

AIR FORCE JUNIOR ROTC (LA-933)

Course Syllabus

Academic Year 2026–2027

AFJROTC Aviation Blended Class (AS II, AS III & AS IV)

Course Information

Course Name: AFJROTC Aviation

Mission Statement

The mission of Air Force JROTC is to develop citizens of character.

Credit: One (1) Physical Education or Elective Credit (Fall or Spring Semester)

The Federal Aviation Administration (FAA) Part 107 certification is recognized by the Louisiana Department of Education as an official Industry-Based Certification (IBC) and teacher credential requirement under BESE Bulletin 746.

Instructors

- MSgt Richard Lochren (Ret.)
 - MSgt Gene Moll (Ret.)
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Course Materials

The cadet must have a valid government-issued photo ID. This will more than likely be a Louisiana State issued ID, Permit or Driver's License.

- Airman Knowledge Testing Supplement for Sport Pilot, Recreational Pilot, Remote Pilot and Private Pilot (2025 Edition)
 - Part 107 FAA Work Book
 - Cadet Guide
 - AFMAN 36-2203, *Personnel Drill and Ceremonies*
 - AS STEM 1: Drone
 - Selected instructional videos and multimedia
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Course Overview

The Air Force Junior ROTC curriculum consists of three instructional areas:

- **Aerospace Science (70%)-Included in this Aviation Class**
 - **Leadership Education (10%)-AFJROTC HQ Waivered for higher Aerospace Science content.**
 - **Wellness and Physical Fitness (20%)**
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Module 1: Regulations (14 CFR Part 107)

- **Pilot Requirements:** Eligibility, keeping your Remote Pilot Certificate current, and medical fitness.
 - **Drone Rules:** Registration, displaying registration numbers, and weight limits (< 55 lbs).
 - **Operating Limits:** Max altitude (400 ft AGL), max speed (100 mph), and daylight-only restrictions (unless waived or equipped with anti-collision lights).
 - **Flight Rules:** Maintaining Visual Line of Sight (VLOS), yielding right-of-way, and rules for flying over people or from moving vehicles.
 - **Incident Management:** Pre-flight inspections, reporting accidents within 10 days, and Remote ID compliance.
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Module 2: Airspace Classification and Operating Requirements

- **Airspace Types:** Controlled airspace (Classes B, C, D, E) versus uncontrolled airspace (Class G).
 - **ATC Authorizations:** Using LAANC (Low Altitude Authorization and Notification Capability) or FAA portals for airspace waivers.
 - **Sectional Charts:** Reading latitude/longitude, finding airport elevations, calculating obstacle clearance, and identifying radio frequencies.
 - **Special Use Airspace:** Identifying Prohibited Areas, Restricted Areas, Military Operations Areas (MOAs), and Temporary Flight Restrictions (TFRs).
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Module 3: Operations and Emergency Procedures

- **Emergency Protocol:** Managing lost-link scenarios, flyaways, and battery fires.
- **Airport Operations:** Standard airport traffic patterns, runway numbering, and listening to CTAF/Unicom radio frequencies.

- **Radio Communications:** Proper phonetic alphabet usage and standard aviation communication phrasing.
 - **Aeronautical Decision-Making (ADM):** Identifying the 5 hazardous attitudes, practicing Crew Resource Management (CRM), and using the IMSAFE health checklist.
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Module 4: Aviation Weather Sources and Effects

- **Weather Data:** Reading and decoding METARs (Meteorological Aerodrome Reports) and TAFs (Terminal Aerodrome Forecasts).
 - **Atmospheric Effects:** Understanding air density, humidity, and temperature, and how "density altitude" drops drone performance.
 - **Weather Hazards:** Recognizing wind shear, microclimates, structural icing, fog, and the stages of a thunderstorm.
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Module 4: Loading and Performance

- **Weight and Balance:** Calculating center of gravity, load factors during turns, and how payloads change stability.
 - **Battery Care:** Lithium-polymer (LiPo) safety, storage, thermal runaway risks, and cold-weather operation limitations.
 - **Performance Charts:** Using manufacturer data to predict flight times and hover capabilities.
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FAA Part 107 Remote Pilot Certification Requirement

As part of this course, students seeking to operate small Unmanned Aircraft Systems (sUAS) under FAA Part 107 regulations are encouraged to obtain the FAA Remote Pilot Certificate. To earn this certification, students must complete the following process:

1. **Create an FAA IACRA Account** and obtain an FAA Tracking Number (FTN), which serves as the applicant's permanent FAA identification number.
2. **Schedule the FAA Unmanned Aircraft General - Small (UAG) Knowledge Test** through an FAA-approved PSI testing center using the FTN obtained through IACRA. Testing fees are established by the testing provider and are paid at the time of registration. **Currently \$175.00 (paid for by St. Charles Public Schools)**
3. **Successfully complete the FAA Part 107 Knowledge Test**, consisting of 60 multiple-choice questions administered over a two-hour period. **A minimum score of 70%** is required to pass the examination. Upon completion, applicants will receive an Airman Knowledge Test Report (AKTR). **(Pass or Fail-this exam will not affect your AFJROTC Class Grade)**

4. **Apply for the Remote Pilot Certificate through IACRA** by submitting FAA Form 8710-13 and entering the 17-digit Knowledge Test Exam ID provided on the AKTR. Following submission, the FAA and TSA will conduct the required security review.
5. **Receive a Temporary Remote Pilot Certificate** through IACRA upon approval and begin exercising Part 107 privileges while awaiting the permanent certificate from the FAA.

To qualify for certification, applicants must be at least 16 years of age, be able to read, write, speak, and understand English, be in a physical and mental condition to safely operate a drone, and successfully pass the FAA knowledge examination.

Students are strongly encouraged to complete the certification process during or immediately following successful completion of this course to enhance their qualifications for collegiate, workforce, and commercial UAS opportunities.

Drill and Ceremonies

Cadets will:

- Understand the history, mission, goals, and objectives of AFJROTC.
- Demonstrate military customs and courtesies.
- Maintain Air Force standards of dress and appearance.
- Practice discipline, respect, integrity, and self-control.
- Demonstrate proper flag etiquette and National Anthem courtesies.
- Understand the importance of citizenship and community service.
- Learn stress management and personal wellness.
- Master basic drill movements and commands.
- Demonstrate proper saluting procedures.

Wellness and Physical Fitness

Cadets will:

- Develop healthy lifelong fitness habits.
- Participate in an individualized fitness program based on national standards.
- Monitor personal fitness improvement.
- Work toward achieving individual fitness goals.

Uniform Requirements

- **Service Uniform:** Every Wednesday and designated special event days.
- **Physical Training (PT) Uniform:** Every Friday unless otherwise directed.

Cadets are expected to wear the proper uniform from the beginning of the school day until dismissal.

Failure to wear the uniform without prior instructor approval will result in a zero for that uniform inspection. Repeated violations may result in dismissal from the AFJROTC program.

All issued uniforms must be returned at the end of the course. Failure to return issued items may result in an Incomplete ("I") grade and placement on the school's fines/holds list.

Graded Assignments

Grades are based on:

- Cooperative Learning Activities
 - Student Workbooks
 - Quizzes
 - Chapter Tests
 - Physical Training
 - Drill Performance
 - Uniform Inspections
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Grading Breakdown

Category	Percentage
Formative Quizzes, Assignments, Workbooks, Physical Training & Drill	40%
Uniform Wear/Dress & Appearance, Summative Assessments	60%
Total	100%

Grading Scale

Grade Percentage

A	90–100%
B	80–89%
C	70–79%
D	60–69%
F	Below 60%

Attendance, Preparation, and Participation

Daily participation is an important component of success in AFJROTC.

Cadets are expected to:

- Arrive on time.
 - Be prepared with required materials.
 - Meet daily grooming standards.
 - Participate fully in classroom instruction, drill, and physical training.
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Community Service

Cadets will have numerous opportunities throughout the year to participate in AFJROTC-sponsored community service projects.

Curriculum in Action (CIA) Field Trips

Cadets may participate in educational activities including:

- Military Base Tours
- National WWII Museum
- Aviation and leadership experiences
- Other school-approved educational trips

Participation requires good academic standing and appropriate behavior.

Classroom Conduct

Cadets are expected to demonstrate professionalism at all times.

The following behaviors are prohibited:

- Fighting or horseplay
 - Bullying or harassment
 - Profanity or inappropriate language
 - Disrespect toward instructors, cadets, or staff
 - Insubordination
 - Alcohol, tobacco, vaping, or illegal drug use
 - Public displays of affection while wearing the AFJROTC uniform
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Electronic Devices

Cell phone and electronic device use follows St. Charles Parish School Board policy.

During class:

- Phones and other personal electronic devices must be powered off and placed in the designated location.
 - Unauthorized use may result in confiscation and referral to administration.
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Cadet Expectations

Cadets are expected to:

- Follow the chain of command.
- Address instructors and senior cadets using proper titles.
- Be punctual.
- Bring required classroom materials.
- Wear the correct uniform.
- Maintain military bearing and professionalism.
- Respect classmates, instructors, and school property.
- Keep the classroom clean.
- Follow all AFJROTC standards of conduct.
- Demonstrate integrity, self-discipline, and respect.

Classroom Procedures

Cadets will:

1. Enter quietly and report directly to their assigned seat.
2. Store personal belongings under their desk.
3. Participate in opening formation directed by the Flight Commander.
4. Receive the daily briefing.
5. Follow all instructor directions during class.
6. Prepare for dismissal by cleaning their area and aligning desks.
7. Stand at attention until officially dismissed by the Flight Commander.

Success in AFJROTC

Success in AFJROTC is built on:

- Integrity First
- Service Before Self
- Excellence in All We Do

Cadets who consistently demonstrate respect, responsibility, discipline, and professionalism will develop leadership skills that extend far beyond the classroom.