

## MERCER COUNTY COMMUNITY COLLEGE AVIATION DEPARTMENT CONTINUOUS ASSESSMENT PLAN

The mission of the MCCC Aviation Flight Technology Program is to produce well educated and informed students who are prepared to successfully transfer to a baccalaureate institution or to continue preparation for a flight career using the knowledge and skill base acquired in their courses at Mercer.

## **Assessment Overview**

This assessment plan was developed and maintained by the faculty and staff of the Mercer County Community College's Aviation Department with the Office of Institutional Effectiveness. This plan was implemented to ensure students who are registered in the Aviation Program attain the program objectives and are prepared to transfer to a four-year institution and enter the professional field of Aviation.

The Aviation Department developed this plan to comply with Middle State Commission on Higher Education, the Aviation Accreditation Board International (AABI), and Mercer County Community College assessment requirements.

STUDENT GOALS		Assessment Method
retain quality students with both academic achievement and professional		
success	AABI 201: 2.1	See AFT matrix
Offer students valuable opportunities for personal and professional		
development beyond traditional classroom settings	AABI 201: 2.1	See AFT matrix

	Student Goals Assessment Matrix (AFT)										
PC	TENTIAL MEANS OF ASSESSMENT	G	OALS	TIMELINE							
		Goal 1: Retain quality students with both academic achievement	Goal 2:Offer students valuable opportunities for personal and professional development beyond traditional classroom settings	Data collection	Data evaluation						
1	Flight progress review records	x		Summer Semester	Fall Semester						
2	Evaluation flight checks	х		Summer Semester	Fall Semester						
3	Internship enrollment records		х	Summer Semester	Fall Semester						
4	End of program survey	x		Summer Semester	Fall Semester						
5	student retention rates and data	x		Summer Semester	Fall Semester						

## PROGRAM EDUCATIONAL GOALS AND STUDENT OBJECTIVES

**AABI Reference** 

Three Program Educational Goals have been established to support the aviation program mission and in accordance to AABI Criteria 2.2. In addition, within each Program Educational Goal, several related Student Learning Objectives (SLO) have been established in accordance to AABI Criteria 2.3, as well as AABI Criteria 2.4. The reference in parenthesis at the end of each SLO indicates whether the objective refers to an AABI General Outcome (GO), Aviation Core Outcome (ACO).

GOAL 1.	PROFESSIONAL EXPERTISE	AABI 201: 2.2
SLO 1A	apply mathematics to aviation-related disciplines	2.3.1 a
SLO 1B	identify, formulate, and solve applied aviation problems	2.3.1 b
SLO 1C	work effectively on multi-disciplinary and diverse teams	2.3.1 c
SLO 1D	make professional and ethical decisions	2.3.1 d
SLO 1E	communicate effectively, using written communication skills	2.3.1 e
SLO 1F	communicate effectively, using oral communication skills	2.3.1 f
SLO 1G	engage in and recognize the need for life-long learning	2.3.1 g
	Apply knowledge of aircraft design, performance, operating	
SLO 1H	characteristics, and maintenance	2.3.2
SLO 1I	Describe the professional attributes, requirements or certifications, and planning applicable to aviation careers	2.3.2
GOAL 2.	REGULATORY COMPLIANCE	AABI 201: 2.2
SLO 2A	Describe the professional attributes, requirements or certifications, and planning applicable to aviation careers	
SLO 2B	Demonstrate knowledge of aviation regulations (AABI ACO)	
GOAL 3.	CRITICAL THINKING	AABI 201: 2.2
SLO 3A	Apply pertinent knowledge in identifying and solving problems (AABI GO)	2.3.1
SLO 3B	Demonstrate knowledge and skills related to aviation safety and human factors (AABI ACO)	2.3.1
SLO 3C	Use written communication skills to communicate effectively (AABI GO)	2.3.1
SLO 3D	Use oral communication skills to communicate effectively (AABI GO)	2.3.1
SLO 3E	Recognize the need for, and engage in life-long learning (AABI GO)	2.3.1

SLO 3F Assess contemporary issues (AABI GO)

2.3.1

Program Goals	#	Student Learning Objective	AVI101	AVI102	AVI105	AVI111	AVI112	AVI113	AVI114	AVI131	AVI132	AVI203	AVI208	AVI215	AVI231	AVI240	AVI241	AVI217	Assessment Method	Performance Goals/ Criterion
Professional Expertise: Graduates will possess the requisite knowledge and skills necessary to make an	1A	Apply mathematics, science, and applied sciences to aviation- related disciplines (AABI GO)		т1			Т	Т	Т	T	T	T	A	A	Т	T	Т	Т	End-of-course stage check/FAA checkride	80% students will pass standardize test order to pass, students must satisfacto complete all tasks on first attempt
immediate positive impact for their employer as well as act with the highest	1B	Analyze and interpret data (AABI GO)	Т	Т			Т	Т	Т	T	Т	T	A	A	Т	T	T	Т	End-of-course stage check/FAA checkride	80% students will pass standardize test order to pass, students must satisfacto complete all tasks on first attempt
standards of professionalism evidenced by their ethical character and integrity.	1C	Use the techniques, skills, and modern technology necessary for professional practice (AABI GO)		Т			Т	T	T	Т	T	Т	A	A	Т	Т	T	Т	End-of-course stage check/FAA checkride	80% students will pass standardize tes order to pass, students must satisfacto complete all tasks on first attempt
	1D	Work effectively on multi- disciplinary and diverse teams (AABI GO)	Т	A2			Т												Airline Transportation Final Project	On average, students will score 80% or b the paper or presentation or Final Ex
	1E	Make professional and ethical decisions (AABI GO)	T	Т		Т	Т	Т	Т	T	Т	T	A	A			Т		End-of-course stage check/FAA checkride	80% students will pass standardize te: order to pass, students must satisfact complete all tasks on first attempt
		Display the attributes of an aviation professional, carry out career planning and demonstrate knowledge of certification (AABI ACO)	T	Т			Т	Т	Т	Т	Т	Т	A	A	Т		Т	Т	End-of-course stage check/FAA checkride	80% students will pass standardize te: order to pass, students must satisfact complete all tasks on first attempt
	1G	Apply knowledge of aircraft design, performance, operating characteristics, and maintenance (AABI ACO)		Т				T	Т	Т	T	Т	A	A	Т		Т	Т	End-of-course stage check/FAA checkride	80% students will pass standardize te order to pass, students must satisfact complete all tasks on first attemp
	1H	Demonstrate knowledge of airport, airspace, and air traffic control operations (AABI ACO)		Т	Т		Т	T	Т	Т	T	Т	A	A	Т			Т	End-of-course stage check/FAA checkride	80% students will pass standardize te order to pass, students must satisfact complete all tasks on first attemp
		Apply knowledge of meteorology at a level commensurate with their position (AABI ACO)		Т			Т	T	Т	Т	T	Т	A	A	Т	Т		Т	End-of-course stage check/FAA checkride	80% students will pass standardize te- order to pass, students must satisfact complete all tasks on first attemp
Regulatory Compliance: Graduates will be able to assess the role and impact	2A	Describe the professional attributes, requirements or certifications, and planning applicable to aviation careers	Т	Т		A													Final Exam	On average, students will score 80% or b the Final Exam
of regulatory compliance in the conduct of global aviation commerce.	2B	Demonstrate knowledge of aviation regulations (AABI ACO)		Т	Т	A	Т	Т	Т	Т	T	Т	Т	Т	Т	Т		Т	Final Exam	On average, students will score 80% or b the Final Exam
Critical Thinking: Graduates will demonstrate the planning, decision making,		Apply pertinent knowledge in identifying and solving problems (AABI GO)	Т	Т			A	T	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	Research Paper/ Oral Presentation/	On average, students will score 80% or b the paper or presentation or Final Exam
vorkload management, and communication skills necessary to engage in effective critical thinking		Demonstrate knowledge and skills related to aviation safety and human factors (AABI ACO)		Т	Т		A	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	Research Paper/ Oral Presentation/	On average, students will score 80% or b the paper or presentation or Final Exam
errective critical thinking		Use written communication skills to communicate effectively (AABI GO)	Т	Т			A												Research Paper/ Oral Presentation/	On average, students will score 80% or b the paper or presentation or Final Exam
	3D	Use oral communication skills to communicate effectively (AABI GO)	Т	Т			A	Т	Т	Т	Т	Т	Т	Т			Т		Research Paper/ Oral Presentation/ Final Exam	On average, students will score 80% or b the paper or presentation or Final Exam
		Recognize the need for, and engage in life-long learning (AABI GO)		Т			A		Т	Т	Т	Т	Т	Т					Research Paper/ Oral Presentation/ Final Exam	On average, students will score 80% or be the paper or presentation or Final Exam
	3F	Assess contemporary issues (AABI GO)	T	Т	Т	T	A	T	Т	Т	T	Т	Т	Т	Т	Т	Т	Т	Research Paper/ Oral Presentation/	On average, students will score 80% or t the paper or presentation or Final Exam

CUR	RICULUM GOALS			AABI Refe		Assessment Method		
	Review AFT curriculum annually to en industry	AABI 2	01: 2.4	Matrix below				
	Review College Core curriculum to en components are consistent with desir		AABI 2	AABI 201: 2.4		Matrix below		
		Curriculum Assess	ment Matri	X				
РОТ	TENTIAL MEANS OF ASSESSMENT	GOAL	S	TIMELINE				
		<b>Goal 1</b> : Review AFT curriculum annually to ensure relevance to the current state of the aviation industry	Goal 2:Review Coll curriculum to ensu mathematics, scier general componen consistent with de outcomes	re nce and ts are	Data cc	ollection	Data eva	aluation
1	faculty meetings concerning curriculum	Х	Х		periodically		End of Sprin	g Semester
2	Aviation Industry Advisory Committee input	Х	Х		Once a year		End of Spring	g Semester

	FACULTY AND STAFF GOALS	<b>AABI Reference</b>	Assessment Method
1	Hire and retain a sufficient number of academically and professionally qualified faculty and staff	AABI 201: 2.5	See Faculty and Staff Matrix
2	All Faculty engage with students as educators, advisors and mentors	AABI 201: 2.5	See Faculty and Staff Matrix
	All faculty utilize opportunities for professional development	AABI 201: 2.5	See Faculty and Staff Matrix
2	All faculty meet expectations for teaching excellence	AABI 201: 2.5	See Faculty and Staff Matrix
	All Faculty meet expectations to provide opportunities for promotion and tenure	AABI 201: 2.5	See Faculty and Staff Matrix

		Faculty and	d Staff Assessment	Matrix (AFT)				
P	OTENTIAL MEANS OF ASSESSMENT		GOALS		TIMELINE			
		Goal 1: Hire and retain a sufficient number of academically and professionally qualified faculty and staff	Goal 2: All Faculty engage with students as educators, advisors and mentors	utilize opportunities for	faculty meet	to provide opportunitie	Data collection	Data evaluation
1	Faculty self evaluation forms		X		Х	Х	When submitted	End Spring Semester
2	Aviation faculty staff meetings	х	Х		Х			End Spring Semester
3	Position searches	Х						End Spring Semester
4	Funds for professional development given to faculty and staff			Х				End Spring Semester

	FACILITIE	AAI	BI Reference		sment :hod			
1	Provide adequate classroom, labo program goals and provide an atn	See Matr AABI 201: 2.6 below			rix			
2	Provide modern and state-of-the art aviation training equipment, software, and materials				ABI 201: 2.6		/latrix ow	
		Facilities and Resour	ces Assessmer	nt Mat	rix			
	POTENTIAL MEANS OF ASSESSMENT	GOA	LS		1	IMELIN	Ε	
		Goal 1: Provide adequate classroom, laboratory, and equipment adequate to accomplish the program goals and provide an atmosphere condusive of learning	<b>Goal 2:</b> Provide mode state-of-the art aviation equipment, softwar materials	n training	Data Collecti	Data Eva	aluation	
1	Student evaluation of AVI Courses	Х	X		Once a year		End of Seme	
2	Student flight training surveys	Х	Х	X Once a year			End of Spring Semester	
3	Flight out-processing surveys	х	Х				End of Seme	

	INSTITUTIONAL SUPPORT GOALS	AABI Reference	Assessment Method
	Establish and maintain an institutional structure, provide adequate support, allocate		
	sufficient financial resources, and cultivate constructive leadership to ensure the		
1.	quality and continuity of the associate degree program in aviation	AABI 201: 2.7	See Institutional Matrix
	Ensure that resources are sufficient to attract, retain, and support the continued		
2.	professional development of a well-qualified faculty	AABI 201: 2.7	See Institutional Matrix
	Ensure that resources are sufficient to acquire, maintain, and operate facilities and		
3.	equipment appropriate for the program	AABI 201: 2.7	See Institutional Matrix
	ensure that support personnel and institutional services are adequate to meet the		
4.	needs of the program	AABI 201: 2.7	See Institutional Matrix

	Institution	al Support Assessm	ent Matrix (AFT)			
POTENTIAL MEANS OF ASSESSMENT		GOAL	s		Tin	neline
	Goal 1: Establish and maintain an institutional structure, provide adequate support, allocate sufficient financial resources, and cultivate constructive leadership to ensure the quality and continuity of the associate degree program in aviation	professional	Goal 3: Ensure that resources are sufficient to acquire, maintain, and operate facilities and equipment appropriate for the program	that support personnel and institutional services are adequate to meet the	Data collection	Data evaluation
Annual aviation budget     Annual external	Х	X	Х		Start Spring Semester	Fall Semester End of Spring
2 contributions Capital equipment			Χ	Х	Once a year Summer	Semester
3 acquisitions Yearly funds for	X		X	Х	Semester	Fall Semester
professional 4 developments Annual faculty/ salary		Х			Submitted Fall term	End of Spring Semester End of Spring
5 raises		X			Spring Semester	

	PROGRAM SAFETY GOALS A	ABI Reference	Assessment Method
	Provide an aviation safety program that incorporates key		
	components of Safety Management Systems (SMS) appropriate to		
1	national regulatory guidance, institution size, and scope	AABI 201: 2.8	See Safety matrix
2	Zero accidents/ Incidents resulting in fatalities or serious injuries.	AABI 201: 2.8	See Safety matrix

	Safety Program Assessment Matrix (AFT)										
РО	TENTIAL MEANS OF ASSESSMENT	G	DALS	ТІМІ	ELINE						
			<b>Goal 2:</b> Zero accidents/ Incidents resulting in fatalities or serious injuries.	Data collection	Data evaluation						
1	Aviation Safety Action Program Reports	Х	X	Summer Semester	Fall Semester						
2	Accident/Incident Reports	X	X	Summer Semester	Fall Semester						
3	Faculty/Student Participation in safety - related activities	Х		Summer Semester	Fall Semester						