

AVIATION SCIENCES (AVSC)

AVSC 102 Flight School Orientation 3 Credit hours

An orientation course for students enrolled in the flight school. Topics to include pilot training regulations and procedures, safety and security, federal aviation organizations, and career opportunities.

Grade Mode: Normal Grading Mode

AVSC 105 Transition Lab 1 Credit hour

Students admitted to the program who hold FAA certifications will learn the operation of Marshall's aircraft at a level commensurate with his or her FAA certification.

Grade Mode: Credit/No Credit Grade Only

AVSC 200 Private Pilot Ground School 4 Credit hours

An introductory overview of aviation fundamentals as required by the Federal Aviation Administration regulations for students pursuing a Private Pilot certificate.

Pre-req: AVSC 205 (may be taken concurrently) with a minimum grade of D.

Concurrent PR: AVSC 205

Grade Mode: Normal Grading Mode

AVSC 205 Solo Flight Lab 1 Credit hour

A course designed to prepare students for pilot's first solo flight.

Pre-req: AVSC 200 (may be taken concurrently) with a minimum grade of D.

Concurrent PR: AVSC 200

Grade Mode: Normal Grading Mode

AVSC 210 Private Pilot Cert ASEL Lab 2 Credit hours

A course designed to prepare students to pass the Federal Aviation Administration Private Pilot Practical Exam: ASEL

Pre-req: AVSC 200 with a minimum grade of D and AVSC 205 with a minimum grade of D.

Grade Mode: Normal Grading Mode

AVSC 215 Instrument Ground School 3 Credit hours

A course designed to teach pilots to fly an airplane using only instruments as required by Federal Aviation Administration regulations for the Instrument Flight Rules rating.

Pre-req: AVSC 205 (may be taken concurrently) with a minimum grade of D or AVSC 210 (may be taken concurrently) with a minimum grade of D.

Concurrent PR: AVSC 205 or AVSC 210

Grade Mode: Normal Grading Mode

AVSC 220 Instrument Certification Lab 3 Credit hours

A course designed to prepare students to pass the Federal Aviation Administration Instrument Practical Exam.

Pre-req: AVSC 210 with a minimum grade of D and AVSC 215 with a minimum grade of D.

Grade Mode: Normal Grading Mode

AVSC 221 Flight Management Systems 3 Credit hours

This course familiarizes students with popular flight management systems in use in aircraft today and introduces flight management systems that may still be in various stages of development.

Grade Mode: Normal Grading Mode

AVSC 231 Aviation Law and Regulations 3 Credit hours

This course familiarizes students with the Federal Aviation Regulation, certification standards, air transportation operational oversight and law governing commercial aviation.

Grade Mode: Normal Grading Mode

AVSC 241 AV Safety and Human Factors 3 Credit hours

This course familiarizes students with the Federal Aviation Regulations, aircraft certification, all weather operations, and the impacts of stress in aviation.

Grade Mode: Normal Grading Mode

AVSC 250 Commercial Phase II AMEL Lab 3 Credit hours

A course designed to prepare students to pass the Federal Aviation Administration Commercial Pilot Practical Exam for multi-engine airplane.

Pre-req: AVSC 235 (may be taken concurrently) with a minimum grade of D and (AVSC 225 with a minimum grade of D or AVSC 230 with a minimum grade of D).

Concurrent PR: AVSC 235

Grade Mode: Normal Grading Mode

AVSC 255 Initial CFI AMEL Lab 3 Credit hours

A course designed to train students to become Federal Aviation Administration certified flight instructors required of a Private and Commercial Pilot.

Pre-req: AVSC 235 with a minimum grade of D and (AVSC 240 with a minimum grade of D or AVSC 275 with a minimum grade of D).

Grade Mode: Normal Grading Mode

AVSC 260 ASEL Private Add-On Lab 1 Credit hour

Designed to prepare pilots to complete the Federal Aviation Administration's ASEL practical exam.

Pre-req: AVSC 204 with a minimum grade of D.

Grade Mode: Normal Grading Mode

AVSC 265 AMEL Private Add-On Lab 1 Credit hour

Designed to prepare pilots to complete the Federal Aviation Administration's AMEL private practical exam.

Pre-req: AVSC 204 with a minimum grade of D or AVSC 260 with a minimum grade of D.

Grade Mode: Normal Grading Mode

AVSC 270 Commercial ASEL Add-On Lab 1 Credit hour

Designed to prepare pilots to complete the Federal Aviation Administration's Commercial Pilot ASEL Practical Add-On Exam.

Pre-req: AVSC 220 with a minimum grade of D or AVSC 250 with a minimum grade of D.

Grade Mode: Normal Grading Mode

AVSC 290 CFI ASEL Add On Lab 1 Credit hour

Designed to prepare pilots to complete the Federal Aviation Administration's Certified Flight Instructor Add-On Practical Exam.

Pre-req: AVSC 255 with a minimum grade of D.

Grade Mode: Normal Grading Mode

AVSC 295 CFI AMEL Add-On Lab 1 Credit hour

Designed to prepare pilots to complete the Federal Aviation Administrations AMEL Certified Flight Instructor Add-On Practical Exam.

Pre-req: AVSC 245 with a minimum grade of D.

Grade Mode: Normal Grading Mode

- AVSC 300 Tailwheel Transition Lab** **1 Credit hour**
 Designed to prepare pilots to earn a tail-wheel endorsement from the Federal Aviation Administration.
Pre-req: AVSC 210 with a minimum grade of D or AVSC 260 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 305 CFII Lab** **1 Credit hour**
 Designed to prepare pilots to pass the FAA Certified Flight Instructor Instrument Practical Exam.
Pre-req: AVSC 245 with a minimum grade of D or AVSC 280 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 310 Aircraft Sys and Powerplants** **3 Credit hours**
 This course familiarizes students with the Federal Aviation Regulations relating to aircraft certification of systems and the various powerplants for fixed wing aircraft.
Grade Mode: Normal Grading Mode
- AVSC 315 Airport Operations and Mgmt** **3 Credit hours**
 This course familiarizes students with the Federal Aviation Regulations relating to certification of airport systems and examines the policies and procedures for the Airport Improvement Plan (AIP).
Grade Mode: Normal Grading Mode
- AVSC 320 Flight Phys and Human Factors** **3 Credit hours**
 This course familiarizes students with the Federal Aviation Regulations relating to flight physiology, oxygen systems, and human factors impacting pilot flight operations.
Grade Mode: Normal Grading Mode
- AVSC 325 Ntnl Airspace Sys and NextGen** **3 Credit hours**
 An overview of the US National Airspace System and an in-depth analysis of the methods and procedures used in controlling air traffic.
Grade Mode: Normal Grading Mode
- AVSC 329 Commerical Ground School** **3 Credit hours**
 A study of commercial flight fundamentals as required by Federal Aviation Administration regulations for students pursuing a Commercial Pilot certificate.
Pre-req: AVSC 210 with a minimum grade of D and AVSC 215 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 330 Commercial Phase I Lab** **3 Credit hours**
 A continued review of topics required for flying an airplane in VFR & IFR environments during day and night cross-country flights, and development of Pilot and Command decision-making skills.
Pre-req: AVSC 220 with a minimum grade of D and AVSC 226 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 335 CFI Ground School** **3 Credit hours**
 Review the instruction fundamentals required by the FAA for pilots pursuing a Certified Flight Instructor rating.
Pre-req: AVSC 325 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 340 Commercial Phase II ASEL Lab** **3 Credit hours**
 A course designed to prepare students to pass the Federal Aviation Administration ASEL Commercial Practical Exam.
Pre-req: AVSC 335 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 345 Initial CFI ASEL Lab** **3 Credit hours**
 A course designed to train to become Federal Aviation Administration certified flight instructors.
Pre-req: AVSC 340 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 355 Aviation Weather** **3 Credit hours**
 A study of atmospheric conditions on aeronautic operations. Topics include atmospheric properties, aviation hazards including thunderstorms, wind shear, turbulence, icing, and weather flight resources.
Pre-req: GEO 230 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 375 Commercial AMEL Add-On Lab** **1 Credit hour**
 Designed to prepare pilots to complete the Federal Aviation Administration's Instrument Practical exam and Commercial Pilot Add-On Practical exam for multi-engine airplane.
Pre-req: AVSC 210 with a minimum grade of D or AVSC 260 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 405  Business Aviation** **3 Credit hours**
 This capstone is a study of business aviation operations, management, and finance to include corporate, fractional, charter, Fixed Base Operator (FBO), and various aviation business models.
Attributes: Capstone Course
Grade Mode: Normal Grading Mode
- AVSC 410 Air Transportation Operations** **3 Credit hours**
 An overview of the airline industry and an in-depth analysis of key management functions within an airline.
Grade Mode: Normal Grading Mode
- AVSC 450 Crew Resource Management** **3 Credit hours**
 Within this capstone course, students will examine the principles of proper crew collaboration that reduce the risk of accidents caused by human behavior.
Pre-req: AVSC 200 with a minimum grade of D or AVSC 210 with a minimum grade of D or AVSC 215 with a minimum grade of D or AVSC 220 with a minimum grade of D or AVSC 225 with a minimum grade of D or AVSC 230 with a minimum grade of D or AVSC 235 with a minimum grade of D or AVSC 240 with a minimum grade of D or AVSC 245 with a minimum grade of D or AVSC 250 with a minimum grade of D or AVSC 255 with a minimum grade of D or AVSC 260 with a minimum grade of D or AVSC 265 with a minimum grade of D or AVSC 270 with a minimum grade of D or AVSC 275 with a minimum grade of D or AVSC 290 with a minimum grade of D or AVSC 295 with a minimum grade of D.
Grade Mode: Normal Grading Mode
- AVSC 495 Internship in Aviation Ops** **3 Credit hours**
 Student will participate in an internship as coordinated with their assigned advisor. The internship allows students to apply those flight instruction and classroom instruction skillsets appropriate to the respective internship.
Grade Mode: Normal Grading Mode