

COURSE DESCRIPTIONS

Course Numbering System

100 – 299 Lower Level Applicable to Associate in Applied Science Degrees

Classes offer student faculty ratio of 15:1

Flight training ratio 1:1

**Indicates prerequisite(s) are required.*

Course Descriptions

AVN 110 – 5 Credits

Private Pilot Ground School

This course provides the knowledge necessary to pass the FAA Private Pilot, Airplane knowledge examination. Knowledge gained from the course will be used in flight training. FAA Approved.

No prerequisite.

AVN 120* – 5 Credits

Commercial Pilot Ground School

This course provides the knowledge necessary to pass the FAA Commercial Pilot, Airplane knowledge examination. Knowledge gained from the course will be used in flight training. FAA Approved.

Prerequisite: AVN 110 or instructor permission.

AVN 130* – 5 Credits

Instrument Pilot Ground School

This course provides the knowledge necessary to pass the FAA Instrument Pilot, Airplane knowledge examination. Knowledge gained from the course will be used in flight training. FAA Approved.

Prerequisite: AVN 110 or instructor permission.

AVN 140* – 5 Credits

Flight/Ground Instructor Ground School

This course provides the knowledge necessary to pass the FAA Fundamentals of Instruction and Flight Instructor knowledge exams. Upon completion the student will apply knowledge toward flight training. FAA Approved.

Prerequisite: AVN 120 or instructor Permission.

AVN 150* – 5 Credits

Aviation Weather

This course covers the theory of weather and weather phenomena. The interpretation of weather charts will be discussed in detail. This course explores all facets of weather including local weather patterns and high altitude weather.

Prerequisite: Acceptable scores on the ASSET test, ENGL 111, or advisor approval.

AVN 151* – 5 Credits

Current Aviation Problems

This course explores the rapidly changing field of aviation. A brief history of aviation in the United States will be discussed followed by an in-depth look into the changes that have taken place regarding commercial air travel due to geopolitical influences, the world-wide economy, and consumer confidence. Students will solve current aviation problems using case studies.

Prerequisite: Acceptable scores on the ASSET test, ENGL 111, or advisor approval.

AVN 152* – 5 Credits

Air Taxi Operations

This course provides an introduction to commercial pilot Air Taxi (charter) operations. A student will gain general knowledge of 14 CFR Parts 119 and 135 as they pertain to air taxi certification.

Prerequisite: Acceptable scores on the ASSET test, or advisor approval.

AVN 210 – 5 Credits

ATC & The Instrument Pilot

This course provides an overview of the development and application of Air Traffic Control (ATC) separation standards and procedures for the control of instrument flight in controlled airspace.

AVN 211* – 5 Credits

Aviation Safety

This course examines the various hazards associated with flying and is designed to assist pilots in developing sound countermeasures in reducing these hazards. Strong emphasis will be on Crew Resource Management (CRM) and training techniques. *Prerequisite: Acceptable scores on the ASSET test, ENGL 111, or advisor approval.*

AVN 212* – 5 Credits

Airport Management

This course offers a definitive study of the requirements necessary to manage a public airport. Airport & Airway systems will be introduced. A student will also study the government agencies, which are involved in monitoring airport activities. Additional topics to be explored: planning funding, growth management, and airport operations.

Prerequisite: Acceptable scores on the ASSET test, ENGL 111, or advisor approval.

AVN 213* – 5 Credits

Aviation Law

This course is an introduction to the analysis of aviation legislation and its effect on the industry. Topics covered include litigation, product liability, airport expansion, and special interest groups.

Prerequisite: Acceptable scores on the ASSET test, ENGL 111, or advisor approval.

AVN 214* – 5 Credits

Aviation History

This course is a survey of the pursuit of flight from; Kitty Hawk to modern times. Emphasis will be on heavier-than-air flight, beginning with the first flight made by the Wright brothers.

Prerequisite: Acceptable scores on the ASSET test, ENGL 111, or advisor approval.

AVN 215- 2 Credits

Aviation Aerodynamics

The student will gain an understanding of the aerodynamics associated with flight. Including but not limited to: theories of flight, drag, lift, thrust and weight as well as how it affects all phases of flight.

AVN 216- 3 Credits

Aircraft Systems

The student will gain a deep level of understanding of the systems of different types of aircraft. The student will learn about aircraft engines, electrical systems, control systems, navigation systems and instrument systems.

AVN 221* – 1 Credit

Private Pilot 1, Flight

This course completes the first stage of the Private Pilot Certificate syllabus. During this course, the student will gain all the necessary knowledge and training to solo an aircraft.

Prerequisite: Private Pilot Ground (AVN 110) or instructor's approval.

AVN 231*- 2 Credits

Private Pilot 2, Flight

This course completes the second stage of the Private Pilot Certificate syllabus. During this stage, the student will become familiar with solo operations as well as cross-country procedures. At the completion of the stage, the student will be ready to complete cross-country flights while flying solo.

Prerequisite: Private Pilot 1, Flight (AVN 221) or instructor's approval.

AVN 241*- 2 Credits

Private Pilot 3, Flight

This course prepares the student for the FAA Private Pilot Practical Examination. Successful completion of this course will certificate the student to act as pilot in command of single engine aircraft carrying passengers or property but not for compensation or hire.

Prerequisite: Private Pilot 2, Flight (AVN 231) or instructor's approval.

AVN 222 *– 3 Credits

Commercial Pilot 1, Flight

This course completes the first stage in the Commercial Pilot. Focus will be on mastering the skills of Cross-Country Flight procedures as well as gaining ample experience in solo operations. Successful completion will allow the student to continue into Commercial Pilot 2.

Prerequisite: Private Pilot Certificate.

AVN 232 *– 4 Credits

Commercial Pilot 2, Flight

This course completes Stage 5 of the Commercial Pilot Syllabus. During this course, the student will acquire the skills to fly a complex aircraft as Pilot-In-Command.

Prerequisite: Commercial Pilot 1, Flight (AVN 222) or instructor's approval.

AVN 242*- 3 Credits

Commercial Pilot 3, Flight

This course prepares the student for the FAA Commercial Pilot Practical Examination. Successful completion of the course will certificate the pilot to act as pilot in command of a single engine aircraft and be compensated (or for hire). Focus will be on flying complex aircraft as well as gaining mastery in manipulating the aircraft.

Prerequisite: Commercial Pilot 2, Flight (AVN 232) or instructor's approval.

AVN 223- 2 Credits

Instrument Pilot 1, Flight

During this course, the student will complete Stage 1 of the Instrument Syllabus. The student will master piloting an aircraft solely by reference to instruments and prepare them for the second stage of the Instrument Syllabus.

Prerequisite: Instrument Pilot Ground (AVN 130) or Instructor's Approval.

AVN 233*- 1 Credits

Instrument Pilot 2, Flight

The student will complete Stage 2 of the Instrument Syllabus. During this course, the student will master radio communications with Air Traffic Control as well as learn about departure, enroute and arrival procedures.

Prerequisite: Instrument Pilot 1, Flight (AVN 223) or instructor's approval.

AVN 243*-1 Credits

Instrument Pilot 3, Flight

The student will complete stage 3 in the Instrument Syllabus. Students are prepared for the FAA Instrument Rating Practical Examination. Successful completion of the course will allow the pilot to act as pilot in an aircraft that is being flown by sole reference to instruments in actual or simulated instrument conditions.

Prerequisite: Instrument Pilot 3, Flight (AVN 233) or instructor's approval.

AVN 224* – 2 Credits

Flight Instructor 1, Flight

The student will complete Stage 1 of the Flight Instructor Syllabus. The student will focus on learning to apply Fundamentals of Instruction concepts as well as learning to fly from the right seat of the aircraft.

Prerequisite: Flight Instructor, Ground (AVN 140) or Instructor's permission

AVN 234*- 3 Credits

Flight Instructor 2, Flight

The student is prepared for the FAA Flight Instructor Practical Examination. Successful completion of this course will allow the Instrument rated Commercial pilot to teach both the flight and ground subjects appropriate to the instructor certificate attained. *Prerequisite: Flight Instructor 1, Flight (AVN 224) or instructor's approval.*

AVN 240* – 3 Credits

Flight Instructor, Instrument

This course is designed to prepare the student for both the FAA Instrument Instructor written exam and the FAA Practical Exam. Upon successful completion of the course the pilot will be able to train students in the fundamentals of instrument flight. FAA Approved.

Prerequisite: Student must possess a flight instructor certificate.

AVN 250* – 3 Credits

Multi-engine Rating

This course is designed to prepare the student for the FAA Multiengine Rating Practical Examination. Successful completion of this course will allow the pilot to act as pilot in command of a multiengine airplane. FAA Approved.

Prerequisite: Advanced Single-Engine Operations (AVN 280) or Commercial Pilot 3, Flight (AVN 2420) or Instructor's Permission.

AVN 251* – 5 Credits

Flight Instructor, Multi-engine

This course is designed to enable the student to obtain an additional rating on the flight instructor certificate that allows them to instruct in a Multi-engine Airplane. FAA Approved.

Prerequisite: Flight Instructor, Flight 2 (AVN 234) and Multi-engine Rating (AVN 250) or instructor's approval.

AVN 260* – 5 Credits

Airline Transport Pilot, Ground

This course is designed to prepare the student for the FAA Airline Transport Pilot knowledge examination. FAA Approved.

Prerequisite: Commercial Pilot 3(AVN 242).

AVN 261* – 5 Credits

Airlines Transport Pilot, Flight

This course is designed to prepare the student for the FAA ATP Practical Examination. FAA Approved. *Prerequisite: Commercial Pilot 3(AVN 242).*

AVN 270* – 5 Credits

Flight Engineer Ground School

This course provides the knowledge necessary to pass the FAA Flight Engineer Turbojet and Basic Examination. Knowledge gained from the course will be used in flight training.

Prerequisite: Commercial Pilot 3(AVN 242).

AVN 280*- 2 Credits

Advanced Single-Engine Operations

The student will acquire training in advanced single engine operations in a complex aircraft as well as an aircraft equipped with a Glass Cockpit. The student will receive a completion certificate for the Glass Cockpit experience in a Cirrus aircraft.

Prerequisite: Private Pilot 3, Flight (AVN 241)

AVN 281*- 2 Credits**Single-Engine Rating, Commercial**

This course prepares a student who has received their initial Commercial Pilot Certificate in an aircraft other than a Single-Engine to pass the Single-Engine Rating. The student will develop skills in commercial maneuvers as well as mastery of the aircraft.

Prerequisite: Commercial Pilot Certificate

AVN 282*- 3 Credits**Multi-Engine Rating, Commercial**

This course prepares a student who has received their initial Commercial Pilot Certificate in an aircraft other than a Multi-Engine Land airplane to pass the Multi-Engine Land rating. The student will develop mastery of the aircraft.

Prerequisite: Commercial Pilot Certificate

BA 107* – 5 Credits**Business Math**

This course covers basic arithmetic and algebraic fundamentals and the applications to typical business problems. Major economic changes that have influenced wages, interest rates, social security, taxes, income taxes, the stock and bond market and consumer prices are presented in a mathematical format. *Prerequisite: Acceptable scores on the ASSET test, or advisor approval.*

SPCH 101* – 5 Credits**Speech Communications**

The student will explore communications theory, and practical applications of that theory. Verbal and non-verbal forms of communication and barriers to effective communications will also be covered. *Prerequisite: ENGL 111, acceptable scores on the ASSET test, or advisory approval.*

PHYS 101* – 5 Credits**Conceptual Physics**

This course will survey physics at a conceptual level, integrating the principles of physics into an aviation background as well as relating them to everyday life. *Prerequisite: MA 111/BA 107, acceptable scores on the ASSET test, or advisor approval*

ENG 111* -5 Credits**Technical Writing**

This course will teach the student principles of organizing, developing, and expressing technical information in written form. The course will examine rhetorical patterns common to technical subject matter. In addition, the course will allow the student the opportunity to utilize these skills in the aviation field.

Prerequisite: ENGL 111, acceptable scores on the ASSET test, or advisory approval.

MA 111* – 5 Credits

Basic Algebra and Trigonometry

This course offers a study of basic laws of fractions, scientific notation exponents, radicals, inequalities, quadratic equations, complex numbers, elements of trigonometry, and the use of calculator functions in finding solutions. *Prerequisite: Acceptable scores on the ASSET test, or advisor approval.*

PSYC 110* – 5 Credits

Introduction to Psychology

This course covers the scientific survey of human behavior, biological and social basis of behavior, cognition, motivation, emotion, perception, and personality. This course will place the topics described in an application setting utilizing the individual as a model, (especially as applied to the field of aviation).

Prerequisite: Acceptable scores on the ASSET test, or advisor approval.