



GLENN HILLS HIGH SCHOOL  
2640 Glenn Hills Drive  
Augusta GA 30901  
(706) 796-4924



Students and Families,

Welcome to Fundamentals of Aerospace! I am excited about the opportunity to get to know you, and I look forward to a productive learning school year. Please read the information below to acclimate yourself with the procedures and expectations for this course.

## **FUNDAMENTALS OF AEROSPACE (2024 - 2025) SEMESTER 1**

### **COURSE DESCRIPTION:**

**Fundamentals of Aerospace** is a course that provides an introductory, thorough overview of Aerospace Engineering and Aviation Technology. The course first examines the engineering practices, which are standard practices engineers use to solve a complex problem. These practices will help students to grow their skills as problem solvers and critical thinkers. As students learn how to apply engineering practices, their questions should become more relevant and focused.

Facilitating such evolution requires a classroom culture that values good questions and offers students opportunities to refine their questions and strategies. As a result, students will become increasingly proficient at posing questions that seek relevant evidence, work to refine an engineering problem, or challenge the feasibility of a design.

**Instructor's Name:** Mr. William Islar (Chief Flight Instructor, Naval Aviation Warfare Specialist, Bachelor of Science in Aeronautics, Bachelor of Science in Business Studies, Master of Aeronautical Science, Master of Business Administration).

**Hours Available for Calls:** 6:45am - 2:55pm. Email messages may be left at any time.

**Office Phone:** Glenn Hills School (706) 796-4924 Ext: 1367

**Email:** IslarWi@BOE.Richmond.K12.ga.us

## **COURSE OUTLINE:**

### **UNIT 1: AVIATION 101**

- A. Introduction to Aviation and Aerospace
- B. Overview of Commercial, Military and General Aviation
- C. Introduction to Unmanned Aircraft Systems
- D. Introduction to Space Exploration

### **UNIT 2: TAKING FLIGHT - EARLY AVIATION INNOVATIONS**

- A. Aviation's Primitive Beginnings
- B. Lighter Than Air
- C. Gliders
- D. Powered, Controlled Flight

### **UNIT 3: FROM THEORY TO PRACTICAL REALITY - RAPID DEVELOPMENTS IN POWERED FLIGHT**

- A. First Practical Application of Airplanes, Commercial and Military
- B. Women in Early Aviation
- C. World War II

### **UNIT 4: TO THE STARS - MAKING JET AND SPACE TRAVEL POSSIBLE**

- A. The Jet Age
- B. The Space Race

### **UNIT 5: CREATING THE FUTURE - WHAT'S NEW AND NEXT IN AVIATION AND AEROSPACE**

- A. Modern Aircraft Design
- B. Government and Commercial Space
- C. End of Semester Project

## **GRADING:**

### **Category of Grades:**

Major Grades (40%): Assessments (Test, Quizzes, Projects, Research Papers)

Minor Grades (60%): Classwork/Homework (Bellringers, Journal Check, Labs)

### **Scale:**

A (90 - 100)

B (80 - 89)

C (75 - 79)

D (70 - 74)

F (00 - 69)

## **SAFETY:**

Aviation safety is paramount! In the classroom, hangar and flight simulator room safety ensures the physical and emotional safety of students and protects their educational experience from disruptions or offenses. In this course, a variety of tools will be used to explore and engage in the overall aviation environment; therefore, the following rules must be strictly adhered to:

1. Be Respectful to Teacher(s) and other Students.
2. Listen Carefully to ALL instructions.
3. Students must be Responsible for His/Her own Actions and Words.
4. Know Emergency Procedures.
5. Tell an adult if you feel Unsafe.
6. Follow all safety regulations.
7. Only use equipment or tools that are in good, safe working condition.
8. Do not distract other students.
9. Refrain from all forms of pranks or horseplay.
10. Report unsafe practices/behavior immediately to a teacher.
11. Immediately report all accidents to the teacher as soon as they occur.
12. NEVER operate equipment or tools without Teacher supervision.

## **A. CLASSROOM RULES:**

1. NO personal cellphone use.
2. NO sleeping.
3. NO foul language (Cursing, Derogatory terms, Insults, Etc.).
4. NO horseplay.
5. NO eating.
6. NO smoking, open flames, etc.
7. Be Respectful - to yourself, your classmates, your teacher and your classroom.
8. Be Responsible - come to class on time and prepared for the day.
9. Do Your Best! Be the Best you can Be - Work Hard - every day, all day.
10. Stay Focused.
11. Raise your hands to ask questions and comment.
12. Be on time.

## **B. CONSEQUENCES:**

1. Warning and Teacher/Student Conference.
2. Parent Contact (Phone Call or Email).
3. Parent Contact (2nd Phone Call or Email).
4. Email Notice to Administrator and Parent.
5. Behavior report to Administration.
6. Suspension (In School/Out of School).
7. Course Failure.

## **C. TARDINESS:**

1. Tardiness is unacceptable. Tardies more than 15 minutes are recorded as an absence and will be referred to Administration.
2. The Richmond County Schools System and Glenn Hills High School policies will be enforced for persons who are tardy to class.

## **D. ABSENCES:**

1. It is the responsibility of the student to make up all missed assignments.
2. Assignments will be posted and updated on the Canvas platform.
3. Missed assignments, resulting from unexcused absences, will be evaluated on a case-by-case.

## **E. STUDENT PORTFOLIO, REFLECTIVE JOURNAL, FLIGHT LOGBOOK**

The Student Portfolio, Reflective Journal and Flight Logbook will play significant roles in the Assessment and Evaluation of student learning in this course. They are integral to completion of the course because they provide the documentation of all the student does in this course. Furthermore, the Student Portfolio, Reflective Journal, and Flight Logbook will provide evidence of the knowledge, skills and abilities he/she will gain in this course. Students will continue the development of their portfolio in the Capstone course during their senior year.

The Reflective Journal is a key feature of the portfolio. Reflective Journal entries will be utilized for a variety of assignments throughout the course, such as student reflections on key concepts, topics, events, and impressions. If you have any questions or concerns or if you would like to visit our classroom, schedule a conference, or volunteer, you can contact me via email: [IslarWi@BOE.Richmond.k12.ga.us](mailto:IslarWi@BOE.Richmond.k12.ga.us). I will do my best to return the correspondence as soon as possible.

## **F. LATE ASSIGNMENT POLICY:**

Students may turn in late assignments in accordance with applicable policies to demonstrate mastery/understanding of the content/subject/material. Students may coordinate with Mr. Islar on a case-by-case basis to discuss submitting assignments after the assigned due date.

1. Assignments not submitted on the due date are subject to an automatic 10-point deduction.
2. Assignments not submitted within 7 days after the due date are subject to an additional 5-point deduction.
3. Late assignments will receive an additional 5-point deduction for each 7-day period the assignment is late.
4. The maximum grade a 30-day late assignment will receive is 50%.
5. Missed assignments, resulting from unexcused absences, will be evaluated on a case-by-case.

## **G. COMPUTERS/LAPTOPS/TABLETS:**

Computers/Laptops/Tablets are available for ACADEMIC use only! Students may also use personal laptops. Students are provided the opportunity to checkout laptops/tablets that are the property of the Richmond County School System (RCSS). A RCSS Student Technology Loan Agreement must be completed by the student and parent/guardian.

## **H: FOOD, DRINKS, PERSONAL ELECTRONIC DEVICES:**

Food, drinks and the use of personal electronic devices are NOT allowed during scheduled classroom time.

## **I. PARENTAL/GUARDIAN ENGAGEMENT:**

1. Periodically check Infinite Campus and Canvas to monitor your student's progress.
2. Encourage good study skills, organization, and time management.
3. If extra help is needed, tutoring is available on a case-by-case basis.
4. Contact teacher regularly to discuss student's progress/engagement.

## **J. COURSE MATERIALS:**

1. Aviation Journal (Composition Notebook, Spiral Notebook, etc.)
2. Aviation Portfolio (Loose Leaf Binder, 3-Ring Binder, etc.)

## **K. NEW CELLPHONE POLICY**

Please familiarize yourself with the new "Cellphone Policy" in the "Student Code of Conduct and Discipline" manual. Starting on the first day of school, we are asking students to put away their cellphones from the time the morning bell rings to the time they are dismissed. You can find this policy at the following link:

<https://www.rcboe.org/CodeOfConduct>