

AVIATION/AEROSPACE A.F.J.R.O.T.C.

COURSES OFFERED

Grades 9, 10

Introduction to Aviation/Aerospace Science 1	# 9413
Aeronautical Aspects of Aerospace Science 2	# 9415

Grades 11, 12

Advanced Aviation/Aerospace Science 3	# 9416
Advanced Aviation/Aerospace Science 4	# 9417

**INTRODUCTION TO
AVIATION/AEROSPACE SCIENCE 1**
Full Year/Full Time
Grades 9, 10

No. 9413
Credit 1.0

This introductory course is for the student who has some interest in aviation or learning about any of the military services, but would like to sample the course material before getting more involved. Uniforms are first issued to those students who become involved in the extra-curricular activities associated with the program. This course includes familiarization with the history of the aerospace industry, the aviation programs, and career opportunities available throughout the 20th century. Aircraft flight simulators are used when appropriate to demonstrate the speed and handling characteristics of the aircraft present during various periods in aviation history. This course may also be selected on a semester basis for ½ credit with the approval of the instructors. Cadets have the opportunity to travel to active duty military installations to view different branches of our armed forces in action and participate in military training exercises. Annual demonstrations and rides in military vehicles such as Army Humvees and Air Force C-130 aircraft are available. Current text: *Frontiers of Aviation History*.

Criteria for Selection – None.

AERONAUTICAL ASPECTS OF AVIATION/AEROSPACE SCIENCE 2
Full Year/Full Time
Grade 9, 10

No. 9415
Credit 1.0

This course is a study of selected areas of aviation and aeronautics. It includes an examination of the component factors of aerospace power and a development of individual skills in leadership activities. Cadets will participate in playing new roles and in promoting team effort. The learning activities will help develop traits of good citizenship and strong character. Units of instruction include Aerospace Vehicles, Propulsion Systems, and Civil Aviation. Aircraft flight simulators are incorporated to demonstrate flight control sensitivity and operation, stalls, aerobatic maneuvers, and to instill the skill, attention to detail, and concentration necessary to execute instrument approaches. Cadets have the opportunity to travel to active duty military installations to view different branches of our armed forces in action and participate in military training exercises. Annual demonstrations and rides in military vehicles such as Army Humvees and Air Force C-130 aircraft are available. Current text: *The Science of Flight*.

Criteria for Selection –

Introduction to Aviation/Aerospace Science 1 (9413) is recommended, but not required.

ADVANCED/AEROSPACE SCIENCE 3
Full year/Full Time
Grades 11, 12

No. 9416
Credit 1.0

The students will examine the space environment and know the effects the Sun and its planetary system have on living matter. The students will study the national and international space programs and the progress each country has made. They will study how space technology has developed over the last century. Manned space flight and the impact space exploration had and will have on improving our everyday living. The students will be assigned Corps projects and then develop a timeline and resources necessary to complete them. Senior ROTC cadets will be allowed to lead, be active self-directive learners, and will accomplish weekly staff meetings to monitor Corp projects and activities. They will discover and affirm new ideas and techniques for developing and maintaining self-discipline and self-reliance. The students will participate in weekly discussions of current events. Cadets will develop and polish their professional interview skills and be prepared to present a current accurate resume. In addition to Air Force C-130 flights, Air Force KC-135 flights involving inflight-refueling demonstrations are available. Current text: *The Exploration of Space*.

Criteria for Selection –

Aeronautical Aspects of Aviation/Aerospace Science 2 (9415) is recommended but not required.

ADVANCED AVIATION/AEROSPACE SCIENCE 4
Full Year/Full Time
Grade 12

No. 9417
Credit 1.0

The cadets will know how to survive in situations where your safety and life depends on your decisions. They will know basic survival medicine procedures, treatments, and prevention measures when faced with medical encounters. The students will understand the necessities to maintain life. They will understand the concepts of orienteering, traveling, and land navigation. The students will be assigned Corps projects and then develop a timeline and resources necessary to complete them. Senior ROTC cadets will continue to lead and be active self-directive learners and will accomplish weekly staff meetings to monitor Corp projects and activities. Discovering and affirming new ideas and techniques for developing and maintaining self-discipline and self-reliance will continue. The students will participate in weekly discussions of current events. Cadets will continue to develop and improve their professional interview skills and update and polish their current accurate resume. The cadets will study financial planning including funding college education and the real life issues of banking, spending, savings, and investments. In addition to Air Force C-130 flights, Air Force KC-135 flights involving inflight-refueling demonstrations are available. Current text: *Survival*.

Criteria for Selection –

Successful completion of Advanced Aviation/Aerospace Science 3 (9146)