# DELTA STATE UNIVERSITY

# College of Business and Aviation Department of Commercial Aviation Student Learning Outcomes 2017-2019



BCA – Flight Operations-01: Commercial Pilot Skills

Flight Operations majors will possess the knowledge and skills necessary to fly an airplane at the commercial pilot skill level in both single and multiengine airplanes under both VFR and IFR.

BACHELOR OF COMMERCIAL AVIATION (BCA) FLIGHT OPERATIONS – CAV 350

		Analysis of Re	sults
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A1. 70% of students enrolled in CAV 350 will demonstrate knowledge of the regulatory requirements that must be met for pilots and aircraft operating under IFR in the national airspace system by scoring 70% or higher on embedded test questions.	Embedded exam questions	A1 - % of CAV 350 Students scoring 70% or higher -  150% 100% 50% Spring 2018 Spring 2019 Academic Year	Increase the number of times materials throughout the semester.
A2. 70% of students enrolled in CAV 350 will demonstrate the ability to explain the operation of pilot-static and gyroscopic flight instruments and their errors by scoring 70% or higher on embedded test questions.		A2 - % of CAV 350 Students scoring 70% or higher -	
A3. 70% of students enrolled in CAV 350 will demonstrate the ability to read and interpret Departure Procedure Charts, Low Altitude En-Route Charts, Standard Terminal Arrival Charts, and Instrument Approach Procedure Charts by scoring 70% or higher on embedded test questions.		A3 - % of CAV 350 Students scoring 70% or higher -  80% 60% 71% 20% Spring 2018 Spring 2019 Academic Year	
A4. 70% of students enrolled in CAV 350 will demonstrate knowledge of ADM and aeromedical factors as it pertains to IMC flight by scoring 70% or higher on embedded test questions.		A4 - % of CAV 350 Students scoring 70% or higher -	

BCA - Flight Operations-01: Commercial Pilot Skills

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BACHELOR OF COMMERCIAL AVIATION (BCA)
FLIGHT OPERATIONS – CAV 352 & CAV 355

	TEIGHT OF ENATION	Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A5. 80% of students enrolled in CAV 352 will take 90% of the practice chapter in preparation for the retake of the ASA Commercial test prep test.	Written Exam FAA Written Exam FAA Commercial Pilot Written & Practical Exams	A5 - % of CAV 352 Students scoring 80% or higher -	CAV 352 Continue to require the ASA Commercial test prep practice chapter test. Will have Canvas automatically to post a zero grade if the student does not attempt the practice. This policy will encourage the student to take the practice test. Continue to require the use of Aircraft familization sheets for each aircraft in CAV 352. Students will present the material in class.
A6. 75% of students enrolled in CAV 352 will identify components of both multiengine and single-engine aircraft on a test with a score of 80% or higher.		A6 - % of CAV 352 Students scoring 75% or higher - 100% 80% 60% 60% 60% 40% 40% 90% Spring 2018 Fall 2018 Academic Year	
A7: 100% of students enrolled in the CAV 355 course will demonstrate the ability to successfully complete the stage check on the first attempt.	Stage Check	A7 - % of CAV 355 Students passing stage check on 1st Attempt  90% 80% 70% 60% 50% 40% 10% 0% Spring-Summer 2018 Fall 2018 Spring 2019	CAV 355 — Continue to adhere to FAA Standards.

BCA - Flight Operations-01: Commercial Pilot Skills

Flight Operations majors will possess the knowledge and skills necessary to fly an airplane at the commercial pilot skill level in both single and multi-engine airplanes under both VFR and IFR.

## BACHELOR OF COMMERCIAL AVIATION (BCA)

**FLIGHT OPERATIONS – CAV 420** 

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A8: 75% of students enrolled in the CAV 420 course will demonstrate a knowledge of aircraft systems and operations required of commercial pilots to fly single and multi- engines airplanes under both the VFR and IFR by completing a written examination with a score of 70% or higher.	FAA Written Exam	A8 - % of CAV 420 Students scoring 70% or higher -  80% 60% 98 60% 98 60% Spring 2019 Academic Year	Increase the number of times materials throughout the semester.  CAV 420 Increase the teaching of CRM. Also, including two additional weeks of ground training before getting into the FTD.
A9: 75% of students enrolled in the CAV 420 course will demonstrate the ability to discuss different aspects of operating in airline and crew settings while engaged in online discussions.	Online Discussion  - Operation Airline & Crew Settings	A9 - % of CAV 420 Students - online discussions  80% 80% 40% 20% 0% Spring 2019 Academic Year	
A10: 75% of students enrolled in the CAV 420 course will demonstrate the ability to successfully complete the Line-Oriented Flight Exercise (LOFT) with a score of 80% or higher.	Line- Oriented Flight Exercise (LOFT)	A10 - % of CAV 420 Students - scoring 80% higher on LOFT  80% 80% 80% 80% 80% 90% Spring 2019 Academic Year	

BCA – Flight Operations-02: Federal Aviation Regulations

Flight Operation majors will have a thorough and comprehensive understanding of Federal Aviation Regulations.

#### BACHELOR OF COMMERCIAL AVIATION (BCA)

FLIGHT OPERATIONS – CAV 352, CAV 355, & CAV 360

		Analysis of Resu	lts
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
Al: 75% of students enrolled in the CAV 352 course will identify the components on a test with a core of 80% or higher.	Commercial Ground Written Exam	A1 - % of CAV 352 Students - scoring 80% or higher  150%  150%  100%  Spring 2018  Academic Year	CAV 352 Continue to require correctly identified common types of Oxygen Environmental Systems and CFR regulations in general aviation aircraft. In addition, develop an exam covering just this material.
A2: 100% of students enrolled in the CAV 355 course will demonstrate the ability to successfully complete the stage check on the first attempt.	Stage Check	A2 - % of CAV 355 Students passing stage check on 1st Attempt  90% 80% 70% 60% 50% 40% 30% 20% 10% Spring-Summer 2018 Fall 2018 Spring 2019	CAV 355 Continue to hold the FAA standards.
A3. 75% of students enrolled in CAV 360 will demonstrate knowledge of both the multiengine and single-engine aircraft familiarization.	Written Exams Embedded Questions	A3 - % of CAV 360 Students - scoring 80% or higher  80% 60% 20% Spring 2019 Academic Year	CAV 360 Adjust materials coverage with the goal of covering additional material. Continue to add course content via class participation, group discussion, and improve scenario training. Continue to require the FAA FIA written and the FAA FOI written exams.

BCA – Flight Operations-02: Federal Aviation Regulations

Flight Operation majors will have a thorough and comprehensive understanding of Federal Aviation Regulations.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

**FLIGHT OPERATIONS – CAV 360** 

	Analysis of Results		
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A5. 70% of students enrolled in CAV 360 will demonstrate the ability to discuss the Special Emphasis Areas listed in CFI PTS by scoring 70% or higher on the examination embedded questions.	Written Exam Embedded Questions	A5 - % of CAV 360 Students - scoring 70% or higher  102% 98% 98% 99% Spring 2018 Spring 2019 Academic Year	CAV 360 Adjust materials coverage with the goal of covering additional material. Continue to add course content via class participation, group discussion, and improve scenario training. Continue to require the FAA FIA written and the FAA FOI written exams.
A6. 75% of students enrolled in CAV 360 will demonstrate the ability to identify and use Aircraft Performance Charts and Graphs by scoring 80% or higher on embedded test questions.		A6 - % of CAV 360 Students - scoring 80% or higher  80% 80% 96 60% 98 40% 98 20% 0% Spring 2018 Academic Year	CAV 360 Adjust materials coverage with the goal of covering additional material. Continue to add course content via class participation, group discussion, and improve scenario training. Continue to require the FAA FIA written and the FAA FOI written exams.
A7. 75% of the students enrolled in CAV 360 will demonstrate the ability to communicate with clear purpose and organization the proper actions a pilot takes when performing Commercial Maneuvers and Completion Standards by scoring 80% or higher on an oral and written assessment.		A7 - % of CAV 360 Students - scoring 80% or higher  100% 80% 60% 40% 20% 0% Spring 2018 Academic Year	
A8. 80% of students enrolled in CAV 360 will demonstrate knowledge of the proper procedure and the ability endorse pilot certificates, log books, and medical certificates as a CFI, teach the required documents, certificates, and airworthiness inspections required for Part 91 training airplanes by earning 75% or higher overall grade on embedded test questions.		A8 - % of CAV 360 Students - scoring 75% or higher  150% 100% 5pring 2019 Academic Year	

BCA – Flight Operations-02: Federal Aviation Regulations

Flight Operation majors will have a thorough and comprehensive understanding of Federal Aviation Regulations.

#### BACHELOR OF COMMERCIAL AVIATION (BCA)

FLIGHT OPERATIONS - CAV 360, CAV 361, & CAV 371

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A9. 80% of students enrolled in CAV 360 will demonstrate a thorough understanding of aerodynamics by earning 75% or higher overall grade on embedded test questions.	Written Exam Embedded Questions	A9 - % of CAV 360 Students - scoring 75% or higher  150%  150%  98 100%  Spring 2019  Academic Year	CAV 360 Adjust materials coverage with the goal of covering additional material. Continue to add course content via class participation, group discussion, and improve scenario training. Continue to require the FAA FIA written and the FAA FOI written exams.
A10: 100% of students enrolled in the CAV 361 course will demonstrate the ability to successfully complete the stage check on the first attempt.	Stage Check	A10 - % of CAV 361 Students passing stage check on 1st Attempt  100% 98% 99% 99% 99% 98% 88% 88% 88% 88% 88	CAV 361 Continue to hold FAA standards on stage checks.
A11: 80% of students enrolled in the CAV 371 course will demonstrate a working knowledge of applicable aviation laws to various scenarios and conditions by earning 75% or higher on their final grade.	FAA Written Exams	A11 - % of CAV 360 Students - scoring 75% or higher  100% 8 80% 40% 40% 0% Fall 18 Academic Year	CAV 371 The instructor will continue to add more indepth questions to increase the rigor of the examination and seek out more advanced legal cases to include in the mock trial.
A12: 80% of students enrolled in the CAV 371 course will demonstrate a basic knowledge of the U. S. legal system in aviation by earning 75% or higher on their overall grade.		A12 - % of CAV 360 Students - scoring 75% or higher  100% 80% 60% 40% 20% Fall 18 Academic Year	

BCA - Flight Operations-03: Communication Skills

Flight Operation majors will possess technical communications skills.

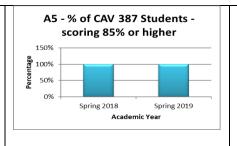
## BACHELOR OF COMMERCIAL AVIATION (BCA)

FLIGHT OPERATIONS – CAV 352, CAV 355, CAV 361 & CAV 387

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A1. 75% of students enrolled in the CAV 352 will correctly identify and use Aircraft Performance Charts and Graphs components on a test with an 80% or higher score.	Written Exam Embedded Questions	A1 - % of CAV 352 Students - scoring 80% or higher  80% 80% 80% 40% 0% Spring 2018 Academic Year	CAV 352 Continue to require the use of Aircraft Performance Charts and Graphs. Have the students to present the material in class.
A2. 75% of the students enrolled in CAV 352 will pass both the written and oral assessment with an 85% or higher score.		A2 - % of CAV 352 Students - scoring 85% or higher  80% 80% 40% 20% 0% Spring 2018 Academic Year	CAV 352 Continue to require project presentation. This learning outcome helped to build students' knowledge, confidence, and delivery of materials.
A3: 100% of students enrolled in the CAV 355 course will demonstrate the ability to successfully complete the stage check on the first attempt.	Stage Check	A3 - % of CAV 355 Students passing stage check on 1st Attempt  102% 100% 108% 108% 108% 108% 108% 108% 108	CAV 355 Continue to require adherence to FAA standards.  CAV 361 Continue to hold FAA standards on stage checks.
A4: 100% of students enrolled in the CAV 361 course will demonstrate the ability to successfully complete the stage check on the first attempt.	Stage Check	A4 - % of CAV 361 Students passing stage check on 1st Attempt  90% 80% 70% 60% 40% 20% 10% Spring-Summer 2018 Fall 2018 Spring 2019	CAV 387 Continue to require the principles of electricity. In addition use the JAA ATPL Training #6 Electric books Chapter 1 Basic Terminology & Chapter 3 Aircraft Batteries DC along with other materials. Continue to require the electrical systems of the Cessna and DA-42 aircraft. In addition, test on the study of Beechcraft 1900 electrical system. Continue to require how Newton's law relates to turbine engine. Continue to require the oral project with the submission of PowerPoint presentation two weeks prior to presentation.

A5. 80% of students enrolled in CAV 387 will demonstrate the ability to verbally communicate with clear purpose, organization, and presentation style based on aircraft systems by scoring 90% or higher on oral presentation assessed using a rubric.

FAA Written Exams



BCA – Aviation Management-01: Federal Aviation Regulations

Aviation Management majors will have a thorough and comprehensive understanding of Federal aviation regulations.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

**AVIATION MANAGEMENT – CAV 371 & CAV 372** 

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A1: 80% of students enrolled in the CAV 371 course will demonstrate a working knowledge of applicable aviation laws to various scenarios and conditions by earning 75% or higher on their final grade.	Written Examinations Embedded exam questions	A1 - % of CAV 371 Students - earning 75% or higher overall grade	CAV 371 The instructor will continue to add more in-depth questions to increase the rigor of the examination and seek out more advanced legal cases to include in the mock trial.  CAV 372 Continue as presently going with embedded test questions class discussion.
A2: 80% of students enrolled in the CAV 371 course will demonstrate a basic knowledge of the U. S. legal system in aviation by earning 75% or higher on their overall grade.		A2 - % of CAV 371 Students - earning 75% or higher overall grade  100%  Fall 2018  Academic Year	
A3: 80% of students enrolled in the CAV 372 course will demonstrate the ability to identify and explain worldwide regulatory information in aviation by earning 75% or higher on their overall grade.		A3 - % of CAV 372 Students - earning 75% or higher overall grade  100% 50% Fall 2018 Academic Year	
A4: 80% of students enrolled in the CAV 372 course will demonstrate the ability to compare and contrast the main themes of aviation safety by earning 75% or higher on their overall grade.		A4 - % of CAV 372 Students - earning 75% or higher overall grade  100%  Fall 2018  Academic Year	

BCA – Aviation Management-01: Federal Aviation Regulations

Aviation Management majors will have a thorough and comprehensive understanding of Federal aviation regulations.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

**AVIATION MANAGEMENT – CAV 372 & CAV 379** 

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A5: 80% of students enrolled in the CAV 372 course will demonstrate an understanding of safety management systems by earning 75% or higher on their overall grade.	Written Exam Embedded Questions	A5 - % of CAV 372 Students - earning 75% or higher overall grade  100% 50% Fall 2018 Academic Year	CAV 372 Continue as presently going with embedded test questions class discussion.  CAV 379 The instructor will bring in outside evaluators and gain more critiques from a broader cross section of professionals in the field. The instructor will add different assessment method next time this course is taught.
A6: 80% of students enrolled in the CAV 372 course will demonstrate an ability to identify situations and determine their legal stance by earning 75% or higher on their overall grade.		A6 - % of CAV 372 Students - earning 75% or higher overall grade	
A7: 80% of students enrolled in the CAV 372 course will demonstrate an ability to determine and find current aviation law by earning 75% or higher on their overall grade.		A7 - % of CAV 372 Students - earning 75% or higher overall grade  100% 50% Fall 2018 Academic Year	
A8: 80% of students enrolled in CAV 379 course will demonstrate the ability to explain the role of general aviation services by earning 75% or higher on their overall grade.		A8 - % of CAV 379 Students - earning 75% or higher overall grade  100% 50% 60% Fall 2018 Academic Year	

BCA – Aviation Management-01: Federal Aviation Regulations

Aviation Management majors will have a thorough and comprehensive understanding of Federal aviation regulations.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

**AVIATION MANAGEMENT – CAV 379 & CAV 380** 

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A9: 80% of students enrolled in CAV 379 course will demonstrate a basic knowledge of the importance of human resources by earning 75% or higher on their overall grade.	Written Exam Embedded Questions	A9 - % of CAV 379 Students - earning 75% or higher overall grade  100% 50% Fall 2018 Academic Year	CAV 379 The instructor will bring in outside evaluators and gain more critiques from a broader cross section of professionals in the field. The instructor will add different assessment method next time this course is taught.
A10: 85% of students enrolled in the CAV 380 course will demonstrate knowledge of air transportation systems.	Class Project	A10 - % of CAV 380 Students - demonstrating knowledge Air Transportation Systems  100% 50% 996 Spring 2018 Academic Year	CAV 380 The instructor will continue to use the class project as a means of evaluation the students' understanding of the aerospace industry. Instructor will add more aerospace examples to the class to strengthen student understanding of aerospace functions.  Continue to use the group project as a means of evaluating the students' understanding of FARs. Instructor will add more FAR contingencies to the project to strengthen student understanding of FARs.
A11: 85% of students enrolled in the CAV 380 course will demonstrate an understanding of the history and development of air transportation systems.		A11 - % of CAV 380 Students - demonstrating understanding hisory & development ATS  100%  Spring 2018  Academic Year	

BCA – Aviation Management-01: Federal Aviation Regulations

Aviation Management majors will have a thorough and comprehensive understanding of Federal aviation regulations.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

**AVIATION MANAGEMENT - CAV 380 & CAV 382** 

		Analysis of Results		
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken	
A13: 85% of students enrolled in the CAV 380 course will demonstrate an ability to differentiate management organizations within air transportation systems.	Class Project	A13 - % of CAV 380 Students - demonstrating understanding different ATS  100% 50% Spring 2018 Academic Year	CAV 380 The instructor will continue to use the class project as a means of evaluation the students' understanding of the aerospace industry. Instructor will add more aerospace examples to the class to strengthen student understanding of aerospace functions.  Continue to use the group project as a means of evaluating the students' understanding of FARs. Instructor will add more FAR contingencies to the project to strengthen student understanding of FARs.	
A14: 100% of students enrolled in the CAV 380 course will demonstrate a comprehensive and through understanding of Federal Aviation regulations by completing a class project with a score of 70% or higher.	Class Project	A14 - % of CAV 380 Students - earning score 70% or higher  150% 150% 50% 0% Spring 2019 Academic Year		
A15: 85% of students enrolled in the CAV 382 course will demonstrate a comprehensive and through understanding of Federal Aviation regulations by completing a class project with a score of 80% or higher.		A15 - % of CAV 382 Students - earning score 80% or higher  150% egg 100% 50% 0% Spring 2018 Academic Year	CAV 382 Continue to use the project as a measure of the understanding of the aerospace industry and the role of airports in the industry.	

BCA – Aviation Management-02: Aerospace Industry

Aviation Management majors will demonstrate a broad understanding of the aerospace industry.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

**AVIATION MANAGEMENT – CAV 372** 

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A1: 80% of students enrolled in the CAV 372 course will demonstrate the ability to identify and explain worldwide regulatory information in aviation by earning 75% or higher on their overall grade.	Written Exam Embedded Questions	A1 - % of CAV 372 Students - earning overall grade of 75% or higher  100% 50% Fall 2018 Academic Year	CAV 372 Continue as presently going with embedded test questions class discussion.
A2: 80% of students enrolled in the CAV 372 course will demonstrate the ability to compare and contrast the main themes of aviation safety by earning 75% or higher on their overall grade.		A2 - % of CAV 372 Students - earning overall grade of 75% or higher  100% 50% Fall 2018 Academic Year	
A3: 80% of students enrolled in the CAV 372 course will demonstrate an understanding of safety management systems by earning 75% or higher on their overall grade.		A3 - % of CAV 372 Students - earning overall grade of 75% or higher  100% 50% Fall 2018  Academic Year	
A4: 80% of students enrolled in the CAV 372 course will demonstrate an ability to identify situations and determine their legal stance by earning 75% or higher on their overall grade.		A4 - % of CAV 372 Students - earning overall grade of 75% or higher	

BCA – Aviation Management-02: Aerospace Industry

Aviation Management majors will demonstrate a broad understanding of the aerospace industry.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

AVIATION MANAGEMENT – CAV 372, CAV 379 & CAV 380

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A5: 80% of students enrolled in the CAV 372 course will demonstrate an ability to determine and find current aviation law by earning 75% or higher on their overall grade.	Written Exam Embedded Questions	A5 - % of CAV 372 Students - earning overall grade of 75% or higher	CAV 372 Continue as presently going with embedded test questions class discussion.
A6: 80% of students enrolled in CAV 379 course will demonstrate the ability to explain the role of general aviation services by earning 75% or higher on their overall grade.	Written Exam Embedded Questions	A6 - % of CAV 379 Students - earning overall grade of 75% or higher  100% 50% Fall 2018 Academic Year	CAV 379 The instructor will bring in outside evaluators and gain more critiques from a broader cross section of professionals in the field. The instructor will add different assessment method next time this course is taught.
A7: 80% of students enrolled in CAV 379 course will demonstrate a basic knowledge of the importance of human resources by earning 75% or higher on their overall grade.	Class Project	A7 - % of CAV 379 Students - earning overall grade of 75% or higher  100% Fall 2018 Academic Year	CAV 380 The instructor will continue to use the class project as a means of evaluation the students' understanding of the aerospace industry. Instructor will add more aerospace examples to the class to strengthen student understanding of aerospace functions.  Continue to use the group project as a means of evaluating the students' understanding of FARs. Instructor will add more FAR contingencies to the project to strengthen student understanding of FARs.
A8: 100% of students enrolled in the CAV 380 course will demonstrate an understanding of the aerospace industry by scoring 70% or higher on the class project.		A8 - % of CAV 380 Students - earning overall grade of 70% or higher on class project  150% 150% Spring 2019 Academic Year	

BCA – Aviation Management-02: Aerospace Industry

Aviation Management majors will demonstrate a broad understanding of the aerospace industry.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

AVIATION MANAGEMENT – CAV 381 & CAV 382

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A9: 85% of students enrolled in the CAV 381 course will demonstrate a broad understanding of the Aerospace industry by scoring 85% or higher on the final examination.	Final Examination	A9 - % of CAV 381 Students - earning overall grade of 85% or higher on final exam  150% egg 100% Spring 2018 Academic Year	CAV 381 Continue to increase course content via in class participation, group discussions, and improve scenario based training.
A10: 80% of students enrolled in the CAV 381 course will demonstrate a working knowledge of applicable air traffic control history, procedures, and regulations by earning an overall grade of 75% or higher.	Written Exam Embedded Questions	A10 - % of CAV 381 Students - earning overall grade of 75% or higher  150% 50% Spring 2019 Academic Year	CAV 382 Continue to use the project as a measure of the understanding of the aerospace industry and the role of airports in the industry.
A11: 80% of students enrolled in the CAV 381 course will demonstrate a basic knowledge of the aircraft navigational systems by earning an overall grade of 75% or higher.	Class Project	A11 - % of CAV 381 Students - earning overall grade of 75% or higher  150% 50% Spring 2019 Academic Year	
A12: 85% of students enrolled in the CAV 382 course will demonstrate a comprehensive understanding of the Aerospace industry and the role of airports by completing a class project with a score of 80% or higher.		A12 - % of CAV 382 Students - earning overall grade of 80% or higher on class project  150% 150% Spring 2018 Academic Year	

BCA – Aviation Management-03: Skills & Techniques & Procedures for Airport Operations

Aviation Management majors will demonstrate knowledge of the skills, techniques, and procedures for maintaining airports, airlines, government, nongovernmental, and general aviation.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

AVIATION MANAGEMENT – CAV 372

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A1: 80% of students enrolled in the CAV 372 course will demonstrate the ability to identify and explain worldwide regulatory information in aviation by earning 75% or higher on their overall grade.	Written Exam Embedded Questions	A1 - % of CAV 372 Students - earning overall grade of 75% or higher  100% 50% Fall 2018 Academic Year	CAV 372 Continue as presently going with embedded test questions class discussion.
A2: 80% of students enrolled in the CAV 372 course will demonstrate the ability to compare and contrast the main themes of aviation safety by earning 75% or higher on their overall grade.		A2 - % of CAV 372 Students - earning overall grade of 75% or higher  100%	
A3: 80% of students enrolled in the CAV 372 course will demonstrate an understanding of safety management systems by earning 75% or higher on their overall grade.		A3 - % of CAV 372 Students - earning overall grade of 75% or higher  100% 50% Fall 2018 Academic Year	
A4: 80% of students enrolled in the CAV 372 course will demonstrate an ability to identify situations and determine their legal stance by earning 75% or higher on their overall grade.		A4 - % of CAV 372 Students - earning overall grade of 75% or higher  100% 50% Fall 2018 Academic Year	
A5: 80% of students enrolled in the CAV 372 course will demonstrate an ability to determine and find current aviation law by earning 75% or higher on their overall grade.		A5 - % of CAV 372 Students - earning overall grade of 75% or higher  100% 50% Fall 2018 Academic Year	

BCA – Aviation Management-03: Skills & Techniques & Procedures for Airport Operations

Aviation Management majors will demonstrate knowledge of the skills, techniques, and procedures for maintaining airports, airlines, government, nongovernmental, and general aviation.

#### BACHELOR OF COMMERCIAL AVIATION (BCA)

AVIATION MANAGEMENT – CAV 380 & CAV 381

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A6: 100% of students enrolled in the CAV 380 course will demonstrate a knowledge of the skills, techniques and procedures for maintain airports, airlines, government, nongovernmental and general aviation by completing a class project with a score of 70% or higher.	Class Project  Written Exam Embedded Questions	A6 - % of CAV 380 Students - earning overall grade of 70% or higher  150%	CAV 380 The instructor will continue to use the class project as a means of evaluation the students' knowledge of the skills, techniques and procedures for maintain airports, airlines, government, nongovernmental and general aviation. Instructor will add more examples to strengthen student understanding airports, airlines, government, nongovernmental and general aviation.
A7: 85% of students enrolled in the CAV 381 course will demonstrate a knowledge of the skills, techniques and procedures for maintain airports, airlines, government, nongovernmental and general aviation by scoring 85% or higher on the final examination.	Final Examination	A7 - % of CAV 381 Students - earning overall grade of 85% or higher on final exam  150% 100% 50% Spring 2018 Academic Year	CAV 381 Continue to increase course content via in class participation, group discussions, and improve scenario based training.
A8: 80% of students enrolled in the CAV 381 course will demonstrate the ability to identify and an understanding of international and national airspace system by earning an overall grade of 75% or higher.		A8 - % of CAV 381 Students - earning overall grade of 75% or higher  150% 150% 50% Spring 2019 Academic Year	
A9: 80% of students enrolled in the CAV 381 course will demonstrate the skills required in determining ATC communications and phraseology by earning an overall grade of 75% or higher.		A9 - % of CAV 381 Students - earning overall grade of 75% or higher  100% 50% Spring 2019 Academic Year	

BCA – Aviation Management-03: Skills & Techniques & Procedures for Airport Operations

Aviation Management majors will demonstrate knowledge of the skills, techniques, and procedures for maintaining airports, airlines, government, nongovernmental, and general aviation.

#### **BACHELOR OF COMMERCIAL AVIATION (BCA)**

AVIATION MANAGEMENT – CAV 382

		Analysis of Results	
Performance Measure (Competency)	Data Collection (Evidence)	Results of Evaluation	Analysis and Action Taken
A10: 85% of students enrolled in the CAV 382 course will demonstrate a knowledge of the skills, techniques and procedures for maintain airports, airlines, government, nongovernmental and general aviation by completing a class project with a score of 80% or higher.	Class Project  Written Exam Embedded Questions	A10 - % of CAV 382 Students - earning overall grade of 80% or higher on class project    100%	CAV 382 Continue to add content via in class participation, group discussions, and improve scenario based training.
A11: 80% of students enrolled in the CAV 382 course will demonstrate a working knowledge of airports and airport systems by earning an o overall grade of 75% or higher.		A11 - % of CAV 382 Students - earning overall grade of 75% or higher  100% Spring 2019 Academic Year	
A12: 80% of students enrolled in the CAV 382 course will demonstrate the ability to identify airport operations management components, history and classifications by earning an overall grade of 75% or higher.		A12 - % of CAV 382 Students - earning overall grade of 75% or higher  100% 50% Spring 2019 Academic Year	
A13: 80% of students enrolled in the CAV 382 course will demonstrate the ability to determine airport management applications by earning an overall grade of 75% or higher.		A13 - % of CAV 382 Students - earning overall grade of 75% or higher  100% 50% Spring 2019 Academic Year	

#### Program Outcomes – Master of Commercial Aviation (MCA)

MCA - 01: PLO US Laws and FAA

MCA majors will demonstrate the ability to distinguish between the different kinds of laws that the United States in aviation and the distinction between the different kinds essential to understanding the FAA enforcement process.

	MASTER OF	COMMERCIAL AVIATION (N	MCA)
CAV 630			
Analysis of Results			
Performance	Data Collection	Results of Evaluation	Analysis and Action
Measure	(Evidence)		Taken
(Competency) A1: 85% of students enrolled in CAV 630 will demonstrate the ability to distinguish between the different kinds of laws that the United States has and ability to describe the structure of the U. S. by successfully completing the Module 1 Homework.	Assignments Written Exam Embedded Questions Final Exam	A1: 95% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to distinguish between the different kinds of laws that United States has and to describe the structure of the U. S. by successfully completing the Module 1 Homework.	Move the APA research paper to mid-term to increase studer participation and give time for improvements in papers submitted.
A2: 85% of students enrolled in CAV 630 will demonstrate the ability to distinguish between the different kinds of laws of the United States and ability to describe the structure of the U. S. by successfully completing with 85% or higher Module 1,2,3 Discussion.		A2: 92% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to distinguish between the different kinds of laws of the United States and to describe the structure of the U. S. by successfully completing with 85% or higher Module 1,2,3 Discussion.	
A3: 85% of students enrolled in CAV 630 will demonstrate an understanding of law terminology including Administrative Law, as opposed to Common Law and Legislative Law by successfully completing with 85% or higher Modules 15 & 16 assignment.		A3: 96% of students enrolled in CAV 630 in Spring 2019 demonstrated an understanding of law terminology including Administrative Law, as opposed to Common Law and Legislative Law by successfully completing with 85% or higher Modules 15 & 16 assignment.	

A4: 85% of students enrolled in CAV 630 will demonstrate an understanding of law terminology including Administrative Law, as opposed to Common Law and Legislative Law by successfully completing the APA research paper.

A5: 85% of students enrolled in CAV 630 will demonstrate an understanding of law terminology including Administrative Law, as opposed to Common Law and Legislative Law by successfully completing the final exam.

A6: 85% of students enrolled in CAV 630 will demonstrate the ability to determine the basic principles of liability and how to minimize and limit liabilities in the workplace environment by successfully completing with 85% or higher Module 1 Discussion.

A7: 85% of students enrolled in CAV 630 will demonstrate the ability to determine the basic principles of liability and how to minimize and limit liabilities in the workplace environment by successfully completing the APA research paper.

A4: 79% of students enrolled in CAV 630 in Spring 2019 demonstrated an understanding of law terminology including Administrative Law, as opposed to Common Law and Legislative Law by successfully completing the APA research paper.

A5: 88% of students enrolled in CAV 630 in Spring 2019 demonstrated an understanding of law terminology including Administrative Law, as opposed to Common Law and Legislative Law by successfully completing the final exam.

A6: 92% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to determine the basic principles of liability and how to minimize and limit liabilities in the workplace environment by successfully completing with 85% or higher Module 1 Discussion.

A7: 79% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to determine the basic principles of liability and how to minimize and limit liabilities in the workplace environment by successfully completing the APA research paper.

A8: 85% of students enrolled in CAV 630 will demonstrate the ability to understand aircraft transfer of ownership and the rental and aircraft by successfully completing with 85% or higher Module 11 & 12 assignment.

A9: 85% of students enrolled in CAV 630 will demonstrate the ability to understand aircraft transfer of ownership and the rental and aircraft by successfully completing the final exam.

A10: 85% of students enrolled in CAV 630 will demonstrate the ability to describe the current state of aviation security and the five most pressing aviation regulatory problems for the industry and formulate solutions by successfully completing with 85% or higher Module 1 Discussion.

A11: 85% of students enrolled in CAV 630 will demonstrate the ability to describe the current state of aviation security and the five most pressing aviation regulatory problems for the industry and formulate solutions by successfully completing the APA research paper.

A8: 88% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to understand aircraft transfer of ownership and the rental and aircraft by successfully completing with 85% or higher Module 11 & 12 assignment.

A9: 88% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to understand aircraft transfer of ownership and the rental and aircraft by successfully completing the final exam.

A10: 96% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to describe the current state of aviation security and the five most pressing aviation regulatory problems for the industry and formulate solutions by successfully completing with 85% or higher Module 1 Discussion.

A11: 79% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to describe the current state of aviation security and the five most pressing aviation regulatory problems for the industry and formulate solutions by successfully completing the APA research paper.

A12: 85% of students enrolled in CAV 630 will demonstrate the ability to describe the current state of aviation security and the five most pressing aviation regulatory problems for the industry and formulate solutions by successfully completing the final exam.		A12: 88% of students enrolled in CAV 630 in Spring 2019 demonstrated the ability to describe the current state of aviation security and the five most pressing aviation regulatory problems for the industry and formulate solutions by successfully completing the final exam.	
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#### Program Outcomes – Master of Commercial Aviation (MCA)

MCA - 03: PLO Air Cargo Economics and Marketing

MCA majors will demonstrate the ability to articulate the role of the fixed base operator in the aviation system.

#### MASTER OF COMMERCIAL AVIATION (MCA) **CAV 650 Analysis of Results Results of Evaluation** Performance **Data Collection Analysis and Action** (Evidence) Taken Measure (Competency) A1: 87% of students enrolled in A1: 100% of CAV 650 in Fall 2017 students enrolled in demonstrated the ability to CAV 650 will Students will be articulate the role of the fixed demonstrate the encouraged to fully base operator in the aviation ability to articulate participate in online system by participating in 15 the role of the fixed discussions and chapter weeks of online discussions and base operator in the Assignments review questions. 90% of students answered all aviation system by Guidance on being a chapter review questions. Embedded participating in successful online student Questions online discussions will be posted and completely for students. answering all chapter review questions. A2: 87% of students enrolled in A2: 100% of CAV 650 in Fall 2017 students enrolled in demonstrated the ability to CAV 650 will understand pertinent demonstrate the management concepts applicable ability to to the field of FBO management understand by participating 15 weeks of pertinent online discussions and 90% of management students answered all chapter concepts applicable review questions. to the field of FBO management by participating in online discussions and completely answering all chapter review questions.

A3: 100% of students enrolled in CAV 650 will demonstrate the ability to recognize successful marketing strategies and discuss the most effective manner in which to market the services of an FBO by participating in online discussions and completely answering all chapter review questions.

A4: 100% of students enrolled in CAV 650 will demonstrate the ability to acquire a working knowledge of financial concepts appropriate to the FBO business by participating in online discussions and completely answering all chapter review questions.

A3: 87% of students enrolled in CAV 650 in Fall 2017 demonstrated the ability to recognize successful marketing strategies and discuss the most effective manner in which to market the services of an FBO by participating in 15 weeks of online discussions and 90% of students answered all chapter review questions.

A4: 87% of students enrolled in CAV 650 in Fall 2017 demonstrated the ability to acquire a working knowledge of financial concepts appropriate to the FBO business by participating in 15 weeks of online discussions and 90% of students completely answered all chapter review questions.

A5: 100% of students enrolled in CAV 650 will demonstrate the ability to apply effective human resources skills to the management of FBO employees by participating in online discussions and completely answering all chapter review questions.

CAV 650 in Fall 2017 demonstrated the ability to apply effective human resources skills to the management of FBO employees by participating in 15 weeks of online discussions and 90% of the students completely answered all chapter review questions.

A5: 87% of students enrolled in

A6: 100% of students enrolled in CAV 650 will demonstrate the ability to discuss the organization of a typical FBO, including administration and operations by participating in online discussions and completely answering all chapter review questions and 90% of the students will adequately complete the assigned FBO

paper.

A6: 87% of students enrolled in CAV 650 in Fall 2017 demonstrated the ability to discuss the organization of a typical FBO, including administration and operations by participating in online discussions and 90% completely answered all chapter review questions.

A7: 100% of students enrolled in CAV 650 will demonstrate the ability to share with others why proper maintenance, safety, and security are necessary to the FBO manager by participating in online discussions and completely answering all chapter review questions and 90% of the students will adequately complete the assigned FBO paper. A7: 87% of students enrolled in CAV 650 in Fall 2017 demonstrated the ability to share with others why proper maintenance, safety, and security are necessary to the FBO manager by participating in online discussions and 90% completely answered all chapter review questions.

A8: 100% of students enrolled in CAV 650 will demonstrate the ability to apply the various managerial concepts learned in class to solving realworld issues and problems encountered FBO managers by participating in online discussions and completely answering all chapter review questions and 90% of the students will adequately complete the assigned FBO paper. A8: 87% of students enrolled in CAV 650 in Fall 2017 demonstrated the ability to apply the various managerial concepts learned in class to solving realworld issues and problems encountered FBO managers by participating in online discussions and 90% completely answered all chapter review questions.

#### Program Outcomes - Master of Commercial Aviation (MCA)

MCA – 04: PLO Human Factors

MCA majors will demonstrate the ability to explain individual and group behavior and interaction in the aerospace industry.

#### MASTER OF COMMERCIAL AVIATION (MCA) **CAV 610 Analysis of Results Data Collection Results of Evaluation** Performance **Analysis and Action Taken** Measure (Evidence) (Competency) A1: 93% of students enrolled in A1: 100% of CAV 610 in Fall 2017 students enrolled Students will be encouraged demonstrated a thorough in CAV 610 will to fully participate in online knowledge of human factors by demonstrate a discussions and chapter participating in 15 weeks of thorough review questions. Guidance online discussions and 85% of knowledge of on being a successful online students completely answered all human factors by Assignments learner will be posted chapter review questions. participating in for students. online discussion Embedded and completely Questions answering all chapter review questions. A2: 93% of students enrolled in A2: 100% of CAV 610 in Fall 2017 students enrolled demonstrated the ability to in CAV 610 will analyze an aircraft accident and demonstrate the the role human factors played in ability to analyze the accident by participating in an aircraft online discussions and 85% of accident and the students completely answered all role human chapter review questions. factors played in the accident by participating in online discussion and completely answering all chapter review questions.

A3: 100% of students enrolled in CAV 610 will demonstrate an understanding of the need for a systems approach to aviation safety by participating in online discussion and completely answering all chapter review questions.

A4: 100% of students enrolled in CAV 610 will demonstrate an understanding of the role of airlines, manufacturers, and governmental agencies in improving aviation safety by participating in online discussion and completely answering all chapter review questions.

A5: 100% of students enrolled in CAV 610 will demonstrate the ability to discuss the best practices in use today to enhance aviation safety by participating in online discussion and completely

A3: 93% of students enrolled in CAV 610 in Fall 2017 demonstrated an understanding of the need for a systems approach to aviation safety by participating in online discussion and 85% of students completely answered all chapter review questions.

A4: 93% of students enrolled in CAV 610 in Fall 2017 demonstrated an understanding of the role of airlines, manufacturers, and governmental agencies in improving aviation safety by participating in online discussion and 85% of students completely answered all chapter review questions.

A5: 93% of students enrolled in CAV 610 in Fall 2017 demonstrated the ability to discuss the best practices in use today to enhance aviation safety by participating in online discussion and 85% completely answered all chapter review questions.

answering all	A6: 93% of students enrolled in
chapter review	CAV 610 in Fall 2017
questions.	demonstrated the ability to
A6: 100% of	discuss aviation safety and the
students enrolled	inherent challenges on a
in CAV 610 will	worldwide scale by participating
demonstrate the	in online discussion and 85%
ability to discuss	completely answered all chapter
aviation safety	review questions.
and the inherent	
challenges on a	
worldwide scale	
by participating in	
online discussion	
and completely	
answering all	
chapter review	A7: 93% of students enrolled in
questions.	CAV 610 in Fall demonstrated the
	ability to discuss aviation safety
A7: 100% of	and the inherent challenges on a
students enrolled	worldwide scale by participating
in CAV 610 will	in online discussion and 85%
demonstrate the	completely answered all chapter
ability to discuss	review questions.
aviation safety	
and the inherent	
challenges on a	
worldwide scale	
by participating in	
online discussion	
and completely	
answering all	
chapter review	
questions.	