

# Curriculum Committee



## New Course Proposal

<b>School or Division</b>	School of Business and Technology
<b>Program or Certificate</b>	Aviation Airframe Mechanics (PSAV) Program Number – T640300 CIP Number - 0647060703
<b>Proposed by (faculty only)</b>	Professor Leroy Bugger
<b>Presenter (faculty only)</b>	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.	
<b>Submission date</b>	10/12/2017
<b>Course prefix, number, and title</b>	AMT 0701 AVIATION MAINTENANCE TECHNOLOGY GENERAL I

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

<b>List course prerequisite(s) and minimum grade(s) (must include minimum grade if higher than a "D").</b>	Admission into the Aviation Airframe Mechanics (PSAV) program. Must have a minimum a minimum grade of "C" to pass.
<b>Provide justification for the proposed prerequisite(s).</b>	This is a limited access and limited enrollment program.
<b>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)?</b>	No
<b>List course co-requisites.</b>	NA
<b>Provide justification for the proposed co-requisite(s).</b>	NA
<b>Is any co-requisite for this course listed as a co-requisite on its paired course?</b> (Ex. CHM 2032 is a co-requisite for CHM 2032L, and CHM 2032L is a co-requisite for CHM 2032)	No  NA
<b>Course credits or clock hours</b>	120 clock hours
<b>Contact hours (faculty load)</b>	120 clock hours
<b>Select grade mode</b>	Standard Grading (A, B, C, D, F)
<b>Credit type</b>	Vocational Credit

**Course description** (provide below)

This course is designed to provide the student with an understanding of general hangar and shop safety, environmental concerns, mathematics, physics, basic aerodynamics, federal aviation regulations, publications and records. Human factors in maintenance are introduced and professional ethics are explored. Theory of flight, aircraft structure and control are discussed.

**General topic outline** (type in outline below)

- General hangar and shop safety
- Environmental concerns
- Mathematics, physics, basic aerodynamics as applied general aviation maintenance
- Federal aviation regulations, publications and records

**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: Think

- Use and understand the principles of simple machines: sound, fluid, and heat dynamics

**B. Other Course Objectives/Standards**

- Extract roots and raise numbers to a given power.
- Determine areas and volumes of various geometrical shapes.
- Solve ratio, proportion, and percentage problems.
- Perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers.
- Describe the theory of flight and aircraft structures.
- Relate the benefits of Human Factors and safety.
- Use documents, publications, and records applicable to the maintenance technician.
- Demonstrate use of aircraft drawings, blueprints, charts and graphs; also prepare a sketch for an aircraft repair and/or alteration.

- Demonstrate the ability to read, comprehend, and apply information in FAA and manufacturers' aircraft maintenance specifications, data sheets, manuals, publications, and related Federal Aviation Regulations, Airworthiness

**Copy and Paste the SCNS Course Profile Description below ([http://scns.fldoe.org/scns/public/pb\\_index.jsp](http://scns.fldoe.org/scns/public/pb_index.jsp)).**

THIS COURSE IS DESIGNED TO INTRODUCE GENERAL HANGAR AND SHOP SAFETY, ENVIRONMENTAL CONCERNS, MATHEMATICS, PHYSICS, BASIC AERODYNAMICS, FEDERAL AVIATION REGULATIONS, PUBLICATIONS AND RECORDS.

<b>ICS code for this course</b>	POSTSECONDARY ADULT VOCATIONAL (PSAV) - 1.26.02 - INDUSTRIAL
<b>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".</b>	Yes PSAV
<b>Is the course an "International or Diversity Focus" course?</b>	No, not International or Diversity Focus
<b>Is the course a General Education course?</b>	No

<b>Is the course a Writing Intensive course?</b>	No
<b>Is the course repeatable*?</b>  (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
<b>Do you expect to offer this course three times or less (experimental)?</b>	No

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

**Section II, Justification for proposal**

<b>Provide justification (below) for this proposed curriculum action.</b>
<p>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&amp;P technicians is fairly strong, averaging 20 monthly postings and 47 monthly hires from April of 2013 through April of 2015. A&amp;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</p>

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. Graduates 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.

**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.

<b>Term in which approved action will take place</b>	Fall 2018
<b>Provide an explanation below for the requested exception the submission deadline.</b>	

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

<b>Dean or Associate Vice President</b>	<b>Signature</b>	<b>Date</b>
Type name here		
<b>Provost</b>	<b>Signature</b>	<b>Date</b>
Dr. Jeff Stewart		

<b>Required Endorsements</b>	<b>Type in Name</b>	<b>Select Date</b>
<b>Department Chair or Program Coordinator/Director</b>	Professor Leroy Bugger	10/13/2017

<b>Academic Dean or Associate Vice President</b>	Dr. Tom Rath	10/13/2017
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<b>Select Curriculum Committee Meeting Date</b>	11/03/17
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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

May R. Myers  
Curriculum Committee Chair Signature

11/8/17  
Date

Approve       Do not approve

Jeff Stewart  
Provost Signature

11/13/17  
Date