

**Lt Col David Murphy and MSgt Jeffrey Bachman**  
**Course Syllabus and Expectations**  
**Small Unmanned Aerial Vehicle (sUAV) Class**

Welcome to the Air Force Junior Reserve Officer Training Corps (AFJROTC) sUAV Class. The **mission** of the AFJROTC program is, “To develop citizens of character dedicated to serving their nation and communities.”

The **goals** of the AFJROTC program are to instill:

- The values of citizenship
- Service to the United States
- Personal responsibility
- A sense of accomplishment

**Program Outcomes:** Enable the students to:

- Develop a high degree of strong morals, self-esteem, self-reliance, personal appearance, and leadership.
- Adhere to the values of integrity, service, and excellence.
- Increase their understanding of patriotism and responsibilities as US citizens.
- Participate in community service activities.
- Expand skills of critical thinking, problem solving, communication, collaboration, creativity and innovation.
- Demonstrate military customs, courtesies, and traditions and develop habits of order, discipline, and social skills.
- Acquire a broad-based knowledge of aerospace studies and leadership education.
- Strive to graduate from high school and prepare for college and careers in the 21st century.
- Cultivate a lifetime commitment to physical fitness and a healthy lifestyle.

This course is broken into three parts. Part I is the Aerospace Science Course, Part II is the Leadership Education Course and Part III is the Wellness Program

**JROTC Instruction**

JROTC instruction is typically organized into 2-week blocks; at the end of each block students will rotate their teacher. Academics occur on Monday, Tuesday, Wednesday, and Thursday. Tests are on Wednesday or Thursday of the second week of a rotation. Uniforms are worn on Wednesday or Thursday (The day you are scheduled for JROTC) and weather permitting we will also march. Physical Fitness is on Fridays students are scheduled for JROTC.

***Text: Small Unmanned Aircraft Systems Study Guide. (FAA-G-8082-22), Part 107 Drone Certificate Study Guide***

**Instructor:** Lt Col (Ret) David Murphy

**Email:** [david.murphy@hsv-k12.org](mailto:david.murphy@hsv-k12.org)

**Office Phone/Hours:** (256) 428-8061 / 8:00 – 5:00\* with 2nd Block planning: 10:03 - 11:35

**Instructor:** MSgt (Ret) Jeffrey Bachman

**Email:** [jeffrey.bachman@hsv-k12.org](mailto:jeffrey.bachman@hsv-k12.org)

**Office Phone/Hours:** (256) 428-8061 / 8:00 – 5:00\* with 2nd Block planning: 10:03 - 11:35

- One instructor is typically at school until 5:00 but may be outside with cadets
- Specific details for Remote/Virtual Learning are posted to the Materials section of Schoology

Course Description: The sUAV course will provide the knowledge to obtain a Remote Pilot Certificate from the FAA and provide hands on experience flying sUAVs. The course is a mixture of academics and hands on flight experience. Students will begin flight experience on the RealFlight sUAV Simulator and then proceed to the small hand-sized aircraft and advance to an aircraft requiring the Remote Pilot Certificate from the FAA.

Course Objectives:

1. Know the applicable regulations relating to small unmanned aerial vehicle system rating privileges, limitations, and flight operation.
2. Know the airspace classification and operating requirements, and flight restrictions affecting small unmanned aerial vehicle operation
3. Understand and determine the small unmanned aerial vehicle loading and performance
4. Know the aviation weather sources and effects of weather on small unmanned aerial vehicle performance
5. Know small unmanned aerial vehicle emergency procedures
6. Understand Crew resource management
7. Understand Radio communication procedures
8. Understand the physiological effects of drugs and alcohol on a remote pilot
9. Understand Airport operations
10. Understand the requirements and process of maintenance and preflight inspection procedures
11. Demonstrate proficiency in operating small unmanned aerial vehicles.

Course Calendar: **Fall Semester:** 1<sup>st</sup> nine Weeks – sUAV Rules, sUAV Flight Operations, sUAV Simulator, 2<sup>nd</sup> Nine Weeks – Weather, FAA Regulations, Fly Hand-Sized Aircraft, **Spring Semester:** 3<sup>rd</sup> Nine Weeks - National Airspace System (NAS), Reading Sectional Charts, Fly larger sUAVs (Basic Flight Operations) 4<sup>th</sup> Nine Weeks – Airport Operations Fly larger sUAVs (Advanced Flight Operations)

## JROTC and Schoology

### Logging into Schoology

All students will access their classes using the following steps:

1. Login to your HCS issued laptop using your username and password.
2. Click on the “Clever” icon on your home screen or go to [www.clever.com](http://www.clever.com) and select “Login as a Student” at the top.
3. Students use Clever to access different platforms such as Schoology & Inow. To login go to Clever-> Select Huntsville City Schools-> select Log in with active directory-> sign in with your student email address (first [name.lastname@stu.hsv-k12.org](mailto:name.lastname@stu.hsv-k12.org)) -> your password is your six digit birthday. Find and select the “Schoology” tile within Clever.
4. You will then see your scheduled classes in Schoology

Once you select your JROTC class you will be brought to the Materials section. In this section we plan to have seven areas.

- 1) **This week(s)message.** It will provide information on your assignments and class information for the current two-week rotation. It will also include the links to live instruction/office hours for each block.
- 2) **Lt Col Murphy Folder**
  - a. The students rotate between Lt Col Murphy and MSgt Bachman. Whomever is teaching the students that week will have their folder on top.

- b. **Books:** JROTC books are provided through the Air Force. The books are in pdf format and we recommend the students download the entire book to their computer. The file names are as follows: AS100\_CH01\_L01\_p002\_013. AS100 is the course and this file is Chapter 1, Lesson 1 pages 2-13. Of note, the textbook page numbers and pdf file page numbers are different. This section will also have the Cadet Guide and Marching documents posted here.
  - c. **PowerPoints:** Class PowerPoints are filed here. The name will include chapter number, lesson number and name.
  - d. **Assignments:** All assignments are filed here. It will include the rotation time period in the name
  - e. **Discussions:** Are also an assignment but one which requires comments by students and possible responding to a post by another student. The comments will be moderated and approved before each post is published
  - f. **Videos:** All recorded lessons will be posted in this area.
- 3) **MSgt Bachman** Folder (same organization as above)
  - 4) **Newsletter Folder**
  - 5) **Syllabus/Important Information**
  - 6) **JROTC Schedule**
  - 7) **Standard Two-Week Cycle**

### Assignment/Discussion Submission

Upcoming Events is on the right side of the screen. To view an assignment/discussion requirement a student clicks on the link and everything required for the assignment/discussion is available within the pop-up window.

For assignments, on the right-hand side is a submission button. Once an assignment is completed click on this button and upload the correct file and click on submit. Once completed on the righthand side under submissions it will say assignment submitted.

For discussions students will enter their submission in the comment box at the bottom of the pop-up and click on Post

### **HCS Approved Virtual High School Supply List**

Pens, pencils, and highlighters

Notecards and Post-it Notes

File Folders and / or pocket folders

Notebooks, loose-leaf paper, graph paper

Rule, tape, scissors

Printer, printer paper, & ink cartridges

### **Academic Integrity**

As a student at HHS, you are always expected to uphold the highest standards of honesty. Do not take a risk in losing your eligibility for honor societies such as National Honor Society or Kitty Hawk Air Society. Students caught cheating / plagiarizing will receive a zero on the assignment for the first offense. Second offenses and beyond will receive a zero and will be documented in BLOOM.

### **How to Succeed**

- (1) **Show up to your virtual class. Be on time!**
- (2) Complete your assignments
- (3) Wear the uniform and make up missed uniforms (it is 30% Of your grade)
- (4) Ask questions, ask questions, ask questions!

(5) Be teachable, coachable, and correctable.

### **Classroom Rules and Expectations**

Discipline: Self-discipline is fundamental to the AFJROTC mission of developing responsible citizens. Students are expected to be well behaved and courteous at all times. Cadets who violate Huntsville High School Student Handbook or Cadet Guide rule will be subject to disciplinary procedures.

Classroom Participation: Mutual respect and behavior are keys to an effective learning environment. Put-downs and trash talk will not be allowed. Students are expected to come to class on time and actively participate in class activities. In turn, your instructors pledge to treat you fairly and do all they can to help you develop into a better cadet, student, and citizen.

Classroom rules are:

- (1) Upon entering the classroom proceed to your seat.
- (2) When the bell rings assume the position of attention and follow the flight commander/flight sergeant's instruction. You will remain at attention until placed at parade rest, at ease or you are seated.
- (3) Be on time or bring a note from your previous class.
- (4) Once class begins all phones are to be but away in a backpack, purse or pocket. Phones are not to be on the tables during class.
- (5) Backpacks are to be placed on the floor.
- (6) Do not leave class without permission and a pass.
- (7) Raise your hand when you want to speak and do not speak until recognized. If you need to throw away trash or sharpen a pencil, request permission. This rule prevents disruption of the class.
- (8) No food or beverage (except water) is allowed in the AFJROTC classroom.
- (9) **Listen to the Ops order and read it. It is posted on the Cadet Sign-up Board, to the AL-941 Edmodo page and the AL-941 Web Page.**
- (10) When departing the classroom for any class activity cadets will depart via column of files. Cadets will be quiet in the hallway. If unable to be quiet cadets will walk single file.
- (11) When cadets arrive at the drill pad or sports field students will fall in via element.
- (12) When returning from drill or physical fitness, form a single file line 3 feet from the door and await an instructor to unlock the door. Cadets will not proceed inside until the entire flight is formed.
- (13) First cadet in formation will hold the door for the entire flight.
- (14) If you are the first person to see the SASI, Principal, assistant Principal, or a visiting officer of the Armed Services, call the room to attention.

### Virtual Classroom Rules

- (1) Applicable in person classroom rules apply to the virtual classroom.
- (2) Log in with your first and last name (you will not be allowed into the classroom with other names).
- (3) Use backgrounds/screensavers appropriate for school.
- (4) During instruction chat is for academic purposes. If this is abused chat will be shut down during instruction. You are welcome to chat with classmates outside of instruction.
- (5) If there is a question use the hand icon or chat.
- (6) When unmuted do not talk unless called upon (so we don't talk over each other).
- (7) When done talking remember to mute your microphone.
- (8) If you have questions, contact MSgt Bachman/Lt Col Murphy through Schoology or email.

### **Grading Policy**

Your course grade is a weighted average of your daily academic, participation and performance grades

Grading: 100% - 90% = A    89% - 80% = B    79% - 70% = C    69% - 60% = D    Below 60% = F

**Assessment Rules:**

Work is late when the student does not turn in homework or complete a task by the due time. In these instances, a "I" will be used as a placeholder in INow. If the student does not turn in the assignment in the allotted time the "I" will be replaced with a "0." Failure to take part in drill and physical fitness activities will result in a 0 in INow for the daily grade. A grade of "0" will be entered for assignments when there is an unexcused absence.

**Help:**

**We will do anything we can** to help your son/daughter succeed inside and outside of class. We are typically here before school (8:00) and after school each day and our classrooms are open before school. Typically, one classroom is for quiet for studying and the other for corps business and comradery. If things outside of this course are affecting your son/daughter's performance, **we are willing** to assist them work through any difficulties.

**Parents/Guardians:****There are ways you can help!**

We are excited about the prospect of the role we will play in your son/daughter's education, and we are looking forward to making our classes the best learning environment for all students. As the parent/guardian, you are perhaps the single most influential person in your son/daughter's life. Our job cannot be done effectively without you; therefore, we ask for your understanding and cooperation. We would like to ask that you partner with us in helping your son/daughter realize and develop to their potential. There are several things that you can do to strengthen and support this area:

- Discuss with your son/daughter his homework or project assignments on a regular basis, in order to help them as they continue to develop consistency in the management of required tasks.
- Provide opportunities to discuss what your son/daughter is learning in class. You can support their learning through open, meaningful conversations and potential problem-solving strategies to aid in their success.
- Come to us with any questions or concerns about your son/daughter's performance.
- Cooperating with us concerning issues of discipline and expectations of student behavior while in class.
- Volunteer to support AFJROTC events as chaperones, drivers and mentors for extra-curricular activities

**Communication:**

We want to ensure you are aware of what is happening in AFJROTC. Feel free to call or email us. Our contact information is on the Huntsville High School webpage and page one of this syllabus. We are also requesting your email address to contact parents and guardians to ensure you receive information on all the events and happenings in AFJROTC.

We are looking forward to working with you, and your son/daughter, this year and thank you in advance for your time, attention, and cooperation. Please complete and sign the form on the next page and return

**THANK YOU!**

Lt Col (Ret) David Murphy and MSgt (Ret) Jeffrey Bachman