



Cadet Name \_\_\_\_\_

Flight \_\_\_\_\_

MA-771- Lowell High School  
Air Force Junior ROTC Course Syllabus and Room Management Plan Second Year (ASII)  
2018-2019

The Air Force Junior ROTC curriculum has three components, Aerospace Science (AS), Leadership Education (LE) and Wellness/Physical Training (PT). Each component has its own textbooks and runs for the entire school year. Cadets earn 2.5 credits each semester for taking both components.

***Aerospace Science II***

Instructor's Name: MSgt Kevin Casilli

Required Text: Leadership Education II, *Communication, Awareness, and Leadership*. Aerospace Science, *Science of Flight, a Gateway to New Horizons*

**LE/PT/ Drill Course Description:** Leadership Education 2 stresses communications skills and cadet corps activities. Much information is provided on communicating effectively, public speaking, understanding groups and teams, preparing for leadership, solving conflicts and problems, and personal development. Written reports and speeches compliment the academic materials. Cadets will engage in wellness, health and fitness once a week. Second year cadets will learn and be able to execute advanced drill movements, to include Flanks, and column movements. Second year cadets will be able to perform the AFJROTC 30 count drill sequence unsupervised. Additionally, cadets will be taught how to proper drill a flight and development of the command voice. Students are provided detailed instruction on ceremonial performances and protocol for civilian and military events.

**Leadership Education II -Materials**

**Chapters – 1 Learning to Communicate (Lessons 1,2,3)**

**Chapter 2 – Communicating Effectively (Lesson 3)**

**Chapter 3- Understanding Your Attitude (Lessons 1,2,3)**

**Chapter 4- Understanding Your Actions (Lessons 1,2)**

**Chapter 5- Developing Vision and Teams (Lessons 1,2)**

**Chapter 6-Solving Conflicts and Problems (Lesson 1.2)**

**Chapter 7-A Leadership Model (Lessons 1,2,3)**

**Chapter 8- Adaptive Leadership (Lesson 1,2,3)**

**AFMAN 36-2203 Drill and Ceremonies**

**The course objectives are:**

After successfully completing the *Leadership Education 200: Communication, Awareness, and Leadership* textbook the student will:

1. Apply the key factors of effective communications.
2. Know the ways in which personal awareness affects individual actions.
3. Know the key elements of building and encouraging effective teams.
4. Know what it means to be a positive role model.
5. Know the different elements of personality types described in Myers-Briggs Type indicator (MBTI)
6. Apply the key behaviors for becoming a credible and competent leader.

7. Know the four stages of team development.
8. Know the importance of working as a team.
9. Know how to improve group effectiveness.
10. Know causes of conflict and basic conflict resolution techniques.
11. Understand basic problem solving skills.
12. Know and understand the basic elements of leadership
13. Understand and be able to explain the Air Force Core Values.
14. Be able to define Integrity.
15. Understand the importance of being a positive role model.
16. Know the importance of healthy living to include, nutrition, making drug free decisions, Physical activity and fitness.
17. Know and understand the Lowell High School Core Values: Responsibility, Integrity, Determination, Engagement, Respect (RIDER).

## **Aerospace Science (AS)**

Required Text: *Science of Flight, a Gateway to New Horizons*

Chapter 1: How Airplanes Fly

Chapter 2: Working Through Flight Conditions

**Course Description:** The second year in JROTC Aerospace Science is designed to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight, and principles of navigation. The course begins with a discussion of the atmosphere and weather. After developing an understanding of the environment, how that environment affects flight is introduced. Discussions include the forces of lift, drag, thrust, and weight. Students also learn basic navigation including map reading, course plotting, and the effects of wind. The portion on the Human Requirements of Flight is a survey course on human physiology. Discussed here are the human circulatory system, the effects of acceleration and deceleration, and protective equipment.

### Course Objectives:

1. Know and understand the principles of flight including the four forces that affect an aircraft in flight and the concepts of relative wind and angle of attack.
2. Understand and apply Bernoulli's principle and Newton's laws of motion to the theory of flight.
3. Understand and explain the aircraft axes of rotation, and the primary and secondary flight control and how they work.
4. Know and understand the various gas laws and how they affect operation of aircraft engines. Differentiate between the operation of internal combustion engines and reciprocating engines, including theory of operation and mechanical, cooling and ignition systems of each.
5. Know the various regions of the atmosphere and how the atmospheric layers affect flight.
6. Know and understand the different cloud formations, and the role of water and particulate matter in the atmosphere.
7. Understand how different atmospheric conditions and adverse weather affect flight including high and low pressure systems, air masses and frontal boundaries, weather phenomena and terrain factors that affect weather.

### **JROTC Dress Requirements:**

**Uniform Day:** (Thursday for all cadets)

**PT Day:** MSgt Casilli (Tuesday),

**Grading Procedures:**

**Course Evaluation:**

Final assessments	20%
PT	20%
Uniform inspections	20%
Quizzes/Homework	15%
Attitude/Participation	10%
Community Service	15%

Category	Weight Range	Examples of Assignments
Formative Classwork	no higher than 40%	Classroom produced work group/team involvement
Formative Homework	0-20%	homework/study sheets
Formative Quizzes	10-25%	leadership/Aerospace Science quizzes
Summative Assessments (Projects, papers, presentations, tests)	no higher than 40%	Formal Projects Oral presentations Common Assessments Final Assessments

**NOTE:** Cadets are required to maintain JROTC standards, both while in and out of school. If a cadet is unable to maintain standards and brings discredit to Lowell's JROTC program, they may be removed from Lowell High School's JROTC program, at the discretion of the Senior Aerospace Science Instructor (Lt Col Ironfield) and the House/Headmaster

## **Air Force Junior Reserve Officer Training Corps**

### **ROOM MANAGEMENT PLAN**

**2018-2019**

#### **LHS Mission**

Commitment to excellence in everything we do:  
Academics, Activities and Citizenship.

**To: All AFJROTC Cadets**

**Date: 14 June 2018**

#### **AFJROTC Mission**

*To educate and train high school students in citizenship; promote community service; instill responsibility; character and self-discipline; and provide instruction in Air and Space fundamentals*

#### **I. Attendance**

Attendance will be taken at the beginning of each class period by the flight commander or a designated representative. Attendance will be recorded in the SASI's or ASIs' record book and also recorded in X2 each period. Any cadet who has (8) eight absences in a semester (1/2 year) will receive a grade of "U" (unsatisfactory) and will not receive credit for the course. If the grade is not released after the third day of the semester's end the U Grade reverts to NO CREDIT (NC). The cadet will be counseled after the 4<sup>th</sup> absence, and the appropriate housemaster will be notified.

#### **II. Tardiness**

Cadets are expected to arrive to class on time, cadets who arrive after the signal designating the start of the period/mod will be recorded as tardy. Neither a tardy nor an absence will be recorded if the cadet has obtained an acceptable note of explanation from the previous period/mod teacher. A student with an unexcused tardy to class of more than 10 minutes will be marked absent.

#### **III. Discipline**

No food, beverages (except water bottle) or gum chewing is allowed in the classroom unless approved in advance by the instructor. Students are expected to pay attention to the instructor and remain awake and alert. The flight commander, flight sergeant and element leaders are responsible for enforcing classroom discipline prior to class reporting. In case of misconduct: first offense -verbal warning; second offense – written counseling; third offense – students will see the instructor for possible further disciplinary action.

#### **IV. Academic areas:**

- a. The various AFJROTC courses are described in the school catalogue, the AFJROTC curriculum and in the textbooks for the individual courses.
- b. Tests will be announced in advance in Leadership and Aerospace Science and a comprehensive assessment will be given at the end of each quarter. Uniform wear is unique to AFJROTC and is graded weekly as a quiz. Failure to wear the uniform, unless cleared by AFJROTC instructors, will result in a grade of zero (0) in uniform wear for the week. Uniform wear missed may be made up at the discretion of the instructor, if the uniform grade is made up or excused the grade will be upgraded to 100%, if the uniform grade is not made up on the designated date, the uniform grade for that week will become a zero. Students that fail to wear the uniform three (3) times during any grading period (unless excused by the instructor) may be removed from Lowell High School JROTC program.
- c. Homework will be assigned throughout the course and must be turned in by the deadline announced. Failure to turn in an assignment will result in a grade of zero (0).
- d. In the case of excused absence, the instructor may allow the cadet to make up the homework. The student must contact and get the make-up assignments from the SASI/ASI within 4 days after returning to school.

- e. The AFJROTC grade is a composite grade made up of the following: Aerospace Science, Leadership Education, uniform wear, attitude, community service and physical training.
- f. Any cadet requiring extra help should contact the instructor, element leader, flight sergeant, or flight commander to obtain assistance. Every effort will be made to provide the help required through the AFJROTC tutoring program.

I have read and understand the requirements in the course syllabus and room management

**CADET NAME (Print)** \_\_\_\_\_

**CADET NAME (SIGN)** \_\_\_\_\_

**CADET'S PARENT/GUARDIAN (PRINT)** \_\_\_\_\_

**CADET'S PARENT/GUARDIAN (SIGN)**\_\_\_\_\_

**DATE**\_\_\_\_\_