their final capstone research project. Students experience a diverse global learning community with a service learning focus built around the senior level internships and capstone course.

Significant Data Trends: *The number of incoming freshman has decreased significantly over the past three years. Transfer student numbers have also declined. There has also been a massive recruiting across the state by Fire Departments who are now pulling away traditional LSSU FS/EMS students by*

offering employment without State certifications and completing OJT and running through different Regional Fire Academy

Analysis: *Analysis of Retention data*

Possible reasons for the decline in incoming freshman students continue to include minimal promotion/marketing efforts by LSSU and outdated website of the School of CJ, FS and EMS. In addition, the Covid-19 pandemic still has many people concerned about being in the field of FS/EMS with the required human interaction. The School of CJ, FS and EMS has attempted to update and improve the School website with little change. Updating the website will help reach the future university student population in a media that they can understand and relate to. There is a new push towards a third party provider for a NEW website which should greatly improve overall prospective student responses. Professor Henderson continues to recruit students across all majors in a "Grass-Roots" marketing of the program (and other LSSU Programs) in the regional high schools and career and technical center which has continued to create positive student growth from the regional high schools while still having a decline overall. Professor Henderson has met informally with the VP of Marketing and Admissions staff about the program and will request representatives from LSSU Admissions/Marketing to meet with the College of CJ, FS and EMS faculty to discuss ways of promoting the programs. The seminar series of courses that we added in Fall of 2022 focus on integrating students to university life, retention and improved writing skills. These courses start as the freshman seminars FIRE 198 (Fall semester) and FIRE 199 (Spring semester) with FIRE 299 Sophmore seminar and FIRE 399 Junior seminar. These seminar courses should improve overall student success, which should show in improved retention.

Annual Assessment Reporting

55. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

See the attached report printed from Nuventive.

Annual Assessment Results

56. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

See the attached report printed from Nuventive.

Annual Assessment Meeting Minutes – Analysis of Results

57. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

58. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

On August 23rd 2023 the School of Criminal Justice, Fire Science and EMS held a school meeting to review the school annual assessment. Present during this meeting Professor Henderson, Associate Professor Westrick, Assistant Professor Clegg, Assistant Professor Fuller, Assistant Professor Strait, and, and Assistant Professor Vaught. The topics of discussion were enrollment and retention concerns, Curriculum Changes and needs, Internship Experiences and opportunities, and Marketing of the programs.

Enrollment and retention was discussed and the concern over the lack of marketing of our programs being the driving force behind the lack of enrollment. Additionally, the outdated Website continues to be a concern. The retention concern was driven by a shift in the State of Michigan as many agencies in our fields are now hiring students without degrees and certification in hand and paying them to attain the required state licensure as different locations. Mostly Community College based programs. The faculty felt that if we could get help with marketing our programs and updating our website the enrollment issue would be lessened. The re-connection with Sault College was discussed as the fall transfer students in the Bridge program a 3+1 transfer agreement between LSSU CJ and Sault College CJ has started to return. The Covid-19 pandemic did have an impact on this relationship and it continues to have an impact.

Action Plan: Seek out improved Marketing for the program and improved website.

Curriculum changes that Professor Henderson finalized last Fall with the new seminar series for both CJUS and FIRE have been received well by students and should over time show improved retention and student achievement.

A new Degree option of BS Cybersecurity was brought forward by Professor Henderson. This new degree included four new classes and revising a current class that had not been updated since 1992. These courses and degree option were thoroughly discussed and voted on each item and then the degree option all passing unanimously. The new degree is an across discipline degree with computer science making it qualify as a STEM degree. This degree will fill the need for Cybersecurity professionals across Michigan and the Nation. Hence, this degree has a great potential for a sudden increase in enrollment.

Action Plan: Submit all curriculum forms to the Curriculum Committee for approval. Seek out increased marketing for an enrollment push.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

College of Business, Engineering, Computer Science, and Mathematics: Lukenda School of Business

Accounting: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Accounting: Annual Program Assessment Update Report

Person Submitting: *Mindy McCready*
Date: *10/8/2023*
Academic Program: *Accounting – Bachelor of Accounting*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (Primary Major):
Freshmen: *3*
Sophomores: *9*
Juniors: *9*
Seniors: *14**

* Regional Center students transfer to LSSU as juniors or seniors.

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
8 of 9 = 88%
2nd Year Students (from prior year) returned this year:
2 of 3 = 66%
3rd Year Students (from prior year) returned this year:
5 of 8 = 62%
If applicable, 4th Year Students returned for 5th Year:
9 of 22 = 40%

Still Attending LSSU:
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
8 of 9 = 88%
2nd Year Students (from prior year) returned this year:
2 of 3 = 66%
3rd Year Students (from prior year) returned this year:
5 of 8 = 62%
If applicable, 4th Year Students returned for 5th Year:
9 of 22 = 40%

High Impact Practices Applied: Through core business courses and rigorous accounting courses, students are exposed to a first-year seminar course, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity/global learning, service learning, internships, eportfolios and a capstone course and project.

Significant Data Trends: The accounting program has experienced declining enrollment over the last few years as shown below.

	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Accounting Program Enrollment	53	51	43	30	29

A related ongoing issue is low enrollment in upper-level accounting courses. For example, the average enrollment of 300 and 400 level required accounting courses was seven students for the 2022/2023 academic year.

Analysis:

Declining accounting program enrollment is not unique to LSSU. Universities across the nation are also asking why fewer students are electing accounting as a major when the industry is ripe with opportunities. Some of the reasons identified include the 150-hour requirement to become a CPA, the difficulty of the subject matter that requires strong analytical and mathematical skills, a perception that accounting work is boring and monotonous and a lack of awareness of career opportunities in the field.

Accounting faculty members are concerned about declining enrollment in the program and have discussed possible reasons and remedies. Initiatives they will implement in the near future aimed at more effectively marketing the program include the following.

- Assigning a full-time faculty member to teach ACTG132 (Principles of Accounting I) instead of an adjunct
- Rebuild the Accounting Club
- Survey current accounting students to ask why they chose to major in accounting
- Invite local high school students enrolled in business courses to our campus and/or visit those high schools to discuss LSSU programs and career opportunities

Low enrollment in upper-level accounting courses results in inefficient use of LSSU resources. It also may not provide for an optimal learning environment for students (group work, projects, discussions, etc.). ACT332 and ACTG333 are offered every other year. All other 300 and 400 level courses are offered once a year. Accounting faculty have reviewed course offerings and enrollment numbers and determined that ACTG334, ACTG427, ACTG432 and ACTG433 should be offered every other year. They will work on a plan to implement a new course rotation that causes the least amount of issues for current accounting students.

Professor McCready invited all LSSU accounting students to a meeting to discuss rebuilding the Accounting Club during the fall 2022 semester, and only two students attended. However, after completing a summer internship, a senior student came back to campus in fall 2023 excited about opportunities an accounting club could benefit from. She has held a few meetings and gained some interest from classmates.

Other Relevant Trends:

The accounting profession is being impacted by the CPA Evolution Initiative which was recently launched by the National Association of State Boards of Accountancy (NASBA) and the American Institute of Certified Public Accountants (AICPA). These bodies are implementing a new core + licensure model and will release a new Uniform CPA Exam in 2024. Students desiring to become Certified Public Accountants will be required to have a greater skill set, expanded competencies and increased knowledge of emerging technologies. Accounting faculty will respond by reviewing program requirements and course content and outcomes to determine if changes should be made.

Canadian students who earn an accounting degree from LSSU are experiencing difficulty when returning to Canada and applying to becoming CPAs. They have reported being required to complete significant additional coursework due to many of their LSSU courses not being accepted for credit. LSSU accounting faculty will look into this issue in the near future.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

See the attached report printed from Nuventive.

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

See the attached report printed from Nuventive.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

See the attached meeting minutes.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

As indicated in the attached minutes, Lukenda School of Business faculty met on September 5, 2023 to discuss program assessment. Significant time was spent discussing results related to the common professional component of business bachelor degrees. Faculty also provided a brief summary related to specific assessment of each program.

Professors McCready and Diaz met on October 8 to discuss the issues and related action plans detailed in this report.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Sources:

- https://tylerwren.co.nz/why-are-accounting-graduates-hard-to-find/
- https://www.journalofaccountancy.com/issues/2023/jun/how-students-view-the-accounting-profession.html#:~:text=In%20the%20last%20several%20years,in%20accounting%20has%20declined%20significantly.
- https://www.linkedin.com/pulse/why-fewer-college-students-electing-become-accounting-steve-goldmintz/

Lukenda School of Business
School Meeting Minutes
September 5, 2023 – 3:00 p.m.

Present: R. Boston, M. Diaz, K. Fritz, G. Kalchev, M. McCready, J. Murray, V. Philips, R. Wilhelms (via Zoom)

Absent: R. Skiera (excused)

Action Items

1. Approval of meeting minutes from August 23, 2023
   Motion made by V. Philips – Motion supported by B. Boston
   Vote: For = 6, Opposed = 0, Abstain = 0

Major Field Test Results – The Fall 2022 and Spring 2023 Major Field Test results were discussed. The scores have been steadily decreasing since Covid. Prof. Diaz is hoping to increase the scores in Information Systems by implementing a study guide. Faculty also questioned whether the MFT is the right tool for what we use it for. Prof. McCready has been doing research on a test called Peregrine Accounting & Finance Assessment Tool which provides more thorough results and shows which areas the students are struggling in. Prof. McCready will also provide faculty with a trend analysis of the MFT for the last two years.

Program Assessment – Faculty reviewed the Program Assessments for Management, Accounting, International Marketing, E-Marketing, Cannabis, Finance/Economics, Entrepreneurship, International Business Cert and Technical Accounting/Small Business Administration. Dr. Fritz and Prof. Boston will be adding more information to their assessment. Program Assessments are due September 30, 2023 to Prof. Diaz/Gail Essmaker.

Reminders – HLC will be on campus on October 2-3, 2023 for the MBA program. Faculty were asked to look at the reminders listed on the bottom of the agenda for various faculty related deadlines.

The meeting adjourned at 4:45 p.m.

Business Administration: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Business Administration: Annual Program Assessment Update Report

Person Submitting: *Marta Diaz*
Date: *9/30/2023*
Academic Program: *Bachelor of Business Administration*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (Primary Major):
Freshmen: *8*
Sophomores: *8*
Juniors: *8*
Seniors: *18*

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
5 of 9 or 55%
2nd Year Students (from prior year) returned this year:
3 of 3 or 100%
3rd Year Students (from prior year) returned this year:
4 of 10 or 40%
If applicable, 4th Year Students returned for 5th Year:
7 of 19 or 36%

Still Attending LSSU:
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
9 of 9 or 100%
2nd Year Students (from prior year) returned this year:
3 of 3 or 100%
3rd Year Students (from prior year) returned this year:
6 of 10 or 60%
If applicable, 4th Year Students returned for 5th Year:
8 of 19 or 42%

Degrees Conferred: *11*

High Impact Practices Applied: Through core business courses, students are exposed to a first-year seminar course, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity/global learning, internships and a capstone course and project. For example,

1. BUSN 211 – Research and Analysis – Students develop a short survey, apply descriptive statistics techniques using MS Excel, interpret their results and discuss limitations of their research. Students learn data analysis and data visualization techniques to support data-driven management decision-making. This is a collaborative project.
2. BUSN 466 Business Policy – all business students complete a business plan which includes all elements of their core education.
3. In BUSN 350, students work in groups weekly to solve legal hypotheticals. I scramble the groups so that students are working with different peers throughout the term.

Significant Data Trends: Business Administration degree program was developed to allow regional center students an opportunity to earn a general business degree without traveling to the main campus. The number of on-campus students in this program has increased in recent years, however. In addition, an increasing number of incoming freshmen students are selecting the Business Administration major initially. After they have been exposed to professors and other programs, they have a tendency to transfer to one of the other business programs, resulting in lower enrollment but it remains overall a popular option for students.

Analysis: In addition to completing a set of core business courses that is common to all business bachelor degrees, business administration majors are required to earn a business minor. LSB faculty members question whether this degree is as marketable to employers as LSB's other bachelor degrees. For example, would a company seeking a candidate with a marketing degree hire a graduate with a business administration degree and a minor in marketing? Discussion of this issue was initiated due to the increase in enrollment from main campus students. The program had previously been populated with non-traditional regional center students who just needed a business bachelor degree for advancement related to their current employment positions. Since the program serves regional center students well, LSB faculty do not want to eliminate the Business Administration degree. Instead, they will educate main campus students on the benefits and drawbacks of the major and explain the difference between it and the other LSB bachelor degrees through academic advising and introduction to all the

majors in BUSN101 (Freshman Seminar). Since this initiative began, we have experienced a slight decline in on-campus enrollment in this major.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

   See attached Program-level Four Column report from Nuventive.

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

   See attached Program-level Four Column report from Nuventive.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

   See attached meeting minutes that summarize the discussion held by all LSB faculty regarding the common professional component of business bachelor degrees, including the review of the Major Field Test results which are used to evaluate the curriculum and drive any changes needed to the program.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

   See attached meeting minutes and assessment report from Nuventive. Whereas other sections from semester to semester show inconsistencies based on the student, the information systems section of the test shows a consistent and significant decline overall in scores since Covid and lockdowns. The instructor has

made changes to MGMT 280 including providing an exam study guide for students to help them learn the material, requiring a lock-down browser for exams to ensure good study habits, and extra credit opportunities to learn the material. Business faculty will continue to monitor the results.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Cannabis Business: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Cannabis Business: Annual Program Assessment Update Report

Person Submitting: *Koral C. Fritz*
Date: *9/5/2023*
Academic Program: *Cannabis Business*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive,
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments:

Freshmen: *6*
Sophomores: *10*
Juniors: *10*
Seniors: *7*

Retention Numbers:

Freshmen: *7/16*
Sophomores: *4/7*
Juniors: *3/7*

Degrees Conferred: *2*

High Impact Practices Applied:

- This program maintains a living learning community to provide students opportunities to collaborate between the cannabis business and cannabis chemistry programs.
- This program is supported by a student group, the Cannabis Studies Club, which brings students together for industry discussions, workshops, and guest lectures.
- Students in this program complete undergraduate research and projects that culminate in a business plan.
- Students engage in class polls, discussions, group work, and assignments to cover content in the CBUS specific courses.
- Students complete career development projects and networking activities.
- LSB Facility including, Ryan Skiera & Valerie Philips, provide opportunities to integrate cannabis business issues into discussions on marketing and human resources.
- This program is offering a study abroad option for May 2023 for students to study cannabis economics in Amsterdam.

Significant Data Trends: In most CBUS courses (CBUS 122, CBUS 305, CBUS 360, CBUS 361), there are between 1-3 students each term who do not complete coursework and drop or fail the course. Each year 1-3 students enrolled in the degree change degree options or discontinue pursing any degree at all.

Analysis: While it remains early in the program's history, there are a few trends related to retention that are clear. However, it remains too early to identify specific significant trends from the data. The pattern with students not completing work or not progressing in a fashion that would allow for degree completion is being monitored and advisors to the program are working with individual students to support the unique needs and concerns of students in this program. Some hurdles including Veteran Affairs restrictions, personal finances, and life events are the biggest causes for the current issues with course and degree completion. Other students are leaving before completing the degree to pursue positions in the industry. This is both beneficial and problematic for the program. On one hand, it shows that the students are finding job placements and excelling; on the other hand, it negatively impacts the retention data for the program.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).
   - Students are completing their pitch decks and business plans and will continue to engage in this necessary coursework.
   - Students need further development of presentation and synthesis skills to propose solutions to novel problems.
   - Dr. Kalchev and Koral Fritz are providing advising to students to participate in a study abroad trip.
   - Koral Fritz continues to evaluate whether a change to the degree audit is needed to handle course rotation complications.
   - Cannabis courses are being offered online when possible to allow students options to complete the work.
   - There are no other significant changes or conversations related to assessment results as we

wait for more students to complete the program.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.
    - Koral Fritz remains open to offering an independent study for upper classman to explore research in the field.
    - Koral Fritz with continue to include CBPAB members as guest lectures in courses.
    - Faculty will continue advising students about course offerings and rotations to aid in degree completion.
    - There may be a proposal to remove BIO 235 from the BS Cannabis Business degree audit.
    - Coursework will require students to collaborate and propose solutions to unanswered problems.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Entrepreneurship: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Entrepreneurship: Annual Program Assessment Update Report

Person Submitting: *Robert Boston*
Date: *9/19/2023*
Academic Program: *Entrepreneurship*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (Primary Major):
Freshmen: *3*
Sophomores: *1*
Juniors: *1*
Seniors: *3*

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
40%
2nd Year Students (from prior year) returned this year:
40%
3rd Year Students (from prior year) returned this year:
100%
If applicable, 4th Year Students returned for 5th Year:
0%

Still Attending LSSU:
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
40%

2nd Year Students (from prior year) returned this year:
60%
3rd Year Students (from prior year) returned this year:
100%
If applicable, 4th Year Students returned for 5th Year:
0%

Degrees Conferred: *1*

High Impact Practices Applied:

Significant Data Trends: *Retention is lower in the early years and high in the later years.*

Analysis: *Analysis of Retention data*

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

3. Retention and enrollment continue to be a struggle. The business plan continues to be a viable assessment tool. MFT is questionable due to student effort. Further discussion will be required going forward.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Perhaps we should consider another assessment tool to replace the MFT, however we need something that will allow us to compare LSSU to other institutions.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Finance & Economics: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Finance & Economics: Annual Program Assessment Update Report

Person Submitting: *Robert Boston*
Date: *9/19/2023*
Academic Program: *Finance and Economics*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (Primary Major):
Freshmen: *5*
Sophomores: *3*
Juniors: *3*
Seniors: *6*

Retention Numbers within this Academic Program:
(Data for Program retention reporting)
1st Year Students (from prior year) returned this year:
N/A
2nd Year Students (from prior year) returned this year:
80%
3rd Year Students (from prior year) returned this year:
83%
If applicable, 4th Year Students returned for 5th Year:
16%

Still Attending LSSU:
(Data for annual Institutional retention reporting)
1st Year Students (from prior year) returned this year:
N/A
2nd Year Students (from prior year) returned this year:
100%
3rd Year Students (from prior year) returned this year:
83%
If applicable, 4th Year Students returned for 5th Year:
16%

Degrees Conferred: *7*

High Impact Practices Applied:

Significant Data Trends: *Retention and enrollment continue to be issues across many programs. Finance and Economics has a great retention record.. Laker success should assist in the retention of freshman students.*

Analysis: *Analysis of Retention data*

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Annual Assessment Meeting Minutes – Analysis of Results

3. MFT may not be a viable assessment tool due to lack of student effort. Perhaps a new tool should be developed or copied from another school. Small class sizes assist in retention, however a strong job market and higher wages has had an impact on retention.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Case class next semester will be closely monitored and perhaps expanded to include other classes.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

International Business: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

International Business: Annual Program Assessment Update Report

Person Submitting: *Dr. Ralf Wilhelms*
Date: *9/19/2023*
Academic Program: *Business Administration – International Business*
Annual Update – Year Being Reported: *2022-23*

DUE: Email this form to the Vice-Provost for Accreditation & Assessment and your Dean before 3:00pm on Friday of Week 6 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

With approval of the Dean, academic programs with an enrollment of less than 10 may present their data in a combined Within-School Annual Program Assessment Update Report.

Annual Program Data – Combined Reporting for Programs Within Schools with < 10 Enrollment

Program Enrollment Data (Primary Major) – programs with < X students				
	Program Name:	*Program Name:*	*Program Name:*	*Program Name:*
Freshmen	Fall 4			
Sophomores	Fall 3			
Juniors	Fall 1			
Seniors	Fall 1			

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

Retention Numbers for Primary Major within Programs with < X students				
	Program Name: International Business	*Program Name:*	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	Fr to So 100%			
2nd Year Students (prior) Retained to 3rd Year	So to Jun: 33%	We had two students transfer down state to be closer to their family		

3rd Year Students (prior) Retained to 4th Year	Juniors: Fall 1			
4th Year Students (prior) Retained to 5th Year (if any)	Jun to Sen: 100%			

Still Attending LSSU, but changed major:
(Data for annual Institutional retention reporting)

Retention Numbers for Programs with < X students				
	Program Name:	*Program Name:*	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year				
2nd Year Students (prior) Retained to 3rd Year				
3rd Year Students (prior) Retained to 4th Year				
4th Year Students (prior) Retained to 5th Year (if any)				

Degrees Conferred: *3*

High Impact Practices (HIPs) Applied *(specify HIPs applied in specific program(s))*:

International Internships

The International Business Program established a network of organizations to provide internship opportunities abroad. The internships provide students with credits and faculty supervision to ensure that students gain valuable international work experience.

Study Abroad Program:

The International Business program offers short term study abroad programs in Germany, Scotland, Ireland, and China. The program ensures that the study abroad experience aligns with the International Business curriculum and include courses that contribute to major requirements.

Case Studies and Problem Based Learning

Courses are centered around Case Studies that focus on international business scenarios to provide students a hands-on understanding of the challenges and decision-making processes involved in global business operations.

Students participate in the case study competition in Canada. Students are encouraged to apply theoretical knowledge to real-world business scenarios.

Cross-Cultural Communications

The International Business program provides content and opportunities through courses to assist students to develop essential intercultural communication and negotiation skills.

Significant Data Trends: *Note any significant data trends, such as high D/F/W rates in specific courses, or declining enrollment or completion rates compared to the previous year, etc.*

It is difficult to develop data trends with the Covid Pandemic taking place. This had an impact on enrollment with a circulating uncertainty of how the future will look after Covid.

Analysis: *Analysis of Retention data*

One of the goals for the program is to focus on enrollment again and the presented data doesn't provide clear picture and can't be used to build assumptions due to the limited or impacted data available. In the short term - 3 years – We set our goal to have 20 students enrolled in the international business program

Annual Assessment Reporting – see attached documentation from Nuventive

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments. Include each program being reported on this form.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments for each program being reported on this form.

Annual Assessment Meeting Minutes – Analysis of Results

3. Combined Annual Assessment Meetings may be conducted for programs with < **X** students enrolled. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Combined Annual Assessment Meetings may be conducted for programs with < **X** students enrolled. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken for each program being reported on this form.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program(s) from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Management: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Management: Annual Program Assessment Update Report

Person Submitting: *Marta Diaz*
Date: *9/30/2023*
Academic Program: *Bachelor of Business Administration - Management*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (Primary Major):
Freshmen: *9*
Sophomores: *8*
Juniors: *8*
Seniors: *14*

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
6 of 8 or 75%
2nd Year Students (from prior year) returned this year:
7 of 8 or 87%
3rd Year Students (from prior year) returned this year:
7 of 11 or 63%
If applicable, 4th Year Students returned for 5th Year:
6 of 17 or 35%

Still Attending LSSU:
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
8 of 8 or 100%
2nd Year Students (from prior year) returned this year:
8 of 8 or 100%
3rd Year Students (from prior year) returned this year:
8 of 11 or 72%
If applicable, 4th Year Students returned for 5th Year:
7 of 17 or 41%

Degrees Conferred: *12*

High Impact Practices Applied: The same or similar high impact practices are applied in each course and semester.

1. As part of the business core, BUSN 211 Business Statistics, MGMT 280 Management Information Systems and MGMT 371 Operations/Business Analytics courses are linked together to introduce and reinforce data-driven management decision- making.
   - BUSN 211 - Research and Analysis - Students develop a short survey, apply descriptive statistics techniques using MS Excel, interpret their results and discuss limitations of their research. Students learn data analysis and data visualization techniques to support data-driven management decision-making. This is a collaborative project.
   - MGMT 371 - Empirical Research - Students prepare an academic research paper. Students produce a review of the literature, methodology section, analyze survey results using statistical inference techniques, interpret results, and complete a discussion section including how their results could be applied in management decision-making. This is a collaborative project.
   - MGMT 280 - Students complete an individualized, comprehensive online Excel training program concluding with a remote-proctored certification exam. A certificate is awarded to the student providing evidence of tested Excel proficiency: Beginner, Basic, Productive or Advanced.
2. MGMT 360, MGMT 365 and MGMT 464 - Extensive use of groups for research studies/discussions and case study analysis/discussions.
3. MGMT 476 Employee Training and Development - Students develop and deliver employee training programs for local organizations in Michigan and Canada.
4. BUSN 466 Business Policy - all business students complete a business plan which includes all elements of their core education.
5. In BUSN 355, I have the students answer trivia questions that test BUSN 350 content that reinforces concepts that reappear in BUSN 355. The students answer a prompt on a notecard and submit it as an exit ticket at least once a week. The intent is to reinforce the concepts and to help the students retain information longer.
6. In BUSN 355, students present on assigned laws for 5-8 minutes. Students are required to summarize the law, discuss key rules, and share examples of how the law applies to real life or hypothetical scenarios.
7. In BUSN 350 and MGMT 451, students work in groups weekly

to solve legal hypotheticals. I scramble the groups so that students are working with different peers throughout the term.

8. In MGMT 451, students are assigned a chapter case to present and explain to the class. Each student is assigned roughly 4-6 cases each term.
9. In MGMT 451, groups of students produced TikTok style reels to explain to lower classmen in BUSN 350 how to work with a legal writing structure known as IRAC.
10. In BUSN 355 and MGMT 451, students complete case briefs and written summaries with case analysis as assignments.
11. In BUSN 355, students reviewed cases and news articles regarding lawsuits filed against Amazon related to Title VII, OSHA, ADA, ADEA, and the NLRA. The subsequent class discussion allowed students to explore possible strategies to handle lawsuits as a manager or executive. It also informed them of their rights as employees.

Significant Data Trends: Based on a 5-year average, the management program does not appear to be experiencing any significant changes to enrollment or retention – it is a stable program for the Lukenda School of Business.

Analysis: Based on a 5-year average, the management program does not appear to be experiencing any significant changes to enrollment or retention – it is a stable program for the Lukenda School of Business. In addition, there appears to be an uptick in the number of students who are dual enrolling in one or more programs. Several students who were non-management majors are choosing to dual enroll in the management program to enhance their marketability with employers and increase their ability to compete in the marketplace against other students who earn a bachelor's degree. Students appear to becoming dual majors on their own, without any department initiative promotion.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

   See attached meeting minutes and assessment report from Nuventive.

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

   See attached meeting minutes and assessment report from Nuventive.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

   See attached meeting minutes that summarize the discussion held by business faculty regarding the common professional component of business bachelor degrees and program assessments, including the review of the Major Field Test results which are used to evaluate the curriculum and drive any changes needed to the program.

   Overall, management students have performed well in their capstone project. In addition, most management students achieved above the national mean in quantitative analysis and legal sections of the major field test, however, did not do well in the information systems section of the major field test. Management students performed well with data-driven survey research project in MGMT 371 and Excel training program in MGMT 280, as well as in business and labor law courses: BUSN 350, BUSN 355 and MGMT 451.

Marketing: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

- **Marketing: Annual Program Assessment Update Report**

Person Submitting: Valerie Philips, Associate Professor, Marketing, LSB
Date: September 22, 2023
Academic Program: Bachelor of Science, Business Administration -- Marketing major
Annual Update – Year Being Reported: 2022-2023

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

- **Annual Program Data**

Enrollments (Primary Major):
Freshmen: 9
Sophomores:10
Juniors: 10
Seniors:10

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:66%

2nd Year Students (from prior year) returned this year:60%

3rd Year Students (from prior year) returned this year:100%

If applicable, 4th Year Students returned for 5th Year: 40%

Still Attending LSSU:
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:77%

2nd Year Students (from prior year) returned this year:66%

3rd Year Students (from prior year) returned this year:100%

If applicable, 4th Year Students returned for 5th Year: 40%

Degrees Conferred: *8*

High Impact Practices Applied: Simulations, service learning projects, research papers and projects, tests and quizzes, case analysis, collaborative learning in teams

Significant Data Trends: 1. Marketing enrollment and retention demonstrate stability over time.

2. Freshman enrollment in the Marketing major may be understated, since many freshmen do not know what they want to study, or else fail to declare a major and are counted within the generalist degree (with minor) instead

Analysis: 1. With the increase in e-, digital, and social media marketing, and commensurate student interest in the resulting jobs, marketing continues to demonstrate steadiness.

2. This is an advising issue. Advisors should encourage uncertain students or students studying in the generalist program to select the B.S. Business Administration (with major) degree

- ## Annual Assessment Reporting

- See the attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

- ## Annual Assessment Results

- Refer to the attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

- ## Annual Assessment Meeting Minutes – Analysis of Results

Virtual Meeting with Dr. R. Wilhelms and Prof. V. Philips on September 23/23::

Changes introduced into the curriculum (e.g. digital marketing, sports and events, certificates) have strengthened the marketing program.

Post-pandemic, some of the courses will resume project-based application of marketing skills. s

The use of practical application in combination with simulation and hand-on experiences in internships assist in the marketability of Marketing graduates. Examples include a local business

owner in Fall 2022 who telephoned the professor several times to laud students' work in generating higher traffic, increased revenues, and more followers on Facebook and twitter.

Recent positions accepted by our graduates include a position with the Detroit Red Wings and Marketing Data Analyst.

Possibilities for future growth include a certificate in Professional Selling, necessitating one new upper-level course in Selling.

- **Annual Assessment Meeting Minutes – Use of Results *(Action Plans)***

Possibilities for future growth include a certificate in Professional Selling, nequiring the introduction of one new upper-level course in Selling. Faculty discussion will be beneficial here, as well as feedback from the PAB.

Given the online delivery of a key collection of Marketing courses, another possibility would be the launch of an online Marketing major completion program.

Continuous monitoring of assessment results will be used as the basis for any amendments or changes to existing curriculum.

AS-Small Business Administration: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

AS Small Business Administration: Annual Program Assessment Update Report

Person Submitting: *Marta Diaz*
Date: *9/30/2023*
Academic Program: *Associates in Small Business Administration*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (Primary Major):
Freshmen: *1*
Sophomores: *0*
Juniors: *0*
Seniors: *0*

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
0 of 1 or 0%
2nd Year Students (from prior year) returned this year:
0 of 1 or 0%
3rd Year Students (from prior year) returned this year:
0 of 2 or 0%
If applicable, 4th Year Students returned for 5th Year:
N/A

Still Attending LSSU:
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
0 of 1 or 0%
2nd Year Students (from prior year) returned this year:
0 of 1 or 0%
3rd Year Students (from prior year) returned this year:
0 of 2 or 0%
If applicable, 4th Year Students returned for 5th Year:
N/A

Degrees Conferred: *2*

High Impact Practices Applied: Through general education, core business and upper-level accounting courses, students are exposed to a first-year seminar course, writing-intensive courses, ePortfolios, collaborative assignments and projects, undergraduate research and diversity/global learning.

Significant Data Trends: Enrollment in this program remains low as it has been for the last several years.

Analysis: Very few Lukenda School of Business (LSB) students pursue an associate degree without working on a bachelor degree concurrently. Thus, the LSB structured its programs so students are not required to take any courses for associate degrees that are not also required for bachelor degrees.

Many business bachelor degree-seeking students who select an associate degree do so to receive Tuition Incentive Program **(TIP)** funding. Students from other programs of study may add Technical Accounting or Small Business Administration to develop business skills needed to achieve their career goals. Since they provide opportunities for students across campus without requiring significant additional resources, it makes sense for the LSB to continue offering associate degree programs.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

   See attached Program-level Four Column report from Nuventive

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

   See attached Program-level Four Column report from Nuventive

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

   See attached meeting minutes that summarize the discussion held by business faculty regarding program assessments. Three of four students enrolled in the SBA program successfully completed MGMT 360; all students enrolled in the SBA program successfully completed BUSN 231 and MGMT 280 during the academic year. The students that successfully completed the courses did well on the assignments and in the courses. Business faculty had no concerns or suggested changes to the program.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

   Currently, no changes are planned due to the program's low enrollment.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

A-Technical Accounting: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

A-Technical Accounting: Annual Program Assessment Update Report

Person Submitting: *Mindy McCready*
Date: *10/9/2023*
Academic Program: *Technical Accounting – Associate*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (Primary Major):
Freshmen: *0*
Sophomores: *0*
Juniors: *0*
Seniors: *1*

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
N/A
2nd Year Students (from prior year) returned this year:
N/A
3rd Year Students (from prior year) returned this year:
N/A
If applicable, 4th Year Students returned for 5th Year:
1 of 1 = 100%

Still Attending LSSU:
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
N/A
2nd Year Students (from prior year) returned this year:
N/A
3rd Year Students (from prior year) returned this year:
N/A
If applicable, 4th Year Students returned for 5th Year:
1 of 1 = 100%

Degrees Conferred: *2*

High Impact Practices Applied: Through general education, core business and upper-level accounting courses, students are exposed to a first-year seminar course, writing-intensive courses, ePortfolios, collaborative assignments and projects, undergraduate research and diversity/global learning.

Significant Data Trends: In addition to the one student noted above, two other students were enrolled in Technical Accounting as a secondary program of study. Nevertheless, enrollment in this program remains low as it has been for the last several years.

Analysis: Very few Lukenda School of Business (LSB) students pursue an associate degree without working on a bachelor degree concurrently. Thus, the LSB structured its programs so students are not required to take any courses for associate degrees that are not also required for bachelor degrees. Many business bachelor degree-seeking students who select an associate degree do so to receive Tuition Incentive Program (TIP) funding. Students from other programs of study may add Technical Accounting or Small Business Administration to develop business skills needed to achieve their career goals. Since they provide opportunities for students across campus without requiring significant additional resources, it makes sense for the LSB to continue offering associate degree programs.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

See the attached report printed from Nuventive Improve.

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

See the attached report printed from Nuventive Improve.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

   Accounting faculty members Mindy McCready and Marta Diaz met on October 9 to discuss program assessment. There was only one student whose primary major was Technical Accounting during 2022/2023. He took one course (ACTG421) during the academic year from which assignments are used to measure program learning outcomes. The student did very well on the assignments and in the course. Professors McCready and Diaz had no concerns or suggested changes to the program based on the limited data available this year.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

   Professors McCready and Diaz revisited a discussion had in previous years on whether the current practice of using only course-embedded assessment was effective. The LSB is piloting Peregrine Global's Business Administration Assessment for its bachelor degree programs in fall 2023. Professor McCready mentioned that this assessment instrument can be used for various degree levels. Professors McCready and Diaz concluded that they will continue to think about different assessment methods for the Technical Accounting program but refrain from making changes currently due to the program's low enrollment.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

College of Business, Engineering, Computer Science, and Mathematics: Engineering

Computer Engineering: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Computer Engineering: Annual Program Assessment Update Report

Person Submitting: *Paul J. Weber [& Andrew Jones]*
Date: *10/28/2023*
Academic Program: *B.S. Computer Engineering*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive,
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (taken as Fall 2022 primary major): 19

Freshmen: *6*
Sophomores: *2*
Juniors: *2*
Seniors: *6*

Retention Numbers within this Academic Program (Fall 2021 to Fall 2022 as primary major):
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
0 of 5, 0%
2nd Year Students (from prior year) returned this year:
3 of 4, 75%
3rd Year Students (from prior year) returned this year:
2 of 2, 100%
If applicable, 4th Year Students returned 5th year:
4 retained for additional year

Still Attending LSSU (Fall 2021 to Fall 2022 within LSSU):
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
2 of 5, 40%
2nd Year Students (from prior year) returned this year:
3 of 4, 75%
3rd Year Students (from prior year) returned this year:
2 of 2, 100%
If applicable, 4th Year Students returned 5th year:
4 retained for additional year

Degrees Conferred (any degree – primary or secondary – from Fall 2022 / Spring 2023 / Summer 2023): *3*

High Impact Practices Applied: *The following high impact practices are embedded in all engineering and engineering technology degrees.*

- *First-Year Experience: All School of Engineering & Technology (SET) students take EGNR101 where they learn study skills, work on a team project, and develop writing skills through weekly reflections that promote a growth mindset.*
- *Capstone Courses and Projects: All SET students complete a capstone project with either industry collaboration – for EGNR491/495 or the EGNR250/450/451 co-op sequence – or by completing an undergraduate research project in the EGNR260/460/461 sequence which is another high impact practice. In these projects, students work closely with faculty and contacts from industry to complete a year-long project that helps them prepare to enter industry or for the next step in their academic career.*
- *Internships: The SET faculty and staff communicate with industry partners to help students find summer internships and then serve as references where needed. This past fall was one of the strongest career fairs with the largest attendance that LSSU has had in the last four years and the majority of companies looking to hire SET students for internship and/or full-time employment.*

Significant Data Trends:

The BS Computer Engineering (BSCE) program is stable overall. However, additional support and initiatives for marketing and recruitment would be helpful to increase the number of students at that level. An example of this is hosting the FIRST Robotics Competition at LSSU.

The overall retention rate within LSSU for the BSCE was low this past year with 5 out of 11 students (45%) retained and 4 returning for an additional year. This should continue to be monitored as it could be related to the DFWN grades (discussed below).

Analysis:

In terms of retention within LSSU, the percentage of students returning from 1st to 2nd year was the lowest (0 of 5). Retention of 1st year students seems to be an issue. It could be that students are coming in under-prepared, especially in mathematics, due to the challenges with education.

Lastly, some gateway courses within the BSCE have high DFWN grades (ex: EGEE125 was 30% for spring 2023, 25% for spring 2022, and over 30% for spring 2021, compared to 15-19% pre-pandemic). This should continue to be monitored to determine how this can be improved. It appears that a lack of math knowledge is hurting performance and thus potentially retention. MATH111 has been made a prerequisite for EGEE125 so it may help to reduce the DFWN grades.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

These are included in the attached Program-Level Four Column Report as well as the supporting Learning Goals (SLOs) by Program Outcomes Report.

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

These are included in the attached Program-Level Four Column Report as well as the supporting Learning Goals (SLOs) by Program Outcomes Report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Outcome 1: Students are not meeting this outcome well yet, however progress has been made. Specifically, students are not able to calculate simple attributes, such as period given the frequency, but still struggle with more complex attributes such as the resolution time.

Outcome 2: The students met this outcome very well. The design review grades, the oral feedback from industry professionals and others from academia can serve as evidence of this

Outcome 3: Minor concern for the EGEE355 results.

Outcome 4: No concerns from EGNR495. There was no data from EGEE320.

Outcome 5: No concerns but there is limited data.

Outcome 6: No issues in EGNR346, but some teams in EGR495 did not meet the objectives. This seems to be more related to the students understanding of the assignment then the outcome itself.

Outcome 7: The students met this outcome very well. The subjective evaluation grades, the oral feedback from industry professionals and others from academia can serve as evidence of this.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

Outcome 1: Need to introduce POS Boolean expressions in EGEE125 so students are introduced to the topic and then later course re-enforce it. Also, we need to arrive at a means to emphasize the importance of timing (frequency and resolution).

Outcome 2: No action plan needed.

Outcome 3: Minor adjustments to the course should improve the performance in EGEE355. We will continue to monitor to see if the improvements have the desired effect.

Outcome 4: Gather data from EGEE320 to see if it matches the data from EGNR495.

Outcome 5: No action plan needed.

Outcome 6: Additional time can be spent in class to further improve the student's understanding of this outcome.

Outcome 7: No action plan needed.

Attachments:

- Program-Level Four Column Report
- Learning Goals (SLOs) by Program Outcomes Report

LAKE SUPERIOR STATE UNIVERSITY

Data Science: Annual Program Assessment Update Report

Person Submitting: Schemm
Date: *9/20/2023*
Academic Program: Data Science
Annual Update – Year Being Reported: 22-23

DUE: Email this form to the Vice-Provost for Accreditation & Assessment and your Dean before 3:00pm on Friday of Week 6 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

With approval of the Dean, academic programs with an enrollment of less than 10 may present their data in a combined Within-School Annual Program Assessment Update Report.

Annual Program Data – Combined Reporting for Programs Within Schools with < 10 Enrollment

Program Enrollment Data (Primary Major) – programs with < X students				
	Program Name: Data Science (all)	*Program Name:*	*Program Name:*	*Program Name:*
Freshmen	2			
Sophomores	0			
Juniors	0			
Seniors	0			

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

Retention Numbers for Primary Major within Programs with < X students				
	Program Name:	*Program Name:*	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	N/A			
2nd Year Students (prior) Retained to 3rd Year	N/A			

3rd Year Students (prior) Retained to 4th Year	N/A			
4th Year Students (prior) Retained to 5th Year (if any)	N/A			

Still Attending LSSU, but changed major:
(Data for annual Institutional retention reporting)

Retention Numbers for Programs with < X students				
	Program Name:	*Program Name:*	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	N/A			
2nd Year Students (prior) Retained to 3rd Year	N/A			
3rd Year Students (prior) Retained to 4th Year	N/A			
4th Year Students (prior) Retained to 5th Year (if any)	N/A			

Degrees Conferred: 0

High Impact Practices (HIPs) Applied: Group Projects, Hands on lab assignments

Significant Data Trends: This is the first year for the program(s). There are two few students in the program to make any useful trend info.

Analysis: For the amount of work that went into getting these programs put together and through the system, it is disappointing to see the lack of advertising/marketing done with them. Further, currently, these programs are being mis-represented by admissions. They are admitting people into 'Data Science' without any specified (and required) concentration.

Annual Assessment Reporting

1. **No student has made it far enough to be assessed in the normal assessment process associated with our degrees. The earliest it would happen is next year.**

   In fact, there is no program entered into TracDat yet for us to enter data into. We haven't made an issue of that, as there is no data to enter.

Annual Assessment Results

2. **We assess our programs via Sophomore and Senior projects, which run at the end of the Sophomore and Senior years. As stated, the only two students currently in the program(s) have just become Sophomores.**

Annual Assessment Meeting Minutes – Analysis of Results

3. No data to analyze.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. **We are hoping changes in advertising and marketing will lead to a change in recruitment into this program, but it is outside our ability to influence.**

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program(s) from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

There is no Program 'Data Science' in TracDat, this is not possible to do.

Electrical Engineering Technology / Mechatronics: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Elec.EngineeringTech. & Mechatronics: Annual Program Assessment Update Report

Person Submitting: *Paul J. Weber [& Andrew Jones & David Leach]*
Date: *10/28/2023*
Academic Program: *BS Electrical Engineering Technology and BS Mechatronics*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost for Accreditation & Assessment and your Dean before 3:00pm on Friday of Week 6 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

With approval of the Dean, academic programs with an enrollment of less than 10 may present their data in a combined Within-School Annual Program Assessment Update Report.

Annual Program Assessment Update Combined Reporting for Programs Within Schools

Program Enrollment Data (Primary Major) – programs with < 10 students				
	Program Name: EET	*Program Name:* Mechatronics	*Program Name:*	*Program Name:*
Freshmen	0	5		
Sophomores	1	0		
Juniors	1	0		
Seniors	2	3		

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

Retention Numbers for Primary Major within Programs with < 10 students				
	Program Name: EET	*Program Name:* Mechatronics	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	1 of 2 50%	N/A		
2nd Year Students (prior) Retained to 3rd Year	N/A	N/A		
3rd Year Students (prior) Retained to 4th Year	1 of 1 100%	N/A		
4th Year Students (prior) Retained to 5th Year (if any)	1	N/A		

Still Attending LSSU, but changed major:
(Data for annual Institutional retention reporting)

Retention Numbers for Programs with < 10 students				
	Program Name: EET	*Program Name:* Mechatronics	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	1 of 2 50%	N/A		
2nd Year Students (prior) Retained to 3rd Year	N/A	N/A		
3rd Year Students (prior) Retained to 4th Year	1 of 1 100%	N/A		
4th Year Students (prior) Retained to 5th Year (if any)	2	N/A		

Degrees Conferred: *1* *N/A*

High Impact Practices (HIPs) Applied *(specify HIPs applied in specific program(s))*:
The following high impact practices are embedded in all engineering and engineering technology degrees.

- *First-Year Experience: All School of Engineering & Technology (SET) students take EGNR101 where they learn study skills, work on a team project, and develop writing skills through weekly reflections that promote a growth mindset.*
- *Capstone Courses and Projects: All SET students complete a capstone project with either industry collaboration – for EGNR491/495 or the EGNR250/450/451 co-op sequence – or by completing an undergraduate research project in the EGNR260/460/461 sequence which is another high impact practice. In these projects, students work closely with faculty and contacts from industry to complete a year-long project that helps them prepare to enter industry or for the next step in their academic career.*
- *Internships: The SET faculty and staff communicate with industry partners to help students find summer internships and then serve as references where needed. This past fall was one of the strongest career fairs with the largest attendance that LSSU has had in the last four years and the majority of companies looking to hire SET students for internship and/or full-time employment.*

Significant Data Trends:
The BS Electrical Engineering Technology (BSEET) program has declined some in enrollment within the last few years. Mechatronics is a new program with numbers that are slowly increasing. Additional support and initiatives for marketing and recruitment would be helpful to increase the number of students at that level. An example of this is hosting the FIRST Robotics Competition at LSSU.

###The overall retention rate within LSSU for the BSEET was moderate this past year with 67% (2 of 3 students) being retained and an additional student returning for an additional year. However, it is challenging to make any general suggestions, though, since the numbers are so low.

Analysis:
The DFWN scores in EGET270 (previously EGET110) was 27% for Fall 2022. Other gateway courses within the BSEET also had high DFWN grades (ex: EGNR265 was over 50% for Spring 2021 compared to a ~22% average with a range of 15-40% pre-pandemic). This should be monitored to determine whether it is pandemic related or a general trend that needs to be addressed. Extra student support for EGNR265 should continue to be allotted as well.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments. Include each program being reported on this form.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

These are included in the attached Program-Level Four Column Report as well as the supporting Learning Goals (SLOs) by Program Outcomes Report.

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments for each program being reported on this form.

These are included in the attached Program-Level Four Column Report as well as the supporting Learning Goals (SLOs) by Program Outcomes Report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Combined Annual Assessment Meetings may be conducted for programs with < 10 students enrolled. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Outcome 1: There is a slight concern with the performance but there is a limited amount of data.

Outcome 2: No concerns.

Outcome 3: No concerns.

Outcome 4: Some teams in EGR495 did not meet the objectives. This seems to be more related to the students understanding of the assignment then the outcome itself.

Outcome 5: The students met this outcome very well. The subjective evaluation grades, the oral feedback

from industry professionals and others from academia can serve as evidence of this.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Combined Annual Assessment Meetings may be conducted for programs with < **10** students enrolled. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken for each program being reported on this form.

Outcome 1: Need to consider more focus (less breadth) in EGET275 to have better understanding of few topics rather than no understanding of many topics. Additionally, the performance indicator is over a topic (in EGEE355) for which a student may not have seen before (EGET275 is not a prerequisite to EGEE355).

Outcome 2: No action plan needed.

Outcome 3: No action plan needed.

Outcome 4: Additional time can be spent in class to further improve the student's understanding of this outcome.

Outcome 5: No action plan needed.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program(s) from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Electrical Engineering: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Electrical Engineering: Annual Program Assessment Update Report

Person Submitting: *Andrew Jones and Paul J. Weber*
Date: *10/28/2023*
Academic Program: *B.S. Electrical Engineering*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive.
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (taken as Fall 2022 primary major): 19

Freshmen: *5*
Sophomores: *3*
Juniors: *3*
Seniors: *6*

Retention Numbers within this Academic Program (Fall 2021 to Fall 2022 as primary major):
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
1 of 3, 33%
2nd Year Students (from prior year) returned this year:
5 of 5, 100%
3rd Year Students (from prior year) returned this year:
2 of 2, 100%
If applicable, 4th Year Students returned 5th year:
4 retained for additional year

Still Attending LSSU (Fall 2021 to Fall 2022 within LSSU):
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
2 of 3, 66%
2nd Year Students (from prior year) returned this year:
5 of 5, 100%
3rd Year Students (from prior year) returned this year:
2 of 2, 100%
If applicable, 4th Year Students returned 5th year:
5 retained for additional year

Degrees Conferred (any degree – primary or secondary – from Fall 2022 / Spring 2023 / Summer 2023): *1*

High Impact Practices Applied: *The following high impact practices are embedded in all engineering and engineering technology degrees.*

- *First-Year Experience: All School of Engineering & Technology (SET) students take EGNR101 where they learn study skills, work on a team project, and develop writing skills through weekly reflections that promote a growth mindset.*
- *Capstone Courses and Projects: All SET students complete a capstone project with either industry collaboration – for EGNR491/495 or the EGNR250/450/451 co-op sequence – or by completing an undergraduate research project in the EGNR260/460/461 sequence which is another high impact practice. In these projects, students work closely with faculty and contacts from industry to complete a year-long project that helps them prepare to enter industry or for the next step in their academic career.*
- *Internships: The SET faculty and staff communicate with industry partners to help students find summer internships and then serve as references where needed. This past fall was one of the strongest career fairs with the largest attendance that LSSU has had in the last four years and the majority of companies looking to hire SET students for internship and/or full-time employment.*

Significant Data Trends:

The BS Electrical Engineering (BSEE) program is stable overall. However, additional support and initiatives for marketing and recruitment could be useful to continue to increase the number of students. An example of this is hosting the FIRST Robotics Competition at LSSU.

The overall retention rate within LSSU for the BSEE was good this past year with 8 out of 10 students (80%) retained and 4 returning for an additional year.

Analysis:

In terms of retention within BSEE, the percentage of students returning from 1st to 2nd year was the lowest (33%), but overall the numbers are still quite high at 8 out of 10 students.

For the first year Lastly, some gateway courses within the BSEE have high DFWN grades (ex: EGEE125 was 30% for spring 2023, 25% for spring 2022, and over 30% for spring 2021, compared to 15-19% pre-pandemic). This should continue to be monitored to determine how this can be improved. It appears that a lack of math knowledge is hurting performance and thus potentially retention. MATH111 has been made a prerequisite for EGEE125 so it may help to reduce the DFWN grades.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

These are included in the attached Program-Level Four Column Report as well as the supporting Learning Goals (SLOs) by Program Outcomes Report.

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses

from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

These are included in the attached Program-Level Four Column Report as well as the supporting Learning Goals (SLOs) by Program Outcomes Report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Outcome 1: Changes made in earlier courses to introduce some of concepts earlier on, resulted in the expected improvements, thus there are no longer concerns for this outcome. The students performance will continue to be monitored.

Outcome 2: No concerns

Outcome 3: No concerns

Outcome 4: No concerns

Outcome 5: No concerns

Outcome 6: No issues in EGNR346, but some teams in EGR495 did not meet the objectives. This seems to be more related to the students understanding of the assignment then the outcome itself.

Outcome 7: The students met this outcome very well. The subjective evaluation grades, the oral feedback from industry professionals and others from academia can serve as evidence of this

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

Outcome 1: No action plan needed.

Outcome 2: No action plan needed.

Outcome 3: The assignment and/or performance indicator needs to be reviewed as it may be an assessment of AI (ChatGPT) rather than the review of student effort. Need to re-evaluation the usefulness of this assignment.

Outcome 4: The assignment and/or performance indicator needs to be reviewed as it may be an assessment of AI (ChatGPT) rather than the review of student effort. Need to re-evaluation the usefulness of this assignment.

Outcome 5: No action plan needed.

Outcome 6: Additional time can be spent in class to further improve the student's understanding of this outcome.

Outcome 7: No action plan needed.

Attachments:

- Program-Level Four Column Report
- Learning Goals (SLOs) by Program Outcomes Report

Mechanical Engineering: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Mechanical Engineering: Annual Program Assessment Update Report

Person Submitting: *Paul Weber [& Zak Mahmud]*
Date: *9/29/2023*
Academic Program: *B.S. Mechanical Engineering*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive,
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (taken as Fall 2022 primary major): 62

Freshmen: *16*
Sophomores: *14*
Juniors: *14*
Seniors: *24*

Retention Numbers within this Academic Program (Fall 2021 to Fall 2022 as primary major):
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
10 of 13, i.e., 76%
2nd Year Students (from prior year) returned this year:
5 of 11, i.e., 45%
3rd Year Students (from prior year) returned this year:
10 of 15, i.e., 66%
If applicable, 4th Year Students returned 5th year:
17 of 44, i.e., 38%

Still Attending LSSU (Fall 2021 to Fall 2022 within LSSU):
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
12 of 13, i.e., 92%
2nd Year Students (from prior year) returned this year:
10 of 11, i.e., 90%
3rd Year Students (from prior year) returned this year:
13 of 15, i.e., 86%
If applicable, 4th Year Students returned 5th year:
18 of 44, i.e., 40%

Degrees Conferred (any degree – primary or secondary – from Fall 2022 / Spring 2023 / Summer 2023): *13*

High Impact Practices Applied: *The following high impact practices are embedded in all engineering and engineering technology degrees:*

- *First-Year Experience: All School of Engineering & Technology (SET) students take EGNR101 where they learn study skills, work on a team project, and develop writing skills through weekly reflections that promote a growth mindset.*

- *Capstone Courses and Projects: All SET students complete a capstone project with either industry collaboration – for EGNR491/495 or the EGNR250/450/451 co-op sequence – or by completing an undergraduate research project in the EGNR260/460/461 sequence which is another high impact practice. In these projects, students work closely with faculty and contacts from industry to complete a year-long project that helps them prepare to enter industry or for the next step in their academic career.*

- *Internships: The SET faculty and staff communicate with industry partners to help students find summer internships and then serve as references where needed. This past fall was one of the strongest career fairs with the largest attendance that LSSU has had in the last four years and the majority of companies looking to hire SET students for internship and/or full-time employment.*

Significant Data Trends:
The BS Mechanical Engineering (BSME) is a mature program with a longstanding history of being the largest within the School of Engineering & Technology, one of the largest on campus, and in a discipline for which there is great demand in Michigan.

The overall retention rate within LSSU for the BSME was quite high this past year, with 35 out of 39 students (90%) retained (considering those which had been in the first three years) and 17 returning for an additional semester or year.

Analysis:

Retention within the major is fair bit lower than retention of the same students within LSSU, i.e., the students who start in Mechanical Engineering often change to other majors, but remain at LSSU.

On the one hand, this suggests that the Mechanical Engineering program attracts students to LSSU who have a high probability of success in college, even if it may not be in the ME discipline itself.

On the other hand, the rate of return within the major is somewhat low, i.e., about 64% (25 out of 39 returning in ME, for students before fourth year). Nevertheless, this is a retention rate which does not compare unfavorably with that of other institutions offering Engineering (typically "around 60% of students that study engineering will either drop-out or change majors" -- https://engineeryourcareer.net/2019/05/09/5-reasons-why-engineering-students-drop-out/).

The past year's data suggest the lowest retention is from 2nd to 3rd year. While it's not clear whether or not that is an outlier, or typical, it may reflect that the typical sophomore year courses like Physics, Statics, and Calculus III (for those on track) are particularly challenging compared to first-year courses.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

(If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

(Note: These outcomes are identical to EAC-of-ABET's so-called "student outcomes" required of all accredited Engineering programs.)

(1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

(2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

(3) an ability to communicate effectively with a range of audiences.

(4) an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

(5) an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

(6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

(7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Please refer to item 2, below, for a listing of the 1 - 2 indicators used for each outcome. Each of these indicators is taken from a 300 or 400-level (to be as summative as possible) Engineering course within the ME program, from a course activity such as an examination, project, assignment, presentation, laboratory report, etc., which would necessarily require exercise of the ability (-ies) called for by the respective program outcome.

Most of the program outcomes (i.e., all but 5 and 7) are assessed using two indicators. The typical pattern is that one indicator be taken from a course common to most/all Engineering and possibly Engineering Technology disciplines (often, but not exclusively, the capstone courses); this reflects practice in the richest, most multi-disciplinary contexts, but without much opportunity to distinguish ME students from others. That former is typically complemented by a second indicator from an ME - specific course, albeit in a slightly more limited context, but without the potential for conflating ME student work with that of students from the other disciplines.

For each indicator, an outcome is stated subsidiary to, and narrower than, the ABET-stipulated program outcome under which it falls, but the fulfillment of which would credibly demonstrate some essential aspect of fulfilling the larger outcome. The samples of student work in the course activity used for evidence are rated on a 1 – 4 Likert scale (1 being unacceptable, 2 below standard, 3 acceptable, and 4 exemplary), a scoring which is independent of any grading considerations (which latter may account for many other dimensions besides that narrowly stated for the indicator concerned).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached

Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Outcome 1:

1(a) "mathematically characterize a physical system's input-output relationship and use it to predict its response to an input"

EGRS460 final exam, problem on step response

2022-23: Electrical Circuit - 1.9 (1 - 5, 2 - 3, 3 - 4, 4 - 0)
Mechanical System - 2.8 (1 - 0, 2 - 3, 3 - 8, 4 - 1)
2021-22: no data
2020-21: 2.8 (1 - 0, 2 - 5, 3 - 5, 4 - 2)

1(b) "restate verbal information in symbolic/quantitative form in the context of an engineering problem"

EGME350 final exam, problem on machine element performance
2022-23: 2.72 (1 - 0, 2 - 5, 3 - 4, 4 - 2)
2021-22: 3.08 (1 - 2, 2 - 1, 3 - 4, 4 - 6)
2020-21: 2.56 (1 - 1, 2 - 11, 3 - 2, 4 - 5)

Outcome 2:

2(a) "reformulate implied customer needs as specifications and produce an acceptable design solution with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and/or economic factors"

EGRS491 product design review
2022-23: all teams had a 3 or better
2021-22: one team with 2.5, others at least 3
2020-21: one team with 1.8, others at least 3
2019-20: all teams had a 3 or better

2(b) "select values of design parameters to achieve the desired trade-off between competing priorities, such as between [strength and/or rigidity] and [product weight and/or bulk and/or cost]"

EGME350 final design review packet
2022-23: 3.4 (1 - 0, 2 - 1, 3 - 1, 4 - 3)
2021-22: 3.0 (1 - 0, 2 - 2, 3 - 3, 4 - 2)
2020-21: 3.22 (1 - 0, 2 - 2, 3 - 3, 4 - 4)

Outcome 3:

3(a) "make formal engineering presentations"

EGNR-495 - final project presentations
2022-23: all teams had a 3 or better
2021-22: all teams had a 3 or better
2020-21: all teams had a 3 or better

3(b) "prepare a structured laboratory report with proper background, experimental procedures, expected outcomes, and discussion of results

relating them to theoretical expectations"

EGME-432 - lab report from the last experiment of the semester.

2022-23: 3.5 (1 - 0, 2 - 0, 3 - 2, 4 - 2)
2021-22: 3.0 (1 - 0, 2 - 1, 3 - 4, 4 - 1)
2020 -21: 2.8 (1 - 0, 2 - 2, 3 - 2, 4 - 1)

Outcome 4:

4(a) "apply perspectives from established ethical philosophies in the analysis of a case study to make informed judgments about engineering situations"

EGNR-495 - ethics essay

2022-23: all teams had a 3 or better
2021-22: 3.2 (1 - 0, 2 - 0, 3 - 5, 4 - 1)
2020-21: 2.8 (1 - 0, 2 - 1, 3 - 4, 4 - 0)

4(b) "design a product accounting for: regulations in important overseas markets; recyclability, energy usage, and other sustainability considerations; and, ethical sourcing of materials."

EGME-350 - design project: essay on global viability, sustainability, and ethical sourcing, for their design project

2022-23: 3.4 (1 - 0, 2 - 0, 3 - 3, 4 - 2)
2021-22: 3.2 (1 - 0, 2 - 1, 3 - 2, 4 - 2)
2020 -21: 3.7 (1 - 0, 2 - 0, 3 - 3, 4 - 6)

Outcome 5:

5(a) "function effectively as a member of a multi-disciplinary engineering team"

EGNR-495 - midterm subjective grade using the feedback from peer evaluations

2022-23: 2.8 (1 - 0, 2 - 2, 3 - 7, 4 - 0)
2021-22: 3.0 (1 - 0, 2 - 3, 3 - 23, 4 - 3)
2020-21: 3.1 (1 - 0, 2 - 1, 3 - 15, 4 - 3)

Outcome 6:

6(a) "develop a valid and reliable experimental procedure that will validate a product"

EGNR-495 - design review on final product testing

2022-23: 2 of 5 teams received an average score below 3.0
2021-22: 2 of the 6 teams had an average of 2.5 while the others averaged 3.0.
2020-21: All teams scored an average of 3

6(b) "interpret experimental data with limitations associated with inherent and statistical uncertainties"

EGME-432 - experimental investigation of the drag coefficient of an aerodynamic object

2022-23: 3.0 (1 - 0, 2 - 1, 3 - 2, 4 - 1)
2021-22: 3.33 (1 - 0, 2 - 1, 3 - 4, 4 - 1)
2020-21: 3.31 (1 - 1, 2 - 2, 3 - 4, 4 - 9)

Outcome 7:

7(a) "define and clarify customer needs through technical investigation"

EGNR-495 - FA evaluation of each team member at end of semester

2022-23: 3.0 (1 - 0, 2 - 2, 3 - 5, 4 - 2)
2021-22: 3.1 (1 - 0, 2 - 1, 3 - 25, 4 - 3)
2020-21: 3.1 (1 - 0, 2 - 0, 3 - 16, 4 - 1)

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

- *Outcome 1: Although indicator 1 (a) may suggest some cause for concern, given the low score for the electrical circuit part, nevertheless, that datum stands a bit apart. Considering also earlier years' performance, as well as same-year performance in the other indicator 1 (b), and even in the mechanical system part of the same indicator, it's not clear there's any problematic trend, and the electric circuit result may ultimately turn out to be a one-time outlier. In any case, the good performance wrt the mechanical system (also from EGRS460 2022-23) is itself evidence of ability to characterize an input-output relation.*

- *Outcome 2: All indications are that the ability to design, including in contexts with complexity, is well attained in the ME program.*

- *Outcome 3: All indications are that the abilities to communicate in both oral and written forms is well acquired.*

- *Outcome 4: All indications are that the abilities in Ethics (accounting for the global, economic, environmental, and societal contexts) are well acquired.*

- *Outcome 5: A small downturn in the last year notwithstanding , all indications are that the abilities in teamwork are well acquired.*

- *Outcome 6: Results generally suggest good abilities in experimentation, including subsequent data analysis, and preliminary planning of experimental programs. This is especially supported by the ME-specific indicator 6 (b).*

On the other hand, there is some weakness suggested by the first indicator; however, it must be emphasized that indicator is from the context of mixed senior project teams, so that it is not necessarily of weakness on the part of ME students specifically.

- *Outcome 7: All indications are that students develop skills for self-learning.*

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

- *Outcome 1. Accordingly, the action plan relative to ME program outcome 1 is to await further data from the next offering or two, and then ascertain whether or not a problem may exist.*

  (However, as a distinct issue from performance in the present outcome, acknowledging at least a potential for concern about ME students' preparation in electrical circuit analysis, we will raise the latter as a discussion topic for an upcoming School meeting.) priority will be to support faculty teaching math courses as they implement changes and look for ways to strengthen and reinforce math skills within engineering courses.

- *Outcome 2: No action plan is required.*
- *Outcome 3: No action plan is required.*
- *Outcome 4: No action plan is required.*
- *Outcome 5: No action plan is required.*
- *Outcome 6: No action plan is required.*
- *Outcome 7: No action plan is required.*

Manufacturing Engineering Technology: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Manufacturing Engineering Technology: Annual Program Assessment Update Report

Person Submitting: *Paul Weber [& David Leach]*
Date: *10/17/2023*
Academic Program: *B.S. Manufacturing Engineering Technology*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive,
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (taken as Fall 2022 primary major): 12

Freshmen: *1*
Sophomores: *2*
Juniors: *2*
Seniors: *6*

Retention Numbers within this Academic Program (Fall 2021 to Fall 2022 as primary major):
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
1 of 1, i.e., 100%
2nd Year Students (from prior year) returned this year:
1 of 2, i.e., 50%
3rd Year Students (from prior year) returned this year:
3 of 6, i.e., 50%
If applicable, 4th Year Students returned 5th year:
3 of 5, i.e., 60%

Still Attending LSSU (Fall 2021 to Fall 2022 within LSSU):
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
1 of 1, i.e., 100%
2nd Year Students (from prior year) returned this year:
1 of 2, i.e., 50%
3rd Year Students (from prior year) returned this year:
4 of 6, i.e., 67%
If applicable, 4th Year Students returned 5th year:
3 of 5, i.e., 60%

Degrees Conferred (any degree – primary or secondary – from Fall 2022 / Spring 2023 / Summer 2023): *3*

High Impact Practices Applied: *The following high impact practices are embedded in all engineering and engineering technology degrees:*

- *First-Year Experience: All School of Engineering & Technology (SET) students take EGNR101 where they learn study skills, work on a team project, and develop writing skills through weekly reflections that promote a growth mindset.*

- *Capstone Courses and Projects: All SET students complete a capstone project with either industry collaboration – for EGNR491/495 or the EGNR250/450/451 co-op sequence – or by completing an undergraduate research project in the EGNR260/460/461 sequence which is another high impact practice. In these projects, students work closely with faculty and contacts from industry to complete a year-long project that helps them prepare to enter industry or for the next step in their academic career.*

- *Internships: The SET faculty and staff communicate with industry partners to help students find summer internships and then serve as references where needed. This past fall was one of the strongest career fairs with the largest attendance that LSSU has had in the last four years and the majority of companies looking to hire SET students for internship and/or full-time employment.*

Significant Data Trends:
The BS Manufacturing Engineering Technology (BSMfgET) is a mature program with a long history at LSSU, in fact the longest of the existing ET disciplines, and one of the most robust in terms of enrollment. It represents a discipline that's especially relevant in such a manufacturing-oriented State as Michigan.

The overall retention rate within LSSU for the BSMfgET was moderate this past year, with 6 out of 9 students (67%) retained (considering those which had been in the first three years) and 3 returning for an additional semester or year. Retention within the program itself is only slightly less, at 5-out-of- 9 (56%).

Analysis:

Retention is apparently lowest from 2nd-to-3rd year (see data above) at 50%. However, this is based on a population of merely 2 students (of which only 1 retained, and only 1 lost) in that year-to-year transition. Evidently, with such low numbers, little significance (in any statistically rigorous sense) can be attached to such statistics, and the same is true about any of the years (contrast this with the report for Mechanical Engineering, for example, where numbers are one order-of-magnitude higher, and significance is even there marginally attained).

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

(Note: These outcomes are identical to EAC-of-ABET's so-called "student outcomes" required of all accredited Engineering programs.)

(1) an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.

(2) an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.

(3) an ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.

(4) an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.

(5) an ability to function effectively as a member as well as a leader on technical teams.

Please refer to item 2, below, for a listing of the 1 - 2 indicators used for each outcome. Each of these indicators is taken from a late-in-curriculum course in the MfgET program (usually at the 300 or 400-level, although there are a couple instances of 200-level courses as well, but even those taken in the last couple of years by MfgET students); the preference for later courses makes the indicators as "summative" as possible. The courses selected are, moreover, exclusively from those offered by the School of Engineering & Technology. From these courses, the indicators are, more particularly, taken from specific course activities, such as examinations, projects, assignments, presentations, laboratory reports, etc., such as would necessarily require exercise of the ability (-ies) called for by the respective program outcomes.

Most of the program outcomes (i.e., all but #5) are assessed using two indicators. The typical pattern is that one indicator be taken from the senior projects sequence, that being common to all Engineering and possibly Engineering Technology disciplines; this reflects practice in the richest, most multi-disciplinary contexts, but without much opportunity to distinguish MfgET students from others. That former is typically complemented by a second indicator from a more narrow core disciplinary course in MfgET; although this represents a slightly more limited context, it provides more potential to distinguish MfgET students from those of the other disciplines (that said, only one such course, EGMT225, has exclusively MfgET students, but in most of the others, there are fewer other disciplines than would be the case for senior projects courses).

For each indicator, an outcome is stated subsidiary to, and narrower than, the ABET-stipulated program outcome under which it falls, but the fulfillment of which would credibly demonstrate some essential aspect of fulfilling the larger outcome. The samples of student work in the course activity used for evidence are rated on a 1 – 4 Likert scale (1 being unacceptable, 2 below standard, 3 acceptable, and 4 exemplary), a scoring which is independent of any grading considerations (which latter may account for many other dimensions besides that narrowly stated for the indicator concerned).

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

Outcome 1:

```
1(a) "use an industrial robot to automate a manufacturing process "

  EGRS-381 - project report and robot code on setting-up a Staubli robot for
  automating an advanced palletization task or a machine tending task using
  VAL3 programming and I/O communications
```

2022-23: 3.0 (1 - 0, 2 - 0, 3 - 7, 4 - 0)
2021-22: 3.0 (1 - 0, 2 - 0, 3 - 4, 4 - 0)
2020-21: 3.0 (1 - 0, 2 - 1, 3 - 3, 4 - 1)

1(b) "calculate stress and strain in axial loading of a bar"

EGMT-225 - exam 3, axial loading problem
2022-23: 3.0 (1 - 0, 2 - 1, 3 - 3, 4 - 1)
2021-22: 3.08 (1 - 0, 2 - 1, 3 - 2, 4 - 1)
2020-21: 2.56 (1 - 0, 2 - 4, 3 - 2, 4 - 0)

Outcome 2:

2(a) "the ability to reformulate implied customer needs as specifications and produce an acceptable design solution "

EGRS491 product design review
2022-23: all teams had a 3 or better
2021-22: one team with 2.5, others at least 3
2020-21: one team with 1.8, others at least 3
2019-20: all teams had a 3 or better

2(b)"develop PLC & HMI programs that solve practical automated control and manufacturing problems"

EGRS-365 - final project
2022-23: 3.0 (1 - 0, 2 - 0, 3 - 3, 4 - 0)
2021-22: 3.0 (numbers not provided, but all scored a 3)
2020-21: 3.0 (numbers not provided, but all scored a 3)

Outcome 3:

3(a) "make formal engineering presentations"

EGNR-495 - final project presentations
2022-23: all teams had a 3 or better
2021-22: all teams had a 3 or better
2020-21: all teams had a 3 or better

3(b) "write prose containing technical information"

EGME-276 - lab report, preferably a later summative one.
2022-23: 3.25 (1 - 0, 2 - 0, 3 - 6, 4 - 2)
2021-22: 3.25 (1 - 0, 2 - 0, 3 - 2, 4 - 1)
2020 -21: 3.11 (1 - 0, 2 - 0, 3 - 8, 4 - 1)

Outcome 4:

4(a) "develop a valid and reliable experimental procedure that will validate a product"

EGNR-495 - design review on final product testing
2022-23: 2 of 5 teams received an average score below 3.0
2021-22: 2 of the 6 teams had an average of 2.5 while the others averaged 3.0.
2020-21: All teams scored an average of 3

4(b) "use statistical methods to plan an efficient, yet effective, program of experimentation, when the output variable studied is expected to depend on multiple input variables"

EGNR-310 - term project technical report
2021-22: 2.4 (1 - 1, 2 - 2, 3 - 1, 4 - 1)

Outcome 5:

5(a) "the ability to function effectively as a member of a multi-disciplinary engineering team"

EGNR-495 - midterm subjective grade using the feedback from peer evaluations
2022-23: 2.8 (1 - 0, 2 - 2, 3 - 7, 4 - 0)
2021-22: 3.0 (1 - 0, 2 - 3, 3 - 23, 4 - 3)
2020-21: 3.1 (1 - 0, 2 - 1, 3 - 15, 4 - 3)

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

- *Outcome 1: Indicators concur that the application of subject knowledge from science/engineering/mathematics/technology disciplines, in the MfgET program, is at a good level.*
- *Outcome 2: All indications are that the ability to design, including in contexts with complexity, is well attained in the MfgET program.*
- *Outcome 3: All indications are that the abilities to communicate in both oral and written forms is well acquired.*
- *Outcome 4: There is some concern from each of the indicators. Although the 2.4 score from EGNR310 (indicator 4 b) is the more concerning, nevertheless, that is an alternate year course, and there has only been one offering since the new ETAC criteria were established – it does not seem reasonable to draw conclusions based on a single offering. The EGNR495 indicator, however, also shows some (albeit less) possible weakness. However, these are mixed teams (Engineering & ET disciplines) – it's not clear that the MfgET students, in particular, had underperformed in this area.*
- *Outcome 5: A small downturn in the last year notwithstanding, all indications are that the abilities in teamwork are well acquired.*

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

- *Outcome 1: No action plan is required.*
- *Outcome 2: No action plan is required.*
- *Outcome 3: No action plan is required.*
- *Outcome 4: Assessment questionnaires were based on statistical methods. MfgET students were first introduced these methods during their freshmen year in Math207. To improve students' performance, students will be required to use regression analysis of the experimental data in EGME276 for the bending and torsion lab.*
- *Outcome 5: No action plan is required.*

Attachments:

- Program-Level Four Column Report
- Learning Goals (SLOs) by Program Outcomes Report

Robotics Engineering: Annual Program Assessment Update Report

LAKE SUPERIOR STATE UNIVERSITY

Robotics Engineering: Annual Program Assessment Update Report

Person Submitting: *Paul J. Weber [& Jim Devaprasad]*
Date: *9/18/2023*
Academic Program: *B.S. Robotics Engineering*
Annual Update – Year Being Reported: *2022-2023*

DUE: Email this form to the Vice-Provost before 3:00pm on Friday of Week 4 in the fall semester, along with the accompanying program-level 4-column report from Nuventive,
(Please verify that the appropriate year has been selected when entering your data into Nuventive).

Annual Program Data

Enrollments (taken as Fall 2022 primary major): 24

Freshmen: *4*
Sophomores: *3*
Juniors: *3*
Seniors: *10*

Retention Numbers within this Academic Program (Fall 2021 to Fall 2022 as primary major):
(Data for Program retention reporting)

1st Year Students (from prior year) returned this year:
3 of 4, 75%
2nd Year Students (from prior year) returned this year:
3 of 5, 60%
3rd Year Students (from prior year) returned this year:
8 of 9, 88%
If applicable, 4th Year Students returned 5th year:
3 retained for an additional year

Still Attending LSSU (Fall 2021 to Fall 2022 within LSSU):
(Data for annual Institutional retention reporting)

1st Year Students (from prior year) returned this year:
3 of 4, 75%
2nd Year Students (from prior year) returned this year:
4 of 5, 80%
3rd Year Students (from prior year) returned this year:
8 of 9, 88%
If applicable, 4th Year Students returned 5th year:
4 retained for an additional year

Degrees Conferred (any degree – primary or secondary – from Fall 2022 / Spring 2023 / Summer 2023): *4*

High Impact Practices Applied: *The following high impact practices are embedded in all engineering and engineering technology degrees.*

- *First-Year Experience: All School of Engineering & Technology (SET) students take EGNR101 where they learn study skills, work on a team project, and develop writing skills through weekly reflections that promote a growth mindset.*
- *Capstone Courses and Projects: All SET students complete a capstone project with either industry collaboration – for EGNR491/495 or the EGNR250/450/451 co-op sequence – or by completing an undergraduate research project in the EGNR260/460/461 sequence which is another high impact practice. In these projects, students work closely with faculty and contacts from industry to complete a year-long project that helps them prepare to enter industry or for the next step in their academic career.*
- *Internships: The SET faculty and staff communicate with industry partners to help students find summer internships and then serve as references where needed. This past fall was one of the strongest career fairs with the largest attendance that LSSU has had in the last four years and the majority of companies looking to hire SET students for internship and/or full-time employment.*

Significant Data Trends:

The BS Robotics Engineering (BSRE) is a relatively new program that continues to slowly grow in enrollment.

The overall retention rate within LSSU for the BSRE was moderate this past year with 14 out of 18 students (77%) retained and 3 returning for an additional year.

Analysis:

In terms of retention within LSSU, the percentage of students returning from 2nd to 3rd year was the lowest. This should be monitored the following year to see if this is a trend that might require further investigation.

Lastly, while the DFWN rates for some core classes like EGNR265 went up significantly during the 2020-2021 academic year during COVID, the rates in most BSRE-specific classes like EGRS430 and EGRS435 remained about the same or actually went down a little.

Annual Assessment Reporting

1. A full list of your Program Learning Outcomes and a description of each outcome's Assessment Methods is required. This can be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.
   (If an outcome was not assessed during the academic year of this reporting, state that it was "Not assessed this past year," and note when it is next scheduled to be assessed).

These are included in the attached Program-Level Four Column Report as well as the supporting Learning Goals (SLOs) by Program Outcomes Report.

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments.

These are included in the attached Program-Level Four Column Report as well as the supporting Learning Goals (SLOs) by Program Outcomes Report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Briefly summarize the discussion held among program faculty at the Annual Program Assessment Update Meeting (i.e., Meeting Minutes), focusing on the main points discussed to analyze assessment results. (Bullet points sufficient, as long as they are clear. When appropriate, note faculty member names).

Outcome 1: No concerns

Outcome 2: No concerns

Outcome 3: No concerns

Outcome 4: No concerns

Outcome 5: The results were slightly lower than the goal but not enough to be concerning.

Outcome 6: The average for EGRS365 was below average but there was limited data. Some teams in EGR495 did not meet the objectives. This seems to be more related to the students understanding of the assignment then the outcome itself.

Outcome 7: The students met this outcome very well. The subjective evaluation grades, the oral feedback from industry professionals and others from academia can serve as evidence of this.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. Based on the assessments results and faculty discussion / analysis of those results, briefly describe plans for improvements and the next steps that will be taken.

Outcome 1: No action plan needed.

Outcome 2: No action plan needed.

Outcome 3: No action plan needed.

Outcome 4: No action plan needed.

Outcome 5: Monitor the results to see if there is cause for concern.

Outcome 6: Monitor the results for the future. Additional time can be spent in EGRS495 to further improve the student's understanding of this outcome.

Outcome 7: No action plan needed.

College of Business, Engineering, Computer Science, and Mathematics:
Computer Science and Mathematics

LAKE SUPERIOR STATE UNIVERSITY

Computer Networking: Annual Program Assessment Update Report

Person Submitting: Schemm
Date: *9/20/2023*
Academic Program: Computer Networking (BS and AS)
Annual Update – Year Being Reported: 22-23

DUE: Email this form to the Vice-Provost for Accreditation & Assessment and your Dean before 3:00pm on Friday of Week 6 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

With approval of the Dean, academic programs with an enrollment of less than 10 may present their data in a combined Within-School Annual Program Assessment Update Report.

Annual Program Data – Combined Reporting for Programs Within Schools with < 10 Enrollment

As authorized by Dean McCready and Gail Essmaker, we are using this for the combined BS and AS in Computer Science.

Program Enrollment Data (Primary Major) – programs with < X students				
	Program Name: BS in CN	*Program Name:* AS in CN	*Program Name:*	*Program Name:*
Freshmen	5	0		
Sophomores	0	2		
Juniors	0	0		
Seniors	5	0		

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

Retention Numbers for Primary Major within Programs with < X students				
	Program Name: BS in CN	*Program Name:* AS in CN	*Program Name:*	*Program Name:*

1st Year Students (prior) Retained to 2nd Year	N/A	N/A		
2nd Year Students (prior) Retained to 3rd Year	1 of 1	2		
3rd Year Students (prior) Retained to 4th Year	1 of 2	N/A		
4th Year Students (prior) Retained to 5th Year (if any)	4 of 7	N/A		

Still Attending LSSU, but changed major:
(Data for annual Institutional retention reporting)

Retention Numbers for Programs with < X students				
	Program Name: BS in CN	*Program Name:* AS in CN	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	N/A	N/A		
2nd Year Students (prior) Retained to 3rd Year	1 of 1	2		
3rd Year Students (prior) Retained to 4th Year	2 of 2	N/A		
4th Year Students (prior) Retained to 5th Year (if any)	4 of 7	N/A		

Degrees Conferred: 4

High Impact Practices (HIPs) Applied: Group Projects, Hands on lab assignments

Significant Data Trends: Enrollment in this degree continues to decline. We (Marketing and Admissions) are not advertising it at all, and in many cases is actively rerouting students to alternate majors.

Analysis: This is not something that we control. We have tried to discuss this with both our old Dean as well as our new Dean. They, however, have admitted that is isn't something that they can influence either.
We have been working with Criminal Justice to implement a new CyberSecurity Degree which will use many elements from this program. If that is successful (likely from being advertised), then we may see numbers for these courses increase, and potentially a number of dual-majors from it. We will have to see.

Annual Assessment Reporting

1. See Attached four column reports. (Both are included)

Annual Assessment Results

2. Data for these sections comes from CSCI 292/CSCI 419, as well as our After-Projects-Meeting. Data from both is entered into TracDat, and is reported in the 4-column report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Inter-team communications was an issue for the same teams that it was for the CS majors. We had two additional CN teams, one did very well with communications, the other was a one-person team.

   In general, the projects were much better than the ones from the last couple of years. It appears that there has been enough 'normal' classes to begin to mitigate some of the Covid damage observed in prior years. The only 'unsuccessful' project was a student who was assigned a solo-project after failing the previous year.

   For sophomores, only one of two students completed their projects. With such a limited data pool, it is difficult to make any useful observations. We do note, that both students had issues with their mid-semester presentations. We were able to work with both students to greatly improve their final project presentations. Students taking Sophomore projects have not typically had ENGL 306 before taking this class, and in this case, neither had. This is much the same issue that we see with the CS projects.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. As with the CS degree, we are concerned about the lack of good presentation skills in our students. We had originally relied on COMM 101 and ENGL 306 to provide those skills. However, in recent years, COMM 101 is only being taught online, which isn't giving students the skillset they need. Further, the 'new' content for ENGL 306 is not meeting our needs. We have begun discussions about perhaps making an in-house version of this class. We are limited, however, by the amount of spare load (none) that we have.

   Unlike the AS in Computer Science, the AS in Computer Networking is taken by a number of students not pursuing the 4 year degree, so any changes that we make would either need to take that into account, or only affect the full BS degree.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program(s) from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

LAKE SUPERIOR STATE UNIVERSITY

Computer Science: Annual Program Assessment Update Report

Person Submitting: Evan Schemm
Date: *9/13/2023*
Academic Program: Computer Science (BS and AS)
Annual Update – Year Being Reported: 22-23

DUE: Email this form to the Vice-Provost for Accreditation & Assessment and your Dean before 3:00pm on Friday of Week 6 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

With approval of the Dean, academic programs with an enrollment of less than 10 may present their data in a combined Within-School Annual Program Assessment Update Report.

Annual Program Data – Combined Reporting for Programs Within Schools with < X Enrollment

As authorized by Dean McCready and Gail Essmaker, we are using this for the combined BS and AS in Computer Science.

Program Enrollment Data (Primary Major) – programs with < X students				
	Program Name: BS in CS	*Program Name:* AS in CS	*Program Name:*	*Program Name:*
Freshmen	9	1		
Sophomores	2	1		
Juniors	2	0		
Seniors	5	0		

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

Retention Numbers for Primary Major within Programs with < X students				
	Program Name:	*Program Name:* AS in CS	*Program Name:*	*Program Name:*
1st Year Students (prior)	0 of 3	1		

Retained to 2nd Year				
2nd Year Students (prior) Retained to 3rd Year	1 of 5	0		
3rd Year Students (prior) Retained to 4th Year	1 of 2	0		
4th Year Students (prior) Retained to 5th Year (if any)	5 of 7	0		

Still Attending LSSU, but changed major:
(Data for annual Institutional retention reporting)

Retention Numbers for Programs with < X students				
	Program Name: BS in CS	*Program Name:* AS in CS	*Program Name:*	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	1 of 3	1		
2nd Year Students (prior) Retained to 3rd Year	3 of 5	0		
3rd Year Students (prior) Retained to 4th Year	2 of 2	0		
4th Year Students (prior) Retained to 5th Year (if any)	5 of 7	0		

Degrees Conferred: 1

High Impact Practices (HIPs) Applied Group Projects, Applied Homework Assignments
(These are used in both degrees)

Significant Data Trends: Our Freshman class of last year was still plagued by students mis-assigned by admissions to our area. However, the larger initial class size meant that we had more students that made it into CSCI 121, and then into CSCI 201 this Fall. We will see how well they do in 201, which is the key to students being able to proceed to upper level courses.

This increase at the Sophomore level should trickle to our upper level courses over the course of the next couple of years.

Our primary concern for this year is a lack of non-online COMM 101 experiences, as well as disappointment in the effects of recent offerings of ENGL 306. Our students are not getting the experience in public speaking that they need for our classes and their future jobs.

Analysis: We still lost students due to mis-assignment from Admissions. We have brought this issue (and further related items) to the attention of our Dean. I'm not sure that she can do much more than we can, but we are documenting these items for her (and the Provost).

Annual Assessment Reporting

1. See Attached four column reports. (Both are included)

Annual Assessment Results

2. Data for these sections comes from CSCI 292/CSCI 419, as well as our After-Projects-Meeting. Data from both is entered into TracDat, and is reported in the 4-column report.

Annual Assessment Meeting Minutes – Analysis of Results

3. Inter-team (within the team) communications was the breaking factor for all of our group projects. The inability (or unwillingness?) to communicate effectively between team members was a large negative factor for all three senior projects teams. Background reasons for this development were different between the teams, but the end result was the same (a poorer project). Interestingly, this did not affect their final project presentation.

   For the sophomores, there were only two students, so 'results' is difficult. The only common element was that both students needed improvement from their mid-semester presentation to their final presentation.

   At the senior level, we noted that students did a much better job at their final presentations than last year. We have been trying to add presentation requirements to a number of Sophomore / Junior classes to offset the problems from ENGL 306. We try to cover the other elements of teamwork in CSCI 418, but for a variety of reasons, it did not work out well this year. Part of this is the personalities of the students involved, part is the fact that ENGL 306 is no longer meeting this need.

   Of concern to us also is that COMM 101 has online been taught 'online' for the last several (at least 3 now) years. Our students are not getting experience standing in front of others to present material

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. We have begun talks among the three of how we should address the ENGL 306 issue. If we had the load, we might look at making our own class to cover those topics. Both Dr. Bartus and Dr. Smith have significant industry experience, and between the three of us, we could come up with a curriculum that would cover the skillset we need. The issue is load. Being down one CS faculty member has cut into our ability to offer additional classes.
   We discussed that if we did that, we could require that the class be a pre-req to CSCI

291/292, which might improve things at the Sophomore level.
We are waiting to see how things work out this year.

The COMM 101 issue has been partially resolved by asking students to take THEA 156 instead. It isn't as good a solution, because while they need to make public (small group) presentations, they aren't getting the breadth of type of presentations they would get from COMM 101.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program(s) from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*
- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under "Filter," select *Goal Status – Active.*

Mathematics: Annual Program Assessment Update Report

Person Submitting: Schemm / Gorman
Date: *10/4/2023*
Academic Program: Mathematics
Annual Update – Year Being Reported: 22 - 23

DUE: Email this form to the Vice-Provost for Accreditation & Assessment and your Dean before 3:00pm on Friday of Week 6 in the fall semester, along with the accompanying program-level 4-column report from Nuventive. *(Please verify that the appropriate year has been selected when entering your data into Nuventive).*

With approval of the Dean, academic programs with an enrollment of less than 10 may present their data in a combined Within-School Annual Program Assessment Update Report.

Annual Program Data – Combined Reporting for Programs Within Schools with < 10 Enrollment

Program Enrollment Data (Primary Major) – programs with < X students				
	Program Name: Mathematics	*Program Name:* Math Ele Ed	*Program Name:* Math Sec Ed	*Program Name:*
Freshmen	1	0	0	
Sophomores	2	0	0	
Juniors	2	0	0	
Seniors	2	0	0	

Retention Numbers within this Academic Program:
(Data for Program retention reporting)

Retention Numbers for Primary Major within Programs with < X students				
	Program Name: Mathematics	*Program Name:* Math Ele Ed	*Program Name:* Math Sec Ed	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	N/A	N/A	N/A	

2nd Year Students (prior) Retained to 3rd Year	1 of 1	N/A	N/A	
3rd Year Students (prior) Retained to 4th Year	1 of 1	N/A	4 of 5	
4th Year Students (prior) Retained to 5th Year (if any)	N/A	N/A	0 of 1	

Still Attending LSSU, but changed major:
(Data for annual Institutional retention reporting)

Retention Numbers for Programs with < X students				
	Program Name: Mathematics	*Program Name:* Math Ele Ed	*Program Name:* Math Sec Ed	*Program Name:*
1st Year Students (prior) Retained to 2nd Year	N/A	N/A	N/A	
2nd Year Students (prior) Retained to 3rd Year	1 of 1	N/A	N/A	
3rd Year Students (prior) Retained to 4th Year	1 of 1	1/1	4 of 5	
4th Year Students (prior) Retained to 5th Year (if any)	N/A	N/A	0 of 1	

Degrees Conferred: 3
(Note: Math Elementary Ed has been discontinued pending changes at the State level)

High Impact Practices (HIPs) Applied: Group Projects, Applied Homework Assignments

Significant Data Trends: There are no significant data trends, such as high D/F/W rates in specific courses, or declining enrollment or completion rates compared to the previous year, etc. The mathematics program (Mathematics BS and Mathematics Education) is a small one and our enrollment has not changed in a significant way since the last report. Our main challenge has been one of culture, primarily in terms of: lack of connection among the majors; poor work ethic; and fixed rather than growth mindset.

Analysis: We retained nearly all of our students. In the retention data above, the secondary education major who was apparently not retained *was* retained, but had a sufficiently low GPA that he was expelled from the School of Education. He is working on raising his GPA and hopes to graduate in April of 2024.

Annual Assessment Reporting

1. See Attached four column reports. (All are included)

Annual Assessment Results

2. Documentation of your Annual Program Assessment Results for the year is required. The courses from which the data is reported must be made clear. This can also be provided in your attached Program-level Four Column report from Nuventive, with updated data entered from this year's program assessments for each program being reported on this form.

Annual Assessment Meeting Minutes – Analysis of Results

3. Faculty noted that:
- The primary driver of program changes during the 2022 - 2023 academic year was the program revision required by the Michigan Department of Education. This lead to significant reworking of our Mathematics Education majors, resulting in a gradebands model, with grade bands for 5 - 9 and 7 - 12.
- Faculty discussed culture problems among our majors, as noted above. Faculty have a number of ideas for improving the mathematics culture among the majors.
- Dr. Kipka notes that we have consistently been able to teach the integral theorems (Green's, Stokes', and divergence) in Calculus III and should consider exploring the possibility of having this course transfer to UM.
- Dr. Kipka notes that MATH 411 ran as a topics course for the first time in the Spring of 2023 and, though successful, came with new challenges as a topics course rather than a regular course.

Annual Assessment Meeting Minutes – Use of Results *(Action Plans)*

4. The following action plans were agreed on:
- Considerable care will be given to the assessment of the new grade bands model for the Mathematics Education majors, since these are new;
- Faculty are working on providing mathematical experiences outside of the classroom for majors (student seminars, academic experiences, and social events);
- Dr. Gorman has suggested creating a template for sub/waivers for engineering majors who want to consider double majoring as mathematics majors. These templates will make it easier to advertise the major to interested engineering students;
- Faculty continue to discuss potential ways to leverage our small program size through flexible design of curriculum.

Required attachment: Attach your Program Four Column report from Nuventive, with updated data entered from this year's Annual Program Assessment meeting. Settings to run the report are:

- Select your Program(s) from the top center dropdown box in Nuventive.
- Select Reports - Standard Reports from the left-side menu.
- Select *Assessment: Program Four Column*

- Select the year for this specific Annual Update Report.
- Leave pre-determined settings and options unchanged; under “Filter,” select *Goal Status – Active.*