SAINT LOUIS UNIVERSITY.

Program Assessment: *Annual Report*

Program(s): Bachelor of Science in Aeronautics with Concentrations in Aviation Management and Flight Science

Department: Aviation Science

College/School: Parks College of Engineering, Aviation and Technology

Date: Dec. 8, 2019

Primary Assessment Contact: Stephen G, Magoc, Chairperson

1. Which program student learning outcomes were assessed in this annual assessment cycle?

The program-level SLO's assessed during the 2018-2019 academic year were:

Fall 2018

G. Assess contemporary issues.
H. Use the techniques, skills and modern technology necessary for professional practice.
I. Asses the national and international aviation environment.

Spring 2019

J. Apply pertinent knowledge in identifying and solving problems.
K. Apply knowledge of business sustainability to aviation issues.

2. What data/artifacts of student learning were collected for each assessed outcome? Were Madrid student artifacts included?

Graduating student surveys

Student course evaluations

Capstone course results

FAA Airman Knowledge Test and practical examination rates

Alumni surveys

University program reviews

Faculty assessment and discussion of SLO's

3. How did you analyze the assessment data? What was the process? Who was involved?
NOTE: If you used rubrics as part of your analysis, please include them in an appendix.

To perform the undergraduate program assessment of the B.S. in Aeronautics Aviation Management and Flight Science concentrations, the faculty of the Department of Aviation Science performed an undergraduate program assessment at the end of the fall 2018 and spring 2019 semesters. This process included the program-level student learning outcomes (SLO's) which were scheduled to be assessed at the end of the fall 2018 and spring 2019 semesters. As part of this process the assessment of individual courses was conducted by the department.

Please see Appendices A and B for details of the department's assessment plan.

4. What did you learn from the data? Summarize the major findings of your analysis for each assessed outcome.
NOTE: If necessary, include any tables, charts, or graphs in an appendix.

The department faculty performed the assessment of the SLO's included in the cycle. The faculty used a set of rubrics to assist in determining whether the Aviation Management and Flight Science students met the expectations of the SLO's or not. (Copies of the rubrics used can be found in Appendix XX of this report.)

Based on the departmental discussions, the faculty determined the following about the student achievement in the SLO's:

- SLO G. Assess contemporary issues.

  The department determined that the students meet the requirements of the SLO and will continue to monitor student performance.

- SLO H. Use the techniques, skills and modern technology necessary for professional practice.

  The department determined that the students do not satisfactorily meet the requirements of the SLO and need additional instruction in the use of technology in professional practice throughout the curriculum.

- SLO I. Asses the national and international aviation environment.

  The department determined that the students do not satisfactorily meet the requirements of the SLO and need to be better prepared to fly international routes in the ASCI 4022 Jet Flying Techniques II and the ASCI 4023 Jet Flying Techniques II Laboratory courses.

- SLO J. Apply pertinent knowledge in identifying and solving problems.

  The department determined that the students meet the requirements of the SLO and will continue to monitor student performance.

- SLO K. Apply knowledge of business sustainability to aviation issues.

  The department determined that the students do not satisfactorily meet the requirements of the SLO determined that the ASCI 4650 Economics of Air Transportation students were not sufficiently prepared to prepare meaningful analyses of the results of the simulation used in the course.

5. How did your analysis inform meaningful change? How did you *use the analyzed data to make or implement recommendations for change* in pedagogy, curriculum design, or your assessment plan?

In assessing this cycle's SLO's, the department discussed how it might implement changes in the program to better enable future students to be better prepared to meet the expectations of the SLO's. As it pertains to the SLO's that did meet expectations, the department will continue to monitor these SLO's to determine if any programmatic changes are required in the future.

For the SLO's that did not sufficiently meet expectations, the department faculty discussed how to best make the programmatic changes. The department faculty determined that it would implement the following changes and continue the assessment process to determine whether the changes being implemented were effective:

- SLO H. Use the techniques, skills and modern technology necessary for professional practice.

The department recommends including additional learning opportunities surrounding how technology might be leveraged in the context of certain program topics. Particularly, adding a course project in the ASCI 4050 Human Factors course to focus on identifying available technology and providing an extensive narrative on its application.

- SLO I. Asses the national and international aviation environment.

  The department recommends that course instructors continue to develop flying international routes in the ASCI 4022 Jet Flying Techniques II course and in the ASCI 4023 Jet Flying Techniques II Laboratory courses.

- SLO K. Apply knowledge of business sustainability to aviation issues.

  The department recommends that the ASCI 4650 Economics of Air Transportation course instructor implement the following:
  - Establish a set of specific guidelines for teams' decision logs with details of data collection required.
  - The student team management audit will include a more comprehensive report of the findings/results for each airline team.

6. Did you follow up ("close the loop") on past assessment work? If so, what did you learn? *(For example, has that curriculum change you made two years ago manifested in improved student learning today, as evidenced in your recent assessment data and analysis?)*

It is important to note that the assessment plan currently used by the department has completed its first cycle.

Past assessment work involved assessing individual courses as they pertain to the program SLO's as opposed to the assessment of the program SLO's. Using this old assessment plan, the last time that this cycle's SLO's were assessed, the following determinations were made:

- SLO G. Assess contemporary issues.
  - The department determined that the expectations of the SLO were met and that the department will continue to assess this SLO in future cycles.
- SLO H. Use the techniques, skills and modern technology necessary for professional practice.
  - The department determined the need to revise the curricula of ASCI 3010 Jet Transport Systems I and ASCI 3020 Jet Transport Systems II to reflect the upgrade in the department's CRJ200 aircraft to a CRJ700 aircraft. The changes resulted in students performing at a higher and acceptable level in this SLO at this point in the assessment cycle.
- SLO I. Asses the national and international aviation environment.
  - In the ASCI 4022 Jet Flying Techniques II and ASCI 4023 Jet Flying Techniques Laboratory courses, the department implemented increased time reviewing operating specifications and implemented changes to the aircraft flight manual. While improvements in student performance have occurred, further changes need to be implemented to improve student performance in this SLO.
- SLO J. Apply pertinent knowledge in identifying and solving problems.
  - The department determined that the expectations of the SLO were met and that the department will continue to assess this SLO in future cycles.
- SLO K. Apply knowledge of business sustainability to aviation issues.

- The department agreed to use a different software package in the airline simulation. The decision was based in part on a financial basis. Although like the previous airline simulation software, the new package did not adequately allow the students to meet the expectations of this SLO. The department brought back an updated version of the software used in the past and the number of students meeting expectations increased moderately.

IMPORTANT: Please submit any revised/updated assessment plans to the University Assessment Coordinator along with this report.

SAINT LOUIS UNIVERSITY

PARKS COLLEGE OF ENGINEERING, AVIATION AND TECHNOLOGY

The Department of Aviation Science

The Assessment Process
2018-2019

To perform the undergraduate program assessment of the B.S. in Aeronautics Aviation Management concentration, the faculty Department of Aviation Science performed an undergraduate program assessment combined with individual course assessments at the end of the fall 2018 and spring 2019 semesters. This process included assessment of certain program-level Student Learning Outcomes (SLO's) which were scheduled to be assessed at the end of the fall 2018 and spring 2019 semesters and the assessment of individual courses as determined by the department.

The program-level SLO's assessed during the 2018-2019 academic year were:

Fall 2018

G. Assess contemporary issues.
H. Use the techniques, skills and modern technology necessary for professional practice.
I. Asses the national and international aviation environment.

Spring 2019

J. Apply pertinent knowledge in identifying and solving problems.
K. Apply knowledge of business sustainability to aviation issues.

Appendix A: 2018 – 2019 Assessment Plan and Process
Appendix B: Sample rubrics used by the department to assess the program's Student Learning Outcomes (SLO's)

APPENDIX A

2018 – 2019 Assessment Plan and Process

Department of Aviation Science

B.S. in Aeronautics with Concentrations in

Aviation Management and Flight Science

SAINT LOUIS UNIVERSITY.

Program Assessment Plan

Program: Bachelor of Science in Aeronautics with Concentrations in Aviation Management and Flight Science

Department: Aviation Science

College/School: Parks College of Engineering, Aviation and Technology

Date: DRAFT - 11/16/2017

Primary Assessment Contact: Stephen Magoc, Chairperson

Note: Each cell in the table below will expand as needed to accommodate your responses.

#	**Program Learning Outcomes** What do the program faculty expect all students to know, or be able to do, as a result of completing this program? ▪ *Note: These should be measurable, and manageable in number (typically 4-6 are sufficient).*	**Assessment Mapping** From what specific courses (or other educational/professional experiences) will artifacts of student learning be analyzed to demonstrate achievement of the outcome? Include courses taught at the Madrid campus and/or online as applicable.	**Assessment Methods** What specific artifacts of student learning will be analyzed? How, and by whom, will they be analyzed? ▪ *Note: the majority should provide direct, rather than indirect, evidence of achievement.* Please note if a rubric is used and, if so, include it as an appendix to this plan.	**Use of Assessment Data** How and when will analyzed data be used by faculty to make changes in pedagogy, curriculum design, and/or assessment work? How and when will the program evaluate the impact of assessment-informed changes *made in previous years*?
A	Apply mathematics, science, and applied sciences to aviation related disciplines.	The data from the following courses will be used to assess if the undergraduate programs fulfill this student learning outcome: ASCI 4022 Jet Flying Techniques II ASCI 4650 Econ of Air Transportation	**Direct Measures**: The student learning outcome will be assessed using data from: The final LOFT scenario flight exam (videotaped and monitored by the course instructor and an additional faculty member) will be obtained from the ASCI 4022 course. The final results of the airline simulation project and associated student group presentations (monitored by the course	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions

			instructor and additional faculty members) will be obtained from the ASCI 4650 course. **Indirect Measures:** End-of course student surveys.	will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
B	Analyze and interpret data.	The data from the following courses will be used to assess if the undergraduate programs fulfill this student learning outcome: ASCI 4022 Jet Flying Techniques II ASCI 4650 Econ of Air Transportation	**Direct Measures**: The student learning outcome will be assessed using data from: The final LOFT scenario flight exam (videotaped and monitored by the course instructor and an additional faculty member) will be obtained from the ASCI 4022 course. The final results of the airline simulation project and associated student group presentations (monitored by the course instructor and additional faculty members) will be obtained from the ASCI 4650 course. **Indirect Measures:** End-of course student surveys.	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
C	Work effectively on multi-disciplinary and diverse teams.	The following courses will be used to assess if the undergraduate programs fulfill this student learning outcome: ASCI 4350 Team Resource Mgt. ASCI 4650 Econ of Air Transportation	**Direct Measures**: The student learning outcome will be assessed using data from: The results of a student group project and the senior design presentation and poster project (monitored by the course instructor and other faculty members)	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics,

			will be obtained from the ASCI 4350 course. The final results of the airline simulation project and associated class presentations (monitored by the course instructor and additional faculty members) will be obtained from the ASCI 4650 course. **Indirect Measures:** End-of course student surveys. Assessment by external evaluators.	science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
D	Make professional and ethical decisions.	The following course will be used to assess if the undergraduate programs fulfills this student learning outcome: ASCI 4250 Prof. Ethics and Standards	**Direct Measures**: The student learning outcome will be assessed using data from: The results of embedded questions in quizzes; mid-term examinations, final examinations, case studies and evidence of the student knowledge of course topics found in the research paper requirement of the course will be obtained from the ASCI 4250 course. **Indirect Measures:** End-of course student surveys. Student awareness of the Parks College's Academic Integrity Policy. Department level aggregate data of violations of the Academic Integrity Policy.	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
E	Communicate effectively, using both written and oral	The following courses will be used to assess if the undergraduate programs fulfill this student learning outcome:	**Direct Measures**: The student learning outcome will be assessed using data from:	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be

	communication skills.	ASCI 4350 Team Resource Mgt. ASCI 4650 Econ of Air Transportation	The results of a student group project and the senior design presentation and poster project (monitored by the course instructor and other faculty members) will be obtained from the ASCI 4350 course. The final results of the airline simulation project and associated class presentations (monitored by the course instructor and additional faculty members) will be obtained from the ASCI 4650 course. **Indirect Measures:** End-of course student surveys.	analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
F	Engage in and recognize the need for life-long learning.	The following courses will be used to assess if the undergraduate programs fulfill this student learning outcome: ASCI 1010 Professional Orientation ASCI 4350 Team Resource Mgt.	**Direct Measures**: The student learning outcome will be assessed using data from: The results of embedded questions in quizzes, tests and the final exam and of the student group presentations will be obtained from the ASCI 1010 course. The results of a student group project and the senior design presentation and poster project (monitored by the course instructor and other faculty members) will be obtained from the ASCI 4350 course. **Indirect Measures:** End-of course student surveys.	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint

				Louis University's Office of the Provost.
G	Assess contemporary issues.	The following course will be used to assess if the undergraduate programs fulfills this student learning outcome: ASCI 4450 Aviation Law	**Direct Measures**: The student learning outcome will be assessed using data from: The scoring rubrics used to determine the results of student and group presentations of select case studies will be obtained from the ASCI 4450 course. **Indirect Measures:** End-of course student surveys.	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
H	Use the techniques, skills, and modern technology necessary for professional practice.	The following courses will be used to assess if the undergraduate programs fulfill this student learning outcome: ASCI 4022 Jet Flying Techniques II ASCI 4650 Econ of Air Transportation	**Direct Measures**: The student learning outcome will be assessed using data from: The final LOFT scenario flight exam (videotaped and monitored by the course instructor and an additional faculty member) will be obtained from the ASCI 4022 course. The final results of the airline simulation project and associated student group presentations (monitored by the course instructor and additional faculty members) will be obtained from the ASCI 4650 course. **Indirect Measures:** End-of course student surveys.	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records

				of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
I	Assess the national and international aviation environment.	The following courses will be used to assess if the undergraduate programs fulfill this student learning outcome: ASCI 4800 International Aviation ASCI 4022 Jet Flying Techniques II	**Direct Measures**: The student learning outcome will be assessed using data from: The scoring rubrics used to determine the results of weekly discussions and group presentations of select national and international aviation topics will be obtained from the ASCI 4800 course. The final LOFT scenario flight exam (videotaped and monitored by the course instructor and an additional faculty member) will come from the ASCI 4022 course. **Indirect Measures:** End-of-course student surveys	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
J	Apply pertinent knowledge in identifying and solving problems.	The following courses will be used to assess if the undergraduate programs fulfill this student learning outcome: ASCI 4350 Team Resource Mgt. ASCI 4650 Econ of Air Transportation	**Direct Measures**: The student learning outcome will be assessed using data from: The results of a student group project and the senior design presentation and poster project (monitored by the course instructor and other faculty members) will be obtained from the ASCI 4350 course. The final results of the airline simulation project and associated class presentations (monitored by the course instructor and additional faculty members) will be obtained from the	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation.

			ASCI 4650 course. **Indirect Measures:** End-of course student surveys.	Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.
K	Apply knowledge of business sustainability to aviation issues.	The following course will be used to assess if the undergraduate programs fulfill this student learning outcome: ASCI 4650 Econ of Air Transportation	**Direct Measures**: The student learning outcome will be assessed using data from: The final results of the airline simulation project and associated class presentations (monitored by the course instructor and additional faculty members) will be obtained from the ASCI 4650 course. **Indirect Measures:** End-of course student surveys.	Assessment of the program learning outcome will be assessed on a two-year cycle. The assessment results will be analyzed by the department faculty through the use of a rubric applied to the student data obtained from the courses listed to determine whether the students are capable of applying mathematics, science, and applied science to aviation disciplines. Recommendations for curriculum pedagogy and/or assessment revisions will be made by the department faculty at to allow for appropriate implementation. Reviews of the impact of any such program changes will be conducted during the following year and the records of these reviews will be maintained by the department and reported to the Dean of Parks College of Engineering, Aviation and Technology and to Saint Louis University's Office of the Provost.

Additional Questions

1. On what schedule/cycle will faculty assess each of the above-noted program learning outcomes? *(It is not recommended to try to assess every outcome every year.)*

The program student learning outcomes will be assessed on a two-year cycle that allows for a complete assessment of all program student learning outcomes during the cycle.			
A. Apply mathematics, science, and applied sciences to aviation related disciplines.	Fall 2017	Fall 2019	Fall 2021
B. Analyze and interpret data.	Fall 2017	Fall 2019	Fall 2021
C. Work effectively on multi-disciplinary and diverse teams.	Fall 2017	Fall 2019	Fall 2021
D. Make professional and ethical decisions.	Spring 2018	Spring 2020	Spring 2022
E. Communicate effectively, using both written and oral communication skills.	Spring 2018	Spring 2020	Spring 2022
F. Engage in and recognize the need for life-long learning.	Spring 2018	Spring 2020	Spring 2022
G. Assess contemporary issues.	Fall 2018	Fall 2021	Fall 2022
H. Use the techniques, skills, and modern technology necessary for professional practice.	Fall 2018	Fall 2021	Fall 2022
I. Assess the national and international aviation environment.	Fall 2018	Fall 2021	Fall 2022
J. Apply pertinent knowledge in identifying and solving problems.	Spring 2019	Spring 2021	Spring 2023
K. Apply knowledge of business sustainability to aviation issues.	Spring 2019	Spring 2021	Spring 2023

2. Describe how, and the extent to which, program faculty contributed to the development of this plan.

The faculty of the Department of Aviation Science contributed to the development of the entire plan through a series of meetings and retreats.

3. On what schedule/cycle will faculty review and, if needed, modify this assessment plan?

Reviews of the impact of programmatic changes will be conducted at least once per year and the records of these reviews will be maintained by the department.

APPENDIX B

2018 – 2019 Sample Assessment Rubrics

Department of Aviation Science

B.S. in Aeronautics with Concentrations in

Aviation Management and Flight Science

Program Performance Indicator Rubric

AABI Student Learning Outcome G: Assess Contemporary Issues

Date of the Assessment:

Primary Analysis of the Assessment

Performance Indicator	Needs Improvement	Meets Expectations	Exceeds Expectations
Students' ability to assess contemporary issues.	When students attempt to identify contemporary aviation issues, important facts and details are missing. The students provide some explanations of potential solutions, but important facts are missing.	Students can prioritize contemporary aviation issues but ignore some less significant, yet relevant issues. Students show adequate understanding of contemporary aviation issues and provide adequate explanation(s) of potential solutions nut miss the explanation of minor facts.	Students can effectively prioritize contemporary aviation issues, including subtle details and do not include unrelated contemporary issues. Students are capable of show in-depth understanding of contemporary aviation issues and provide in-depth explanation of potential solutions.

Final Assessment of this Student Learning Outcome:

☐ Exceeds expectations

☐ Meets expectations

☐ Needs Improvements (List recommendations for curricular, pedagogical, and other necessary changes)

Program Performance Indicator Rubric

AABI Student Learning Outcome H: Use the Techniques, Skills and Modern Technology necessary for Professional Practice

Date of the Assessment:

Primary Analysis of the Assessment

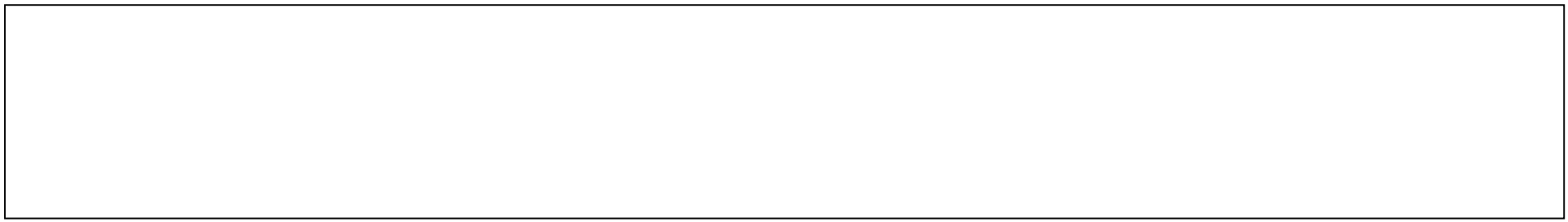
Performance Indicator	Needs Improvement	Meets Expectations	Exceeds Expectations
Students' ability to use the techniques, skills and modern technology necessary for professional practice	Students identify a small subset of necessary techniques, skills, and tools; and identify unrelated techniques, skills, and tools. Students provide little explanation of how the techniques, skills, and tools should be used; provide incorrect explanation of how to use techniques, skills, and tools. Students apply a small subset of the necessary techniques, skills, and tools; incorrectly apply the techniques, skills, and tools. Students provide little evidence of reflection; incorrectly attribute success or failure to certain techniques, skills, and tools.	Students identify almost all the relevant techniques, skills, and tools; missing some minor techniques, skills, and tools. Students explain how almost all of the techniques, skills, and tools should be used; show adequate understanding of techniques, skills, and tools; missing the explanation of some minor techniques, skills, and tools. Students correctly applies almost all of the techniques, skills, and tools; demonstrate adequate use of techniques, skills, and tools; incorrectly apply some minor techniques, skills, and tools. Students reflect properly on almost all of the techniques, skills, and tools; propose some improvements or justify properly the use of some techniques, skills, and tools; reflect improperly on some minor techniques, skills, and tools.	Students identify all relevant techniques, skills, and tools; do not include unrelated techniques, skills, and tools. Students explain how all relevant techniques, skills, and tools should be used; show in-depth understanding of techniques, skills, and tools; do not explain unrelated aspects of techniques, skills, and tools. Students correctly apply all relevant techniques, skills, and tools; demonstrate mastery of techniques, skills, and tools; do not apply unnecessary techniques, skills, and tools. Students reflect properly on all relevant techniques, skills, and tools; propose several improvements or justify properly the use of all techniques, skills, and tools; do not reflect on irrelevant techniques, skills, and tools.

Final Assessment of this Student Learning Outcome:

☐ Exceeds expectations

☐ Meets expectations

☐ Needs Improvement (List recommendations for curricular, pedagogical, and other necessary changes)



Program Performance Indicator Rubric

AABI Student Learning Outcome I: Assess the National and International Aviation Environment

Date of the Assessment:

Primary Analysis of the Assessment

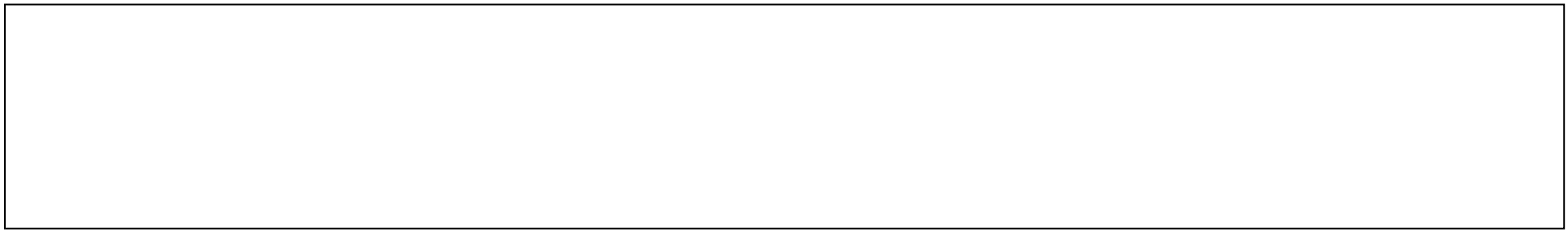
Performance Indicator	Needs Improvement	Meets Expectations	Exceeds Expectations
Students' ability to assess the national and international aviation environment	Students have minimal understanding of contemporary issues affecting the local/regional, national and/or international aviation environment. Students provide little evidence of reflection of the contemporary issues affecting the local/regional, national and/or international aviation environment.	Students identify most of the contemporary aviation issues affecting the local/regional, national and/or international aviation environment. Students reflect properly on almost all the contemporary issues affecting the local/regional, national and/or international aviation environment.	Students identify all relevant contemporary aviation issues affecting the local/regional, national and/or international aviation environment. Students reflect properly on all the contemporary issues affecting the local/regional, national and/or international aviation environment. Students reflect properly on all the contemporary issues affecting the local/regional, national and/or international aviation environment.

Final Assessment of this Student Learning Outcome:

☐ Exceeds expectations

☐ Meets expectations

☐ Needs Improvement (List recommendations for curricular, pedagogical, and other necessary changes)



Program Performance Indicator Rubric

AABI Student Learning Outcome J: Apply Pertinent Knowledge in Identifying and Solving Problems

Date of the Assessment:

Primary Analysis of the Assessment

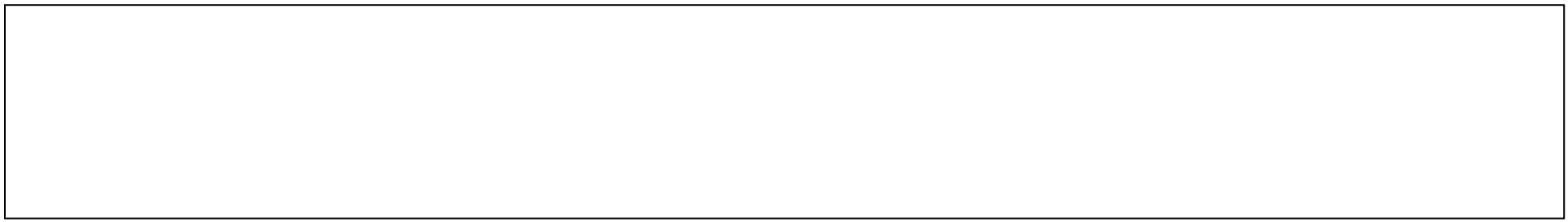
Performance Indicator	Needs Improvement	Meets Expectations	Exceeds Expectations
Students' ability to apply pertinent knowledge in identifying and solving problems	Students exhibit weak problem formulation; some issues/variables identified, but many missing; many criteria missing; many constraints missing; many assumptions missing. Students exhibit a limited analysis of alternatives; only some criteria evaluated; only some constraints considered; weak discussion of analysis results; missing significant steps in decision making process; weak justification for final solution.	Students exhibit adequate problem formulation; most key issues/variables are identified; almost all criteria presented for ranking alternatives; almost all constraints identified; almost all assumptions identified. Students exhibit appropriate analysis approach; mostly correct analysis results; criteria evaluated with minor errors; constraints considered with minor errors; adequate discussion of analysis results; document decision making process.	Students exhibit complete and succinct problem formulation; key issues/variables identified; all relevant criteria presented for ranking alternatives; all relevant constraints identified; all relevant assumptions identified. Students exhibit well thought out or clever analysis approach; complete and correct analysis results; complete consideration of constraints; detailed discussion of analysis results; detailed documentation of decision-making process.

Final Assessment of this Student Learning Outcome:

☐ Exceeds expectations

☐ Meets expectations

☐ Improvements Needed (List recommendations for curricular, pedagogical, and other necessary changes)



Program Performance Indicator Rubric

AABI Student Learning Outcome K: Apply Knowledge of Business Sustainability to Aviation Issues

Date of the Assessment:

Primary Analysis of the Assessment

Performance Indicator	Needs Improvement	Meets Expectations	Exceeds Expectations
Apply Knowledge of Business Sustainability to Aviation Issues	Weak problem formulation by students; some issues/variables identified, but many missing; many criteria missing; many constraints missing; many assumptions missing. Limited analysis of alternatives by students; only some criteria evaluated; only some constraints considered; weak discussion of analysis results; missing significant steps in decision making process; weak justification for final solution.	Adequate problem formulation by students; most key issues/variables are identified; almost all criteria presented for ranking alternatives; Almost all constraints identified; almost all assumptions identified. Appropriate analysis approach by students; mostly correct analysis results; criteria evaluated with minor errors; constraints considered with minor errors; adequate discussion of analysis results; document decision making process.	Complete and succinct problem formulation by students; key issues/variables identified; all relevant criteria presented for ranking alternatives; all relevant constraints identified; all relevant assumptions identified. Well thought out or clever analysis approach by students; complete and correct analysis results; complete consideration of constraints; detailed discussion of analysis results; detailed documentation of decision-making process.

Final Assessment of this Student Learning Outcome:

☐ Exceeds expectations

☐ Meets expectations

☐ Further Change/Improvements Needed (List recommendations for curricular, pedagogical, and other necessary changes)