AVFT - Aviation Flight Training

AVFT 121. Aviation Fundamentals. 5 Credits. (5 Lec) F
Introduction to basic flight principles. Course includes the principles of flight (basic aerodynamics), aircraft systems, performance, weight and balance, aviation physiology, federal air regulations, and flight publications.

AVFT 122. Private Pilot - Flight. 2 Credits. (2 Lab) F
Students must enroll in this course while pursuing their private pilot's certificate from an approved flight school. Course credits will be awarded upon receipt of a copy of the student's private pilot certificate.

AVFT 123. Private Pilot - Basic Air Nav. 3 Credits. F
Students must be co-enrolled in both AST-141 and AST-143. An introduction to air navigation procedures. Course includes basic meteorology, interpreting weather data piloting and dead reckoning navigation, radio navigation, and cross country flight planning.

AVFT 130. Meteorology for Aviation. 3 Credits. (3 Lec) F
COREQUISITE: Generally students will be concurrently enrolled in AST 141 and AST 143. Provides a detailed introduction to the environmental factors that are critical to safe flight operations. Includes the following: thermal patterns, horizontal and vertical motion, moisture clouds, precipitation, air masses, fronts, cyclones, thunderstorms and aviation hazards. Will also include meteorological flight planning, use of weather information systems, and reports and charts used for aviation weather reporting and forecasting.

AVFT 141. Advanced Navigation Systems. 3 Credits. (3 Lec) S
Prerequisite: AST 143, or consent of instructor. Advanced navigation systems includes HSI, RMI, Doppler, VOR, NDB and GPS. Will include navigation theory, in-flight emergencies, electronic instrumentation, and advanced flight computing problems. Extensive use of in-class computer flight simulation will be exercised. Provides the radio navigation skills necessary for the instrument pilot.

AVFT 142. Instrument Flight. 2 Credits. (2 Lab) S,F
Prerequisite: AST 142. Students must enroll in this course while pursuing the Instrument certificate at an approved flight school. Credits will be awarded upon receipt of a copy of the student's instrument rating.

AVFT 143. Instrument Ground. 3 Credits. (3 Lec) S
Prerequisite: AVFT 122. An introduction to flight under IFR conditions. Course includes basic instrument flying, flight instruments, IFR charts and approach plate, IFR regulations and procedures, ATC clearances and IFR flight planning. Completion of the course will prepare the student for the Instrument Knowledge Exam.

AVFT 150. Aviation Operations. 3 Credits. (3 Lec) S
An overview of general aviation operations, specifically the operation and management of the Fixed Base Operation (FBO). This course also covers current events and trends affecting the general aviation industry as a whole.

AVFT 171. Aircraft Systems for Pilots. 3 Credits. (3 Lec) S
Introduction to basic aircraft systems found on modern single and multi-engine reciprocating aircraft. Topics will include piston engines, electrical systems, hydraulic and pneumatic systems, radios and instruments, propellers, pressurization, maintenance requirements and documentation, and trouble shooting from the cockpit. In this course you will be introduced to the systems commonly found in the training aircraft you are now flying.

AVFT 191. UAS Fundamentals. 1 Credit. (1 Lec) F
COREQUISITES: AVFT 121. This course is an introduction to UAS (Unmanned Aerial Systems) systems and will provide students with the basic knowledge of UAS specific systems, regulations, performance, and a range of imaging technologies. Course includes flight planning, waiver application process, situational performance analysis, and imaging techniques/methodologies. Upon completion, the student will be prepared for the FAA Remote Pilot knowledge exam.

AVFT 245. Commercial Ground. 3 Credits. (3 Lec) F
Prerequisite: AVFT 143. Commercial Flight Maneuvers, Airplane Aerodynamics, Advanced Performance, Power plants (including fuel injection and turbo-charging), Environmental Control Systems and Retractable Landing Gear Systems will be taught. Also, airports (marking and lighting) will be reviewed. Advanced Weight and Balance, and Part 61, 91, 125, and 135 and NTSB 830 Commercial Pilot Regulations will build on the private pilot regulations learned earlier. High Altitude Physiology, and High Performance and Turbine-Aircraft Flight Operations will be emphasized.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.