

RECEIVED  
JUL 18 2005

Cover Sheet for Assessment Plans

BY:.....

Directions: Please complete a separate cover sheet for each degree program (e.g., Associates – Doctorate). Feel free to make copies of this sheet if needed. Those graduate programs with an integrated master's and doctoral program may submit one cover sheet. The department head and respective dean are to sign before the plans are submitted to the Provost.

Department / Unit: Aviation

Title and Level of Academic Program (e.g., Chemistry, Ph.D.): Aviation Maintenance, A.A.S.

When submitting an Assessment Plan, please check and indicate when the faculty endorsed the plan.

<input checked="" type="checkbox"/> Faculty have met, reviewed, and endorsed the Assessment Plans being submitted for this degree program.	Date of Endorsement: <u>10/27/04</u>
--	---

Marlon J. [Signature]  
Department Head's Signature

07/08/05  
Date

Deni K. [Signature]  
College Dean's Signature  
(Required for Undergraduate Programs)

7/11/05  
Date

\_\_\_\_\_  
Dean of the Graduate School's Signature  
(Required for Graduate Degree Programs)

\_\_\_\_\_  
Date

**November 1, 2004:** Assessment plans are to be sent to the respective Dean  
**November 29, 2004:** Relevant materials are to be sent from the Deans to the Provost

**Degree Program  
Assessment of Student Learning Plan  
Kansas State University**

---

- Check the box if your program's student learning outcomes have been modified since November 2003. If so, please email ([apr@ksu.edu](mailto:apr@ksu.edu)) or attach a hard copy to this document.

**A. College, Department, and Date**

College: College of Technology and Aviation  
Department: Aviation Department  
Date: May 2, 2005

**B. Contact Person(s) for the Assessment Plans**

Andrew T. Smith, Section Head 826-2682

**C. Degree Program**

A. S. Aeronautical Technology – Aviation Maintenance

**D. Assessment of Student Learning Three-Year Plan**

**Student Learning Outcome(s)**

Of the five (5) student learning outcomes developed for the aviation maintenance program, we will concentrate on the following two outcomes in our three year assessment plan.

1. Demonstrate skills necessary to perform as a FAA Airframe and Powerplant Mechanic
2. Convey an understanding of aircraft design, performance, operation, maintenance, inspection, repair and alteration

Relationship to K-State Student Learning Outcomes (insert program SLOs, check all that apply):

Program SLOs	University-wide SLOs (Undergraduate Programs)					Program SLO is conceptually different from university SLOs
	Knowledge	Critical Thinking	Communication	Diversity	Academic / Professional Integrity	
1.	(1)(a&b)	(1)(a&b)	(1)(a&b)		(1)(a&b)	
2.	(2)(a&b)	(2)(a&b)	(2)(a&b)		(2)(a&b)	
3.						
4.						
5.						

Program SLOs	University-wide SLOs (Graduate Programs)			Program SLO is conceptually different from university SLOs
	Knowledge	Skills	Attitudes and Professional Conduct	
1.				
2.				
3.				
4.				
5.				

**1. How will the learning outcomes be assessed? What groups will be included in the assessment?**

1. (a) Aeronautical Technology – Aviation Maintenance students will be evaluated on the results of the Federal Aviation Administration (FAA) computerized knowledge tests over General, Airframe and Powerplant subject matter, which must be taken in succession based on our academic program structure and in order to pursue certification on the basis of this curriculum. These are national standardized tests which are a direct measure of their achievement. 80% of our students will pass the each one of the three FAA knowledge tests on their first try.

1. (b) Aeronautical Technology – Aviation Maintenance students will be evaluated on the results of initial pre-testing on aviation industry terms, concepts, safety procedures and shop practices. Upon completion of this academic curriculum, the same testing process will be utilized to measure overall aviation knowledge gained from our program. 80% of our students will pass this test on their first try after completing our program.

2. (a) Aircraft design, performance, operation, maintenance, inspection, repair and alteration will be evaluated on the results of successfully completing the successive curriculum requirements for Aeronautical Technology – Aviation Maintenance courses. This requires a minimum score of 70% on all periodic tests, comprehensive finals and laboratory experiments as established by the Kansas State University Salina FAA Part 147 Certification Manual. This is a direct measure. 80% of our students will pass all program courses on their first attempt.

2. (b) An FAA comprehensive evaluation through oral examination and practical examination are administered by an independent FAA Designated Mechanic Examiner (DME). FAA Standards require a minimum of 75% on the oral examination and to a competent knowledge or skill level or an airworthy standard criterion on all practical tasks. We expect 80% of students to pass on the first attempt. This is a direct measure.

**2. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?**

Fall 2005	Spring 2006	Fall 2006	Spring 2007	Fall 2007	Spring 2008	Fall 2008
1. (a) Begin gathering FAA testing data of our students compared to national norms, share with Section faculty to make changes, as needed	1. (a) Gather FAA testing data of our students compared to national norms, share with Section faculty to make changes, as needed	1. (a) Gather FAA testing data of our students compared to national norms, share with Section faculty to make changes, as needed	1. (a) Gather FAA testing data of our students compared to national norms, share with Section faculty to make changes, as needed	1. (a) Gather FAA testing data of our students compared to national norms, share with Section faculty to make changes, as needed	1. (a) Gather FAA testing data of our students compared to national norms, share with Section faculty to make changes, as needed	1. (a) Gather FAA testing data of our students compared to national norms, share with Section faculty to make changes, as needed
(1)(b) Begin initial pre-testing	(1)(b) Await the time needed to post-test	(1)(b) initial pre-testing	(1)(b) Begin the post-testing, share with Section faculty for changes, as needed	(1)(b) initial pre-testing	(1)(b) Continue post-testing, share with Section faculty for changes, as needed	(1)(b) initial pre-testing
2. (a) Begin to monitor the course completion student rate of our program courses	2. (a) Monitor the course completion student rate of our program courses	2. (a) Monitor the course completion student rate of our program courses	2. (a) Monitor the course completion student rate of our program courses	2. (a) Monitor the course completion student rate of our program courses	2. (a) Monitor the course completion student rate of our program courses	2. (a) Monitor the course completion student rate of our program courses
2. (b) Begin to monitor the pass rate of our students taking the oral & practical tests	2. (b) Monitor the pass rate of our students taking the oral & practical tests	2. (b) Monitor the pass rate of our students taking the oral & practical tests	2. (b) Monitor the pass rate of our students taking the oral & practical tests	2. (b) Monitor the pass rate of our students taking the oral & practical tests	2. (b) Monitor the pass rate of our students taking the oral & practical tests	2. (b) Monitor the pass rate of our students taking the oral & practical tests

1. (a) Data on FAA Computerized Knowledge scores is available from Cy 2001 to date. Data is continuously gathered and is posted on the FAA website for our review. A three year base line will be established at the end of Cy 2004. Results obtained include not only scores but by using the subject matter knowledge codes we can pin point the subjects in which the students are not doing well. We can compare the results at the end of each semester to our baseline and give the results to our teachers so they can make changes the following semester. At the end of the year we can gather the statistics for the previous year and share it with the Aviation Maintenance faculty.

1. (b) Initial pre-testing on aviation industry terms, concepts, safety procedures and shop practices will begin in August 2005. This will establish an entry point base line to build from as our AVM Section initiates our assessment program. Summary of student pass rate through the independent FAA Designated Mechanic Examiner will begin fall 2005. This summary will provide immediate feedback to the AVM Section faculty.

2. (a) Data can begin to be compiled in Dec. 2005 for the students currently enrolled.

**3. What is the unit's process for using assessment results to improve student learning?**

a. We will look at the compiled results at the end of each academic year. Results of the initial pre-testing, the standardized FAA Computerized Knowledge tests, the pass rate of in our courses and the oral examination and the practical examination testing will be evaluated to consider how to better improve our program.

b. The success in completing these outcomes is also shared with our advisors. They need to ensure that students follow the curriculum so that the students take courses in the order in which we have planned the curriculum.

c. Faculty teamwork is also a key to the successful implementation of this assessment program through interaction and focus on improving the curriculum as we continue.