Curriculum Committee

New Course Proposal

FLORIDA SOUTHWESTERN STATE COLLEGE

School or Division	School of Business and Technology
Program or Certificate	Aviation Airframe Mechanics (PSAV) Program Number – T640300 CIP Number - 0647060703
Proposed by (faculty only)	Professor Leroy Bugger
Presenter (faculty only)	Professor Leroy Bugger
Note that the presenter (faculty) listed above must be present at the Curriculum Committee meeting or the proposal will be returned to the School or Division and must be submitted for a later date.	
Submission date	10/12/2017
Course prefix, number, and title	AMT 0713 Aviation Maintenance Technology Airframe II

Section I, New Course Information (must complete all items)

List course prerequisite(s) and minimum grade(s) (must include minimum grade if higher than a "D").	Admission into the Aviation Airframe Powerplant (PSAV) program and successful completion of AVM 0712 with a minimum grade of a "C." Must have a minimum of "C" in this course to pass.
Provide justification for the proposed prerequisite(s).	This is a limited access and limited enrollment program.
Will students be taking any of the prerequisites listed for this course in different parts of the same term (ex. Term A and Term B)?	No
List course co-requisites.	NA
Provide justification for the proposed co-requisite(s).	NA
Is any co-requisite for this course listed as a co-requisite on its paired course? (Ex. CHM 2032 is a co-requisite for CHM 2032L, and CHM 2032L is a co-requisite for CHM 2032)	No NA
Course credits or clock hours	225 clock hours
Contact hours (faculty load)	225 clock hours
Select grade mode	Standard Grading (A, B, C, D, F)

Credit type	Vocational Credit
Course description (provide below)	
This course is part of a program being proposed to provide needed workforce credentialing to fill the gap and shortage of qualified aviation technicians, which is forecast to become more acute as a greater number of technicians retire than enter the field. In fact, according to a study commissioned by Boeing, commercial aviation will require 238,000 new technicians worldwide over the next 20 years, with North America accounting for 113,000 new technicians, almost 50% of total demand. According to an analysis prepared by EMSI, the job market in SWFL for A&P technicians is fairly strong, averaging 20 monthly postings and 47 monthly hires from April of 2013 through April of 2015. A&P technicians enjoy high average hourly earnings of greater than $24/hr. The total economic impact of the program 10 years after implantation is forecast to be $118.2 million and the average lifetime earnings for individual technicians are forecast to be improved (over what they would otherwise have earned) of roughly $525,000 in today's net present value dollars (for Airframe and Powerplant mechanics combined), so the economic development implications are quite significant. Gradates of similar programs are actively recruited not only by the aviation industry, but also by industries as diverse as elevator installation/repair and amusement park ride repair as the skills sets and particular attention to detail engendered by the A&P curriculum are essential in those industries, as well.	

General topic outline (type in outline below)
• Aircraft finishes and fabric covering • Assembly and repair of sheet metal structures • Aircraft welding techniques

Learning Outcomes: For information purposes only.

IV. Course Competencies, Learning Outcomes and Objectives

A. General Education Competencies and Course Outcomes

1. Integral *General Education Competency or competencies*: Communicate
   - Explain the processes involved in fabrication of tubular steel structures.

B. Other Course Objectives/Standards

- Identify, select, install, and remove hardware, materials, rivets, and special fasteners on metallic, bonded, and composite structures.
- Install conventional rivets.
- Inspect bonded structures.
- Inspect and repair sheet-metal structures.
- Form, lay out and bend sheet metal structures.
- Inspect and repair sheet metal structures.
- Understand and explain the processes of welding magnesium, aluminum, stainless steel, and titanium.
- Explain the process of soldering stainless steel.
- Solder, braze, gas weld, and arc weld steel.
- Inspect and check welds.

Copy and Paste the SCNS Course Profile Description below (http://scns.fldoe.org/scns/public/pb_index.jsp).

THIS COURSE IS DESIGNED TO INTRODUCE SKILLS AND THE NECESSARY KNOWLEDGE AND UNDERSTANDING OF AIRCRAFT FINISHES AND FABRIC COVERING, ASSEMBLY AND REPAIR OF SHEET METAL STRUCTURES, AND INTRODUCTION TO AIRCRAFT WELDING TECHNIQUES.

ICS code for this course	POSTSECONDARY ADULT VOCATIONAL (PSAV) - 1.26.02 - INDUSTRIAL
Should any major restriction(s) be listed on this course? If so, select "yes" and list the appropriate major restriction code(s) or select "no".	Yes PSAV
Is the course an "International or Diversity Focus" course?	No, not International or Diversity Focus
Is the course a General Education course?	No
Is the course a Writing Intensive course?	No
Is the course repeatable*? (A repeatable course may be taken more than one time for additional credits. For example, MUT 2641, a 3 credit hour course can be repeated 1 time and a student can earn a maximum of 6 credits). *Not the same as Multiple Attempts or Grade Forgiveness	No
Do you expect to offer this course three times or less (experimental)?	No

Impact of Course Proposal	
Will this new course proposal impact other courses, programs, departments, or budgets?	No
If the answer to the question above is "yes", list the impact on other courses, programs, or budgets?	
Have you discussed this proposal with anyone (from other departments, programs, or institutions) regarding the impact? Were any agreements made? Provide detail information below.	
NA	

Section II, Justification for proposal

Provide justification (below) for this proposed curriculum action.
Type in justification here

Section III, Important Dates and Endorsements Required

List all faculty endorsements below. (Note that proposals will be returned to the School or Division if faculty endorsements are not provided).
Leroy Bugger (Department Chair), Dr. Tim Lucas, Jennifer Patterson, Andrew Blitz

NOTE: Course and Program changes must be submitted by the dates listed on the published Curriculum Committee Calendar. Exceptions to the published submission deadlines must receive prior approval from the Provost's Office.

Term in which approved action will take place	Fall 2018
Provide an explanation below for the requested exception the submission deadline.	
This course is part of a program being proposed to provide needed workforce credentialing to fill the gap and shortage of qualified aviation technicians, which is forecast to become more acute as a greater number of technicians retire than enter the field. In fact, according to a study commissioned by Boeing, commercial aviation will require 238,000 new technicians worldwide over the next 20 years, with North America accounting for 113,000 new technicians, almost 50% of total demand. According to an analysis prepared by EMSI, the job market in SWFL for A&P technicians is fairly strong, averaging 20 monthly postings and 47 monthly hires from April of 2013 through April of 2015. A&P technicians enjoy high average hourly earnings of greater than $24/hr. The total economic impact of the program 10 years after implantation is forecast to be $118.2 million and the average lifetime earnings for individual technicians are forecast to be improved (over what they would otherwise have earned) of roughly $525,000 in today's net present value dollars (for Airframe and Powerplant mechanics combined), so the economic development implications are quite significant. Gradates of similar programs are actively recruited not only by the aviation industry, but also by industries as diverse as elevator installation/repair and amusement park ride repair as the skills sets and particular attention to detail engendered by the A&P curriculum are essential in those industries, as well.	

Any exceptions to the term start date requires the signatures of the Academic Dean or Associate Vice President and the Provost prior to submission.		
Dean or Associate Vice President	**Signature**	**Date**
Type name here		
Provost	**Signature**	**Date**

Dr. Jeff Stewart		

Required Endorsements	Type in Name	Select Date
Department Chair or Program Coordinator/Director	Professor Leroy Bugger	10/13/2017
Academic Dean or Associate Vice President	Dr. Tom Rath	10/13/2017

Select Curriculum Committee Meeting Date	11/03/17

All Curriculum proposals require approval of the Curriculum Committee and the Provost. Final approval or denial of a proposal is reflected on the completed and signed proposal.

☒ Approve ☐ Do not approve (ATM0713)

Mary R. Myers — 8/11/17

Curriculum Committee Chair Signature — Date

☒ Approve ☐ Do not approve

Jeff Stewart — [redacted] 25

Provost Signature — *Date* 11/13/17

VPAA: Revised 11/11, 6/12, 6/13, 7/14, 8/15, 8/16, 8/17