



## AVSC 1100 – X01

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <https://catalog.uvu.edu/>

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**Semester:** Fall

**Year:** 2025

**Course Prefix:** AVSC

**Course and Section #:** 1100 X01

**Course Title:** Ground I - Private

**Credits:** 3

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### ***Course Description***

Introduces the entry-level student to the airplane as they prepare for flight training. Stresses airport systems, air traffic control procedures, aviation weather, air navigation, radio communication procedures, and Federal Aviation Regulations. Prepares students for the required FAA Private Pilot Airplane Knowledge Test.

### ***Course Attributes***

This course has the following attributes:

- ☐ General Education Requirements
- ☐ Global/Intercultural Graduation Requirements
- ☐ Writing Enriched Graduation Requirements
- ☒ Discipline Core Requirements in Program
- ☐ Elective Core Requirements in Program
- ☐ Open Elective

Other: *Click here to enter text.*

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### ***Instructor Information***

**Instructor Name:** Broadbent, Devin

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### ***Student Learning Outcomes***

- Explain the aerodynamic principles of flight that affect aircraft operation.
  - Apply knowledge of airports, airspace, radio communication, air traffic control and radar services to private pilot level aircraft operations.
  - Analyze aircraft components and systems, performance and weight and balance.
  - Apply knowledge of meteorology, weather reports, forecasts, and charts to the planning and conduct of flight operations.
  - Explain Federal Aviation Regulations as they apply to private pilot operations.
  - Apply knowledge of pilotage, dead reckoning, and radio navigation in conjunction with the aeronautical charts, plotters, flight computers, and flight publications necessary for cross-country flight.
  - Describe the physiological factors which can affect both pilots and passengers during flight.
  - Evaluate all flight data during the pre-flight and in-flight decision-making process.
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### ***Course Materials and Texts***

## **REQUIRED COURSE TEXTS:**

- Pilot's Handbook of Aeronautical Knowledge (PHAK), **FAA-H-8083-25C (2024 Version)**.
- Federal Aviation Regulations/Aeronautical Information Manual (**FAR/AIM 2025**).

Other (Optional) Important Supplementary Materials/Study References for AVSC 1100 (and 1110):

- Airplane Flying Handbook (AFH) FAA-H-8083-3B.
- Diamond DA40 Flight Information Manual (AFM)
- Airman Certification Standards (ACS): Private Pilot Airplane Single-Engine Land (ASEL)
- Southwest Chart Supplement/Airport Facility Directory
- Salt Lake City and Las Vegas Sectional Charts
- Plotter
- E6B Calculator

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## ***Course Requirements***

### **Course Assignments, Assessments, and Grading Policy**

#### **COURSE DESCRIPTION AND OBJECTIVES:**

The purpose and objective of AVSC 1100 Private Pilot Ground is to introduce aviation, and specifically the airplane, to entry-level student pilots as they prepare for flight training. Various subject areas, such as airport systems and environment, air traffic control procedures, aviation weather, air navigation, radio communication procedures, and the Federal Aviation Regulations (FARs), will be covered. Please note that your primary goal is to prepare for and pass the FAA Private Pilot Knowledge Exam known as the "PAR" exam (Private Airplane Rating), unless you are a aviation management student.

This course is also required as part of your FAA Part 141 flight training. You must attend every class period to receive instruction in all FAA-required aeronautical knowledge subject areas and complete all exams. Failure to attend and complete all work may prevent you from completing this course, which could delay any subsequent training or even dismissal from the UVU flight training program.

Students will find many subject areas interesting, some challenging, with perhaps other topics less engaging. However, every subject covered is essential if becoming an accomplished and safer pilot is to be realized. While actual flight training is fun and exciting, this ground course is essential and required by federal regulation (Part 61). Ground training is fundamental in gaining the necessary knowledge and understanding of crucial subject areas before, or concurrent with, actual flight training. This course will be challenging but enjoyable for those truly interested in pursuing a pilot certificate.

#### **COURSE COMPLETION REQUIREMENTS:**

To complete this course successfully, you must: 1) Attend or make up all class periods, 2) Complete Stage Exams I & II and the "PAR Endorsement" assignment, 3) Complete quizzes when available, and 4) Pass the FAA Knowledge Exam with a minimum score of 70% to meet FAA requirements only, not UVU requirements.

**\*\*\*EXTREMELY IMPORTANT\*\*\*:** Please note that, while the minimum passing score for all FAA written exams is "70% (a "C-"), the UVU flight program requires higher standards. Students who are enrolled in AVSC 1100 will be required to pass this course with a minimum points total equivalent to

80% (“B-“) to qualify for AVSC 1110, the UVU private pilot flight training course. Furthermore, AVSC 1100 students who meet this minimum standard will be required to enroll in AVSC 1110 Private Pilot Flight for Summer 2025, if they plan to fly at UVU, no exceptions. **Please note that if ANY course requirement or expectation is unclear, do not hesitate to ask for clarification.**

#### GRADING CRITERIA:

(NOTE: Course grades will be based on standard UVU grading criteria).

| Item                                 | Points     |
|--------------------------------------|------------|
| <b>Quizzes (6)</b>                   | <b>120</b> |
| <b>Stage Exam 1</b>                  | <b>60</b>  |
| <b>Stage Exam 2</b>                  | <b>60</b>  |
| <b>Assignment: “PAR” Endorsement</b> | <b>60</b>  |
| <b>FAA Written Exam</b>              | <b>300</b> |
| <b>**Extra Credit Final Exam</b>     | <b>*30</b> |
| <b>Total</b>                         | <b>600</b> |

#### Required or Recommended Reading Assignments

Pilot's Handbook of Aeronautical Knowledge (PHAK), FAA-H-8083-25C (2024 Version). Federal Aviation Regulations/Aeronautical Information Manual (FAR/AIM 2025).

#### General Description of the Subject Matter of Each Lecture or Discussion

| Spring | 1100-1 Private Pilot Course Schedule | 2025 |
|--------|--------------------------------------|------|
|--------|--------------------------------------|------|

  

| Date      | Topic/Aeronautical Subject Area                                  | Reading Assignment                            |
|-----------|--|---|
| 6-Jan     | Private Pilot Course Introduction, Objectives/Requirements       | Syllabus Review/Essential Information Handout |
| 8-Jan     | Essential Information/Intro to Regulations                       | PHAK Ch.1: Intro to Flying...                 |
| 13-Jan    | Human Factors/Fitness for Flight                                 | PHAK Ch. 2: ADM/Human Factors                 |
| 15-Jan    | Aeromedical Factors/Aviation Physiology                          | PHAK Ch.17: Aeromedical Factors               |
| 20-Jan    | <b>Holiday</b>   | <b>No Class</b>                               |
| 22-Jan    | Predicting Performance   | PHAK Ch. 9-10-11                              |
| 27-Jan    | Weight & Balance   | "   |
| 29-Jan    | Airplane Principles / Flight Computer Introduction / Four Forces | PHAK Ch. 4, Ch. 5-1 to 5-11                   |
| 3-Feb     | Aerodynamic Stability  | PHAK Ch. 5-12 to 5-25                         |
| 5-Feb     | Maneuvering Flight   | PHAK Ch. 5-22 to 5-49                         |
| 10-Feb    | Basic Systems: Airframe  | PHAK Ch. 3 & 6                                |
| 12-Feb    | Basic Systems: Powerplants/Hangar Tour                           | PHAK Ch. 7                                    |
| 17-Feb    | <b>Holiday</b>   | <b>No Class</b>                               |
| 19-Feb    | Basic Systems: Flight Instruments                                | PHAK Ch. 8                                    |
| 24-Feb    | Flight Instruments Cont.   | "   |
| 26-Feb    | <b>Stage 1 Exam - Online: Canvas</b>                             | <b>Exam 1</b>                                 |
| 3-Mar     | Safety of Flight/Airports  | PHAK Ch. 14                                   |
| 5-Mar     | RADAR-ATC & Radio Procedures                                     | "   |
| Mar 10-15 | <b>Spring Break</b>  | <b>No Classes</b>                             |
| 17-Mar    | Airspace   | PHAK Ch. 15                                   |
| 19-Mar    | Navigation: Aeronautical Charts                                  | PHAK Ch. 16                                   |
| 24-Mar    | Navigation: Flight Planning-Pilotage-Dead Reckoning/VOR/EFD      | "   |
| 26-Mar    | Navigation Cont.   | "   |
| 31-Mar    | Weather (WX)-1: Basics   | PHAK Ch. 12 & 13                              |
| 2-Apr     | WX-2: Hazards  | "   |
| 7-Apr     | WX-3: Products/Reports   | "   |
| 9-Apr     | NTSB 830   | FAR/AIM NTSB 830                              |
| 14-Apr    | <b>Stage 2 Exam - In Class</b>                                   | <b>Exam 2-In Class</b>                        |
| 16-Apr    | Stage 2 Review/MTX Visit   | Lecture Guest: AVIATES & Checkride Prep.      |
| 21-Apr    | TBD  |   |
| 28-Apr    | <b>Extra Credit Final Exam</b>                                   | <b>Finals Week</b>                            |
| 30-Apr    | <b>Official FAA Written Exam Result Due</b>                      | <b>"PAR" Submitted/Course Complete</b>        |

Course Text: Pilot's Handbook of Aeronautical Knowledge (PHAK, FAA-H-8083-25C (2024 is the latest version)).

Scheduled course time = 32.5 hours

## ***Required Course Syllabus Statements***

### **Generative AI**

You may use AI programs e.g. ChatGPT to help generate ideas and brainstorm. However, you should note that the material generated by these programs may be inaccurate, incomplete, or otherwise problematic. For example, AI-generated language programs are known to "hallucinate", i.e. create references to non-existent resources. Beware that use of AI may also stifle your own independent thinking and creativity.

You may not submit any work generated by an AI program as your own. If you include material generated by an AI program, it should be cited like any other reference material (with due consideration for the quality of the reference, which may be poor).

Any plagiarism or other form of cheating will be dealt with severely under relevant UVU Plagiarism policies as described in the [UVU Student Code of Conduct](#), UVU Policy [541](#).

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### **Using Remote Testing Software**

☒ This course does not use remote testing software.

☐ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

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## ***Required University Syllabus Statements***

### **Accommodations/Students with Disabilities**

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU [Accessibility Services](#) at [accessibilityservices@uvu.edu](mailto:accessibilityservices@uvu.edu) or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at [DHHservices@uvu.edu](mailto:DHHservices@uvu.edu)

DHH is located on the Orem Campus in BA 112.

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### **Academic Integrity**

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that

produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](#). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in [UVU Policy 541: Student Code of Conduct](#).

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### **Equity and Title IX**

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – [TitleIX@uvu.edu](mailto:TitleIX@uvu.edu) – 800 W University Pkwy, Orem, 84058, Suite BA 203.

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### **Religious Accommodation**

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at [accessibilityservices@uvu.edu](mailto:accessibilityservices@uvu.edu). If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a [specially dedicated space](#) for meditation, prayer, reflection, or other forms of religious expression.