



Flight Science Program Student Handbook

Effective March 2018



Flight Science Program Description

Reedley College Personnel Contact Information for the Flight science Degree:

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The Reedley College Flight Science degree is designed to provide students with the education, training, and certification required of entry-level Commercial Pilots and Flight Instructors.

Upon successful completion of this degree, students will have earned the following Federal Aviation Administration (FAA) pilot certificates and ratings:

Private Pilot – Airplane Single Engine Land
Instrument Rating – Airplane
Commercial Pilot – Airplane Single Engine Land
Flight Instructor – Airplane Single Engine Land

All Reedley College and State Center Community College standards, practices, policies, and rules apply to students in this program. Additional policies apply to students in the Flight Science degree and are listed in this Student handbook and in the syllabus for each Flight Science course. Students must refer to the current version of the Reedley College catalog for specifics as a student of Reedley College, refer to this Student Handbook for all Flight Science courses, and to the syllabus for each Flight Science course.

The Flight Science degree is compliant with Federal Aviation Regulations (FARs). At all times, students shall comply with all FARs. Academic standards in ground schools and in flight labs are based on FARs and student success and will not be waived. When standards in any course are higher than as outlined in the Reedley College catalog, the syllabus for that course will be specific in outlining those higher standards.

The FAA requires a certain progression of training courses to earn the pilot certificates in this program. Although the Flight Science degree is designed for students without any previous aviation or technical background, a solid readiness for academic performance is required to succeed in this program. Students must be aware that a high degree of dedication, motivation, and perseverance is required to successfully earn all the pilot certificates in this program and then be eligible to enter a career as a professional airplane pilot or airplane flight instructor.

Financial Aid

Flight Science lab courses have significant lab fees. Most flight lab courses also have additional expenses in addition to the lab fees. Therefore, students must be aware of the financial aid alternatives available to them to fund their completion of required courses, not just during the first or second semester, but through completion of the entire program. It is strongly recommended that students contact the Reedley College Financial Aid Office as far in advance of entry into the program as possible and then maintain regular communication with the Office while a student is in the program. Continuous communication with the Financial Aid Office will help ensure all procedures are being followed to maximize a student's ability to fund this program.

Veterans' Benefits

Students applying U.S. Department of Veterans Affairs (VA) benefits to the costs of this program may be able to apply those benefits toward enrollment fees ("tuition") and lab fees associated with this program. Program specific costs that are **NOT** covered by VA benefits are: FAA Testing Costs and Flight Equipment Costs. These uncovered costs average just under \$1,000 per semester (for six semesters). Other college costs may also not be covered by VA benefits. It is strongly recommended that students planning to apply VA benefit funds to the costs associated with this program meet with the Reedley College VA Services Counselor as far in advance of entry into the program as possible to determine eligibility and to determine what costs are or are not covered by VA benefits. Federal financial aid may also be available to qualified students who are using VA benefits.

The U.S. Department of Veterans Affairs only allows new students using VA benefits to enter a college program if no more than 85% of the students already in the program are using VA benefits. If more than 85% of the existing students are using VA benefits, then no new students may enter the program using VA benefits. This VA rule limits how many new students using VA benefits may enter the Reedley College Flight Science degree in any given semester. Approximately 30 days prior to each semester, the College will determine how many new students using VA benefits can enter the program and notify students whether they can enter the program at that time.

As long as an existing student continues to take classes required for the program every semester, the VA 85% rule does not apply to those existing students and they can continue every semester.

Sometimes, a student may not be able to take a full load of college classes. This may cause a lower than planned VA housing allowance and book stipend. Unexpected costs may also occur in any semester. It is highly recommended all students using VA benefits apply for federal financial aid through the College Financial Aid Office.

Program Admission

Students wishing to take Flight Science courses must receive permission to register for the first semester of

Flight Science courses. This permission process **is in addition** to admission as a student into Reedley College. The request for permission form is on the last page of this handbook. Complete this form and submit to the Flight Science Program Coordinator via hardcopy or email. Once permission is granted, students may take non-lab courses in accordance with the standard policies listed in the college catalog.

Flight Science non-lab courses:

FLGHT 101 Private Pilot Ground School
FLGHT 102 Aviation History
FLGHT 103 Careers in Aviation
FLGHT 111 Instrument Pilot Ground School
FLGHT 112 Advanced Navigation
FLGHT 113 Advanced Meteorology
FLGHT 121 Commercial Pilot Ground School
FLGHT 122 Fundamentals of Air Traffic Control
FLGHT 123 Human factors & Crew Resource Management
FLGHT 131 Flight Instructor Ground School

Flight Science Program lab courses have federal government requirements prior to taking an actual flight lesson.

Flight Science lab courses:

FLGHT 105 Private Pilot Flight Lab
FLGHT 106 Advanced Private Pilot Flight Lab
FLGHT 125 Commercial Pilot Flight Lab
FLGHT 115 Instrument Pilot Flight Lab
FLGHT 116 Advanced Instrument Pilot Flight Lab
FLGHT 126 Advanced Commercial Pilot Flight Lab
FLGHT 135 Flight Instructor Flight Lab

To take and pass a Flight Science lab course (where actual flight lessons are provided in an airplane), the student must:

1. Meet FAA medical qualifications:

The FAA requires student pilots hold at least a 3rd class medical certificate during all semesters of actual flying. This medical certificate is provided by an FAA Designated Medical Examiner (DME) upon successful completion of a medical examination. Students may search for DMEs in their area at: <https://www.faa.gov/pilots/amelocator/>. ***Note: Students planning to become airline pilots are highly encouraged to take and pass a 1st class medical instead of a 3rd class medical.***

The *original* medical certificate must be presented to the course instructor no later than the first day of the first lab class meeting.

2. Proof of eligibility to flight train in the U.S.:

Prior to beginning actual flight lessons, the Department of Homeland Security, Transportation Security Administration (TSA) requires student pilots to provide proof that they are either U.S. citizens or receive TSA approval as a non-U.S. citizen.

Citizens of the United States must present either:

- i. An *original* birth certificate plus a *valid* government issued photo ID
- Or
- ii. A *valid* U.S. passport

All originals (*no copies*) of these documents must be presented to the course instructor no later than the first day of the lab class meeting.

If a student is not a U.S. citizen, then they must apply for eligibility to receive flight training from the TSA far in advance (3-4 months) of the first day of classes. Contact the Flight Science Program Coordinator for TSA application procedures. Final TSA *approval* must be received by the instructor no later than the first day of the lab class meeting.

Once a student has provided proof of eligibility to flight train in the U.S. in their first Flight Science lab class (typically FLGHT 101), they do not need to provide this documentation in subsequent lab classes.

3. Maximum FAA allowable aircraft weight restrictions:

- a. There is a maximum FAA allowable weight of people and equipment that is safe and legal to fly in each airplane. Students weighing up to 220 lbs. may fly the VFR Aircraft (PA-38) for the majority of the flight training. Students weighing above 220 lbs. but no more than 250 lbs. may substitute and fly the IFR Aircraft (PA-28) instead of the VFR Aircraft (PA-38) for a higher aircraft cost.
- b. VA benefits are only available for the lower cost VFR Aircraft (PA-38). Any student using VA benefits must pay out-of-pocket for the extra cost for the IFR Aircraft (PA-28) since these extra costs are not covered by VA benefits.
- c. If a student appears to be close to 220 lbs. while flying the PA-38 (or close to 250 lbs. while flying the PA-28), the student must weigh-in at the beginning of each semester and may be required to weigh-in before any flight. Students must stay below the maximum allowable weight limit or they will not be able to complete the flight lab course. Exceeding the maximum student weight after the last day to drop with a full refund is not a valid reason to request the refund of a flight lab fee.

Students who elect to take **non-lab** Flight science courses only do not need to comply with requirements 1 through 3 above, but these students will be unable to earn the A.S. degree or the college certificate.

Flight Science Course Sequence

	Course	course credits
Semester 1	FLGHT 101 Private Pilot Ground School	4
	FLGHT 102 Aviation History*	2
	FLGHT 105 Private Pilot Flight Lab	1
	FLGHT 113 Advanced Meteorology**	2
	Gen-Ed/Degree Requirements	***
Semester 2	FLGHT 106 Advanced Private Pilot Flight Lab	1
	FLGHT 103 Careers in Aviation*	2
	Gen-Ed/Degree Requirements	***
Semester 3	FLGHT 121 Commercial Pilot Ground School	3
	FLGHT 125 Commercial Pilot Flight Lab	1
	FLGHT 112 Advanced Navigation*	2
	Gen-Ed/Degree Requirements	***
Semester 4	FLGHT 111 Instrument Pilot Ground School	3
	FLGHT 115 Instrument Pilot Flight Lab	1
	FLGHT 116 Advanced Instrument Pilot Flight Lab	1
	FLGHT 122 Fundamentals of Air Traffic Control*	2
	Gen-Ed/Degree Requirements	***
Semester 5	FLGHT 126 Advanced Commercial Pilot Flight Lab	1
	FLGHT 123 Human Factors & Crew Resource Management*	2
	Gen-Ed/Degree Requirements	***
Semester 6	FLGHT 131 Flight Instructor Ground School	3
	FLGHT 135 Flight Instructor Flight Lab	1
	Gen-Ed/Degree Requirements	***

* FLGHT 102, 103, 112, 122, and 123 can be taken in any semester they are offered

** FLGHT 113 may be taken concurrently with either FLGHT 105 or FLGHT 106

*** The amount of Gen-Ed and Degree Requirements credits needed each semester varies based on the background and individual needs of each student. See the Academic Counselor for more specific information. Typically, students will take at least 12 credits in the Fall and Spring semesters and 6-7 credits during the Summer semester.

Student Success

Students need to fly every semester until all ground school and flight lab courses are completed. Taking a semester off (even a summer) from flying will degrade a student's flight proficiency and dramatically reduce the likelihood of passing flight lab classes the following semester when flight training is resumed.

Students should make every effort to avoid dropping a FLGHT class at any point in the program and it is

highly recommended that students consult with the Flight Science Program Coordinator *and* the Financial Aid Office *and* the Academic Counselor prior to any schedule changes. If a student is using VA benefits, then the student also needs to see the VA Services Coordinator.

Between academic classes, ground schools, flight labs, travel to/from the Reedley College campus and the Fresno-Yosemite airport, plus homework and studying, a student will expend 40 or more hours a week on this program. It is highly recommend that students apply as much time and energy towards their flight training as possible in order to maximize their success. Students are, therefore, highly discouraged from working any job while in flight training.

Use of Student Car for Transportation

Flight Science classroom based (non-lab) courses, and General Education courses are taught at the Reedley College campus. The flight lab courses are conducted at Fresno Yosemite International Airport, 4955 E. Anderson Road, Suite 117, Fresno, CA 93727. Students must supply their own transportation to/from Reedley College and to/from the airport. Failure to attend classes or flight labs because of lack of transportation may result in a failing grade or an "I" grade. To succeed in this program, students must have continuous access to a reliable vehicle.

Flight Lab Lesson Scheduling

Every Friday afternoon, a schedule for specific student lessons within each Flight lab course will be published on the Web for the succeeding Monday – Sunday. Once this schedule is published, it is the responsibility of the student to arrive prepared and on-time for all scheduled lessons. The Flight Science Program will make every effort to adhere to the published weekly schedule. If a student flight schedule is subsequently changed from the one published, students will be notified in person or by telephone. Flight lab events will be individually scheduled and will be based on weather, aircraft maintenance issues, availability of flight instructors, and the student-provided non-availability sheet. A non-availability sheet must be filled-in and provided to the Flight Science lab instructor during the first week of classes. If a student needs to permanently (for the semester) modify that non-availability data, the student must immediately inform their specific flight instructor (who they fly with in Fresno) and also inform the Flight Science lab course instructor in writing (or via email).

Wanting to reschedule a flight event because of work, preparing for classes, leaving town, or any other circumstance within the control of the student and less than 48 hours prior to a scheduled event is not authorized and will result in an unexcused absence if the student does not show up prepared for the flight at the scheduled day/time. Except for circumstances outside the control of the student and verified by hard copy documentation, students will not be allowed to re-schedule a flight event less than 48 hours prior to the originally scheduled flight event. It is the student's responsibility to check their flight lab schedule in advance and confirm an added activity does not conflict with a scheduled flight lab event. It is the responsibility of students to work with their flight instructor and/or the Flight Program coordinator to make up any unexcused flight lab absences.

Students must be available during daylight hours and during some night hours to accomplish FAA-required

flight experience in each lab course. It is common for flight lessons to be scheduled on the weekends. Each student must be available for 3-6 flight events per week. Each flight event lasts 3-5 hours. Therefore, each student must be available to fly at the airport at least 20 hours per week, every week, during each semester they are taking a flight lab class. Flight events must be scheduled often enough to complete all flight events prior to the last day of classes of that semester. Failing to be available for scheduled flight events will cause the student to earn an "I" or "F" grade for the course.

Weather or other issues may cause a stoppage of flight lessons for a length of time. When conditions get better, the missed flight time must be accomplished in addition to accomplishing the normal flight schedule. When flights are cancelled, they will be re-scheduled as soon as possible and a student will spend significantly more than 20 hours per week to get back on schedule in order to finish the flight lab course by the end of the semester.

Student Personal Telephone Requirements

Due to the flexibility needed for scheduling around bad weather, instructor and student illnesses, and aircraft maintenance issues, all Flight Science students must have and use a cell phone or a land line with voice messaging capability. Notification to students of schedule changes in person, via direct phone contact, or via voicemail (cell or landline) is official notification of flight lesson schedule changes.

Attendance Policy

The FAA requires 100% student attendance in approved ground schools. A student must make-up any ground school time if absent from class. A maximum amount of make-up time is published in the syllabus for each ground school. Absences exceeding this maximum amount will cause the student to earn an "F" grade for the course and the course must be repeated. *A failure in a ground school will cause a failure in the associated flight lab course since passing the ground school is required by the FAA to pass the flight course.*

All aircraft flight time and instructor time must be completed in flight lab courses in order to pass each flight lab class. Failure to complete 100% of scheduled lab times may cause a grade of "I" or "F" based on whether the absences are excused or unexcused. See the syllabus for each course on definitions of excused and unexcused absences and for grading criteria. See college catalog for requirements to issue an "I" grade.

A flight lesson at the airport typical starts on the hour (e.g. 2:00 PM). Students are expected to arrive 30 minutes prior to the scheduled time (e.g. 1:30 pm) to check NOTAMS, calculate aircraft performance, calculate weight & balance, check the weather, and accomplish a visual preflight inspection of the aircraft. If a student is more than 15 minutes late (i.e. arrives after 1:45 PM), it is considered an unexcused absence. On cross-country flights, the student may need to show up 45-60 minutes prior to the scheduled lesson time to accomplish cross-country planning.

Students must finish each flight course by the last day of each semester. If a student does not complete the flight course by the last day of the semester, then a grade of "I" may be applied. Students must finish the "I" grade requirements prior to starting the next set of Flight Science ground school and flight lab courses. See the Reedley College catalog for additional requirements to issue an "I" grade.

Health Requirements

All students must take, pass, and maintain a valid FAA 3rd class or higher (1st or 2nd class) FAA medical certificate while enrolled in and flying in a flight lab course. Failure for any reason to hold and maintain a valid medical certificate is cause for immediate discontinuance of flight training. When the student regains a valid medical, the flight training will resume. Any gap in flight training lessons may cause the student to fail or earn an "I" grade in that flight lab course. An outstanding "I" grade in a flight lab course will prevent the student from taking the subsequent Flight Science ground school and lab course the following semester.

Simulator Lab Room Use Policy

The Flight Simulator Lab is in room 2B of the Aeronautics (AER) building. The lab equipment consists of seven FlyThisSim TouchTrainer VX BATDs (Basic Aviation Training Devices). This lab is typically open only during scheduled lab class times and as posted on the lab entrance door.

- The simulator lab room (sim lab) is only authorized for use during a scheduled flight lab class or when supervised by a college employee.
- Students shall only use the sim lab for flight training purposes. Entertainment, playing computer games, surfing the internet, accomplishing homework, or other purposes are not authorized at any time.
- Students shall not change settings in X-Plane. Students may use the lower right small touch screen to change aircraft location, weather, time, etc.
- Students shall not change any computer setting, including the bios, Windows 10, or SimAvio settings.
- Students shall not install any software on simulator computers.
- Food and/or drinks (including water bottles) are not allowed in the sim lab at any time.
- Use of cell phones is prohibited when other students are flying a simulator.
- Pets are not allowed, except for properly documented Service Animals.
- Directions must be followed when given by any instructor concerning equipment/facilities or student conduct that may cause damage to lab equipment or to people or degrades the learning experience of the other students. Failure to do so may result in student disciplinary action, as described in the Reedley College catalog.

Grading Policies Applicable to Ground School and Flight Lab Courses

For each pilot certificate earned, the student must accrue a minimum number of flight hours in the airplane, gain a minimum level of pilot proficiency, pass a written test, and pass an oral/practical test. The oral/practical test consists of a 2-3 hour verbal exam plus a 1-2 hour flight exam. The oral/practical test is commonly referred to as the "checkride." Students must pass the oral portion of the checkride to progress to the flight portion of the checkride. A student must pass both the oral and flight portions of the checkride to earn the pilot certificate.

The ground school courses are designed to assist the student in preparing to pass the written test and pass the oral exam portion of the checkride. The flight labs are designed to prepare the student to pass the flight portion of the checkride.

Although the FAA allows a minimum of 70% as a passing score on the written tests, the oral exam portion of the checkride must be passed with over a 98% correct (100% correct for emergency procedures). Therefore, the minimum passing score in all Flight Science ground school courses is 85%. Lower than an 85% for the course will require that course to be repeated. The FAA written test(s) in each ground school must be passed with a score of at least 70%. Any student who does not earn a 70% on the FAA written test by the due date in the course syllabus will earn a grade of "F" for that ground school course.

In each of the Flight Science lab courses, a demonstration of FAA minimum pilot proficiency or passing an FAA checkride and completion of all scheduled flight times must be accomplished in order to pass the course. The impact of not passing the minimum pilot proficiency demonstration or not passing the FAA checkride or not completing all scheduled flight time will cause the student to fail the course with a grade of "F." That Flight Science lab course must then be repeated. The student will also need to consider repeating the associated ground school course, in particular, if the checkride was not passed because of lack of aeronautical knowledge (failing the oral portion of the checkride).

Students who earn an "I" grade for any reason, will not be able to take the subsequent Flight Science ground school or lab class until the student has successfully completed all requirements to turn that "I" grade into a passing grade.

Instructor Qualifications

FLGHT Lab courses where FAA flight time is being provided will be taught by a Reedley College employee who holds a valid FAA Certified Flight Instructor Certificate.

FLGHT Ground School courses where FAA aeronautical knowledge is being provided will be taught by a Reedley College employee who holds either a valid FAA Certified Flight Instructor Certificate or a valid Certified Ground Instructor certificate.

FLGHT Courses that are not lab or ground schools may be taught by any normally credentialed Aeronautics faculty.

Alcohol/Drug Use, Criminal Records, and Driving Records

The FAA has specific regulations concerning alcohol, over-the-counter medications, prescription medication, and drugs that are illegal under federal law. Students will be provided with FAA specifics during FLGHT 101.

Although not against *California* law under certain circumstances, the use of any form of or concentrate made from marijuana is against *federal* law and is also against FAA regulations. A more detailed review of this topic is covered in FLGHT 101 Private Pilot Ground School.

Many aviation companies accomplish pre-hire drug and alcohol testing, criminal background checks, and automobile driving (DMV) record checks. It is highly recommended that all Flight Science students comply with all federal, state, county, and municipal laws, and maintain a clean criminal record and driving record.

Grounds for Program Dismissal

Students may be dismissed from the Flight Science program for the following reasons:

1. Violation of any FAA Regulation.
2. Violation of any federal or state statute concerning illegal drug use or the illegal use of prescription medications that occurs while enrolled in a flight lab course.
3. Failure to follow published flight training procedures which negatively impacts safety.

Flight Science Student Resources

Flight Science Program Coordinator: John Johnson
Office location: Aeronautics (AER) building
Office phone: (559) 638-0300 ext. 3475
Email: john.johnson@reedleycollege.edu

Academic Counselor for Flight Science: Maria Silva
Office location: Industrial technology (IND) building
Office phone: (559) 638-0300 ext. 3478
Email: maria.silva@reedleycollege.edu

Financial Aid for Flight Science: Jessica Silva
Office location: Student Services (STS) building upstairs
Office phone: (559) 638-0300 ext. 3312
Email: jessica.silva@reedleycollege.edu

Veterans Services Counselor: Sue Vang
Office location: Student Services (STS) building
Office phone: (559) 638-0300 ext. 3634
Email: sue.vang@reedleycollege.edu

PERMISSION TO REGISTER FOR FLIGHT SCIENCE COURSES

- 1) Apply to become a Reedley College student at <http://www.reedleycollege.edu/admissions-aid/admissions/admissions-applying-to-college.html>. Students will receive a college ID number and an email log-in within a few days via personal email.
- 2) Fill-in and submit the back side of this form to the Flight Science Program Coordinator. A scan (or clear and complete cell phone pictures) of this completed form is acceptable. Hard copy forms may be mailed or submitted in person.

Send forms to:

- a. john.johnson@reedleycollege.edu or John Johnson
Flight Science Program Coordinator
Reedley College
995 N. Reed Ave
Reedley, CA 93654
- b. Students will be contacted via email when the form is received.

NOTICES to STUDENTS:

- A. Prior to permission to register for Flight Science courses, students must be admitted into Reedley College and have a student ID number and email. Upon receipt of permission to register for Flight Science courses, students will be authorized to register for FLGHT courses.
- B. Flight Science students must read, understand, and follow Reedley College Catalog policies applicable to all students and Reedley College Catalog policies that apply to Flight Science students. Students must also read, understand, and follow the policies in the latest version of the Flight Science Student Handbook. Students with questions surrounding these documents may contact the Flight Science Program Coordinator.
- C. Once in receipt of permission to take Flight Science courses, students may take Flight Science lecture courses as outlined in the College Catalog. Prior to taking the FLIGHT **lab** courses, students must also meet Federal Aviation Administration (FAA) medical qualifications and meet Transportation Security Administration (TSA) proof of eligibility to receive flight training. See the Flight Science Student Handbook for details.
- D. **Students using VA benefits:** The number of new students using VA benefits that may enter this program is limited each semester. This number may vary by semester and is based on current U.S. Department of Veteran's Affairs policies. Students planning on using VA benefits will be notified approximately 30 days prior to the beginning of a semester if they have been given permission to register for Flight Science courses using VA benefits. Students using VA benefits will be given permission to register for Flight Science courses in the order in which this completed form is received.
- E. **Students not using VA benefits:** If not using VA benefits, students must comply with the payment schedule as stipulated by the Financial Aid Office.

