# Aviation Flight Associate Degree Program Comprehensive Assessment Plan

(2024-2025)



Southern Illinois University

Carbondale

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# Introduction and Overview

In meeting the requirements of Southern Illinois University Carbondale (SIUC) and the Aviation Accreditation Board International (AABI), the Aviation Flight program at SIU Carbondale maintains this Comprehensive Assessment Plan for the regular and ongoing assessment of various components of the Aviation Flight program.

# **Purpose of this Report**

This document describes the Comprehensive Assessment Plan and process for the Aviation Flight program. Furthermore, it demonstrates how the Aviation Flight program goals directly support the University's strategic goals.

# **Purpose of the Assessment Committee**

The Assessment Committee is responsible for regularly reviewing and maintaining the Assessment Plan and process. This process includes working with aviation faculty in establishing and assessing curriculum goals to ensure continuous improvement of the quality and performance of the flight curriculum, consistent with the mission and educational goals of the Flight Program and the University.

The Assessment Committee is also responsible for developing and accessing goals in each of these areas: students; program mission and educational goals; student learning outcomes; curriculum; faculty and staff; facilities, equipment, and services; aviation safety culture and program; relations with industry; and diversity, equity, and inclusion.\*

\*DEI added in 2023 in response to AABI Criteria Manual changes.

The Assessment Committee makes sure to incorporate input from various stakeholders in the development of this plan, including students, industry members, staff, faculty, and administrators. The committee also takes into consideration accreditation criteria, FAA requirements, and the larger goals and mission of the University.

# **Composition of the Assessment Committee**

The Assessment Committee consists of the Assessment Coordinator, the Chief Flight Instructor, the Safety Officer, and three to six aviation faculty members.

# **Role of the Assessment Coordinator**

The Assessment Coordinator chairs the Assessment Committee, keeps all necessary data in shared electronic files. The Assessment Coordinator is responsible for scheduling regular Assessment Committee meetings and ensuring that various other assessment actions take place, such as the administration of stakeholder surveys, in-depth course reviews, and other related assessment actions.

The Assessment Coordinator is also responsible for submitting annual assessment reports to the School Director, College Dean, and the Provost's Office, in addition to presenting assessment findings with Aviation Flight faculty, staff, and Industry Advisory Board members, as appropriate, for review and discussion. The Assessment Coordinator also manages the AABI accreditation process.

# **The Assessment Process**

Feedback received is used by the Assessment Committee to determine appropriate further actions and revisions in a continuous improvement process.

In addition to reviewing the findings described in this plan, this Assessment Plan itself is also reviewed. As program needs change, other forms of assessment may be required to adequately gauge program effectiveness and student performance. The Assessment Committee may present proposed changes to the Assessment Plan to Aviation Flight faculty and staff for discussion and possible further modification.

# 1. Students

Cohort group (incoming year)	% graduated within 3 years	% graduated within 4 years
2017	14.3%	35.7%
2018	20.0%	42.2%
2019	5.5%	34.2%
2020	5.7%	18.4%
2021	2.6%	NA

#### Graduation Rates (A.A.S. Aviation Flight)-previous five years

#### Change: Measure 5-year grad rate and ANY degree

# Number of degrees granted each year (spring & previous fall)

Year	A.A.S. degrees awarded
Fall 2023 & Spring 2024	40
Fall 2022 & Spring 2023	
Fall 2021 & Spring 2022	
Fall 2020 & Spring 2021	
Fall 2019 & Spring 2020	

#### Retention Rates (A.A.S. Aviation Flight)-previous five years

Cohort group (incoming year)	% returning the following fall
2017	78.6%
2018	86.7%
2019	86.3%
2020	78.2%
2021	76.6%

## Employment & Continuing Education Rates after one year (A.A.S. Aviation Flight)

Year and # of graduates	Continuing Ed or type of employment							
	Aviation	Non-	Unemployed					
		aviation	Ed.	or Unknown				
2024	40	0	0	5				
2023	38	4	0	1				
2022	30	1	0	0				
2021	22	1	5	0				
2020	20	1	6	0				

In direct support of the SIU strategic plan to increase student graduation and retention rates, SIU Aviation Flight has established these goals.

## Goals (2023-2024)

During the previous academic year, the Aviation Flight Program planned to:

1. Increase the number of students who complete the instrument rating.

Results: Did not meet. We did not establish a baseline measure, so we were unable to determine if there were any changes to the completion rate. This prompts us to create a revised goal.

2. Determine if there is a difference in completion timelines between students in AF 199 and AF 201B (students who come to SIU with a private pilot license versus those who get their private pilot license with us).

Results: Deferred. These findings are part of a formal academic research project that is expected to be completed this academic year. This goal will remain.

3. Conduct School of Aviation student survey each fall, share results with AF Assessment Committee, the School Director, and FT faculty.

Results: Met.

#### Goals (2024-2025)

The Aviation Flight Program will:

- 1. Determine if there is a difference in completion timelines between students in AF 199 and AF 201B (students who come to SIU with a private pilot certificate versus those who get their private pilot license with us).
- 2. Conduct School of Aviation student survey each fall, share results with AF Assessment Committee, the School Director, and FT faculty.

#### Responsible party, timeline, and measures:

The Chief Flight Instructor or their designee will track and report these statistics on an annual basis.

# 2. Program Mission and Educational Goals

#### Goals (2023-2024)

During the previous academic year, the Aviation Flight Program planned to:

1. Produce graduates who are prepared to acquire entry-level pilot positions within the aviation industry.

Results: Met, as reported in the 2023-24 Academic Assessment Questionnaire.

2. Provide graduates with the opportunity to pursue the Restricted Airline Transport Pilot certificate.

Results: Met. SIUC continues to be an approved provider, as confirmed by the FAA: <u>https://www.faa.gov/pilots/training/atp/media/Institutional\_Authority\_List.pdf</u>

#### Goals (2024-2025)

The Aviation Flight Program will keep these same goals.

#### Responsible party, timeline, and measures

These goals are assessed as the curriculum is assessed. Student Achievement Data is required to be updated on the University website every fall, using the AF Graduates' Next Steps Report. The Assessment Coordinator ensures this is completed.

# 3. Student Learning Outcomes

The Student Learning Outcomes established for graduates of the Aviation Flight program are based on current federal regulations, industry needs, and AABI requirements.

#### Goals (2023-2024)

The SIU Aviation Flight program will produce graduates who will be able to:

- 1. Apply relevant aeronautical knowledge and skills in planning and conducting safe flights as an instrument-rated Commercial pilot. (a)
- 2. Demonstrate the ability to communicate clearly. (e & f)
- 3. Exercise effective aeronautical decision making while planning and conducting single pilot flight operations. (b)
- 4. Demonstrate the ability to engage in team-based work activities involving multidisciplinary and diverse groups. (c)
- 5. Demonstrate the ability to apply knowledge of contemporary aviation issues to professional practice. (h)
- 6. Recognize the need for and engage in life-long learning. (g)
- 7. Possess either the Multi-Engine Land rating or the Flight Instructor Certificate. (d & i)

Results: These goals have all been met, as reported in the 2023-24 Academic Assessment Questionnaire.

## Goals (2024-2025)

The Aviation Flight Program will keep these same goals.

Responsible party, timeline, and measures

With the assistance of the ground school instructors, academic advisor, and Testing Center

proctors, the AF Assessment Coordinator collects data to assess whether students in the program are meeting the published learning outcomes.

# 4. Curriculum

The AF curriculum is based on requirements set forth by the Federal Aviation Administration, Southern Illinois University Carbondale, and AABI. The curriculum meets, and in many cases exceeds, the minimum requirement for ground and flight instruction as set forth in Chapter 14 of the Code of Federal Regulations, Parts 61 and 141, for pilots earning the Commercial Pilot certificate with airplane single-engine, multi-engine, and instrument ratings.

The Chief Flight Instructor ensures the curriculum meets all FAA requirements; the Assessment Committee formally reviews the flight curriculum via the annual reports and in-depth course review findings.

# Goals (2023-2024)

During the previous academic year, the Aviation Flight Program planned to:

1. Formally review the flight curriculum on an annual basis and suggest changes to be described in the University annual assessment report.

Results: Met. AF 101 was reviewed in person and changes were made. AF 200, AF 202, AF 205, AF 220, and AF 303 were reviewed via instructor surveys. No needed changes identified.

2. Consider Industry Advisory Board input, related to curriculum, following each board meeting, as applicable.

Results: Met. Documentation is kept in the Aviation Advisory Board Meeting files.

# Goals (2024-2025)

The Aviation Flight Program will keep these same goals.

## Responsible party, timeline, and measures

The University Annual Assessment Questionnaire is due every October for the previous academic year (Assessment Coordinator).

Industry Advisory Board input will be collected at least annually and discussed by the Assessment Committee.

# 5. Faculty and Staff

Due to the nature of flight training, the Aviation Flight program has unique and varied staffing

needs. The faculty and staff in the Aviation Flight Program include both instructional and support staff. The instructional staff is comprised of tenured, tenure-track, and NTT faculty and student workers. This includes the Chief Flight Instructor, Assistant Chief Flight Instructors, full-time flight instructors, part-time flight instructors, and Executive Transportation pilots/instructors. The support staff include student advisement, maintenance, line service, Flight Operations, accounting, and administrative support staff.

## Goals (2023-2024)

During the previous academic year, the Aviation Flight Program planned to:

1. Create a scalable staffing model for flight that illustrates different staffing needs based on different levels of student enrollment. The Assessment Committee will work on this during the current school year.

Results: Did not meet. This staffing model was not developed as intended, primarily due to significant changes in leadership at the School level. Additionally, some other goals were determined as being more pressing.

#### Goal (2024-2025)

 By the end of spring semester 2025, the Chief Flight Instructor will create a D2L training module and exam for all CFIs to complete before they can proceed with flight instruction. This module will cover ground information, record-keeping, and other course content. Instructors will need to pass a test on D2L to demonstrate understanding of content. Additionally, CFIs will meet with their Team Leader, who will spot check their comprehension of key information.

#### Responsible party, timeline, and measures

The Chief Flight Instructor will manage this training.

# 6. Facilities, Equipment, and Services

Aviation Flight program facilities consist of all building space utilized by the AF program, including offices, classrooms, hangar space, and other rooms at the Transportation Education Center (TEC).

Equipment consists of all vehicles (aircraft and ground vehicles), simulation equipment, classroom equipment (computers, screens, and audio/visual resources), and office equipment (copy machines, computers, and phones).

Services consist of on-line record-keeping and learning management resources as well as libraries, career development support, and other student services. All of these resources are critical to the delivery of a robust aviation curriculum.

## Goals (2023-2024)

During the previous academic year, the Aviation Flight Program planned to:

- 1. Review and update the fleet replacement and refurbishment plan by the end of fall semester (Chief Flight Instructor).
- 2. Create a more comprehensive facilities and equipment plan during the 2023-2024 school year (Assessment Committee and School Director).

Results: Neither of these goals were met due to leadership changes at the School level. They will be deferred to 2024-2025.

#### Responsible party, timeline, and measures

The Chief Flight Instructor will manage the Fleet Replacement and Refurbishment Plan; the Assessment Committee will work with the new School Director on goal #2.

## 7. Aviation Safety Culture and Program

#### Goal (2023-2024)

1. The Assessment Committee will advocate for additional staffing to oversee and manage the Aviation Safety Culture and Program. Maintaining a comprehensive safety program using the current model is not sustainable as the program continues to grow.

Results: Not met, despite AABI's issuance of a formal recommendation to hire additional safety personnel.

#### Goals (2024-2025)

- 1. Conduct an annual Safety Survey and report its findings to the School Director, the Safety Committee, and flight personnel.
- 2. Produce an annual Safety Report, reviewing data from June 1-May 31 of each year. The report includes safety specific goals for each year.

#### Responsible party, timeline, and measures

The Safety Officer will oversee these goals.

# 8. Relations with Industry

In addition to informal contacts maintained with program graduates, the Aviation Flight program benefits from the input of the Aviation Management and Flight (AVMAF) Industry Advisory Board and established relationships with major and regional airlines.

The Board resumed meeting annually in the fall, during the same weekend as the Aviation Career Fair and the Aviation Management Society Scholarship Banquet. During the fall 2022 Board Meeting, the School Director announced plans to begin holding an additional Board meeting, virtually, in the spring.

The Board members represent various components of the aviation industry, including airlines, business aviation, airports, and government.

The decision was announced at the fall 2022 Board Meeting to conduct a spring virtual meeting in order to have more opportunities to interact with the Board. At least one month prior to each Board meeting, Board Members will be invited to add items to the meeting agenda.

## Goals (2023-2024)

During the previous academic year, no clear goals were established for the Industry Advisory Board.

Results: NA

#### Goal (2024-2025)

1. Create a working group that will finalize bylaws for the Aviation Industry Advisory Board.

#### Responsible party, timeline, and measures

The School Director will support the work of a Working Group that will create bylaws for the Aviation Industry Advisory Board with the goal of establishing more formal processes for the Board.

# 9. Diversity, Equity, and Inclusion

During the previous academic year, no clear goals were established for the Industry Advisory Board.

Results: NA

## Goal (2024-2025)

- 1. Create an umbrella RSO (Registered Student Organization) that will serve to improve coordinated efforts and funding sources for existing aviation RSOs.
- 2. Establish a Latino Pilots Association RSO at SIUC.

3. Establish summer camp scholarships for low income and minority students from the local area.

## Responsible Party, Timelines and Measures

The aviation faculty member overseeing the RSO Council.

# **Appendix- Assessment Matrices**

**2.3 Student Learning Outcomes** 

# 2.3.1 AABI General Outcomes

- a. Apply mathematics to aviation-related disciplines;
- b. Identify, formulate and solve applied aviation problems;
- c. Work effectively on multi-disciplinary and diverse teams;
- d. Make professional and ethical decisions;
- e. Communicate effectively, using written communication skills;
- f. Communicate effectively, using oral communication skills;
- g. Engage in and recognize the need for life-long learning;
- h. Assess contemporary issues;
- i. Use the techniques, skills, and modern tools in aviation for professional practice;

	а	b	С	d	е	f	g	h	i
ENGL 101					I/P				
ENGL 102					I/P				
CMST 101						I			
MATH 108									
AF 101		I	I	I	Р	Р	I	I	I
AF 199	I	I		I					
AF 200	I	Р		Р				Р	
AF 201A	Р	Р		Р					
AF 201B	Р	Р		Р			I		
AF 202	Р				Р		Р		
AF 203	Р	Р							
AF 204	Р	Р							
AF 205	Р	Р	Р	Р	Р		Р	Р	Р
AF 206A	Р	Р					Р		
AF 206B	Р	Р							Р
AF 207A	E	E		E		E			Р
AF 207B									E
AF 210					Р	Р	E	E	
AF 211			E		E				
AF 260									
AF 300A									
AF 300B									
AF 303									

# **2.3.2 Aviation Core Outcomes**

Aviation programs MUST demonstrate that their graduates are able to:

1. Describe the **(1)** professional attributes, **(3)** requirements or certifications, and **(2)** planning applicable to aviation careers.

2. Describe the principles of (4) aircraft design, (5) performance and (6) operating characteristics; and the regulations related to the (7) maintenance of aircraft and associated systems.

3. Evaluate aviation (8) safety and the impact of (9) human factors on safety.

4. Discuss the impact on aviation operations of **(11)** international aviation law, including applicable international Civil Aviation Organization (ICAO) or other international standards and practices; and applicable **(10)** national aviation law, regulations and **(12)** labor issues.

5. Explain the integration of (13) airports, (14) airspace, and (15) air traffic control in

managing the National Airspace System.

6. Discuss the impact of **(17) meteorology** and **(16) environmental issues** on aviation operations.

	Prof. issues		Aircraft			Safety		Legal/Labor			Resource Mgt.			Environ.			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
AF 101	Ι	I/P	I/P													I	I
AF 199			Р					I									
AF 200		Р	Р	Ι	Ι		Ι	Ι	Ι	I/P			Ι	Ι	Ι	Р	
AF 201A				Р	Ρ	Ρ	Ρ	Р				I			Р	Р	
AF 201B		Р			Ρ	Ρ	Р	Р	Р			Р			Р		Р
AF 202	Р	Р		I/P	Ι					I/P/E	I/P/E	I/P/E		Р			Р
AF 203						Ρ	Р	Р					Р	Р	Р		Р
AF 204				Р			Р	Р	Р			Р	Р	Р	Р	Р	
AF 205				Р				Р				Р	Е	Е	Е	Е	Р
AF 206A									Р			Р	Р	Р	Р		Р
AF 206B							Р	Р	Р			Р	Р	Р	Р		Р
AF 207A	Е	Р		Р	Ρ	Е	Е	Р	Р			Р	Р	Р	Р		Р
AF 207B			Е		Ρ							Р					
AF 210								Е	Ε								
AF 211																	Е
AF 260				E	E												
AF 300A																	
AF 300B												Р					