

# AEROSPACE STUDIES

The Air Force Reserve Officers Training Corps (AFROTC) program, offered by the Department of Aerospace Studies, provides college-level education to prepare interested men and women for commissioning as second lieutenants in the United States Air Force while simultaneously completing any university undergraduate or graduate degree. The program emphasizes leadership, managerial skills, and the development of each student's sense of personal integrity, honor, and individual responsibility.

Aerospace Studies courses are open to all university students and are taught by Air Force officers. Detachment 685 (Aerospace Studies) offers a Minor in Aerospace Leadership for graduating students/cadets. If students desire a career as an Air Force officer, they must complete all AFROTC requirements. University students who attend academic classes only as a special student (there is no stipend for special students) can receive elective credit for the course(s). Except for cadets on AFROTC scholarship, students incur no active-duty service commitment by taking general military courses (GMC) and may drop the courses at any time within the limits of university course-drop policies.

The U.S. Air Force's mission is to 'Fly, Fight and Win in Air, Space and Cyberspace.' Whether a student's interest lies in flying advanced aircraft, operating sophisticated outer space systems, defending America's cyberspace infrastructure, researching and developing state-of-the-art technology, or working as a language interpreter, defense intelligence officer, medical or legal professional, the Aerospace Studies Department can guide students to exciting and challenging opportunities.

## AFROTC Scholarships

If students qualify, scholarship opportunities are available. A variety of full and partial scholarships are available, and certain scholarships have specific requirements. High school students must apply online no later than December-January timeframe, before they begin college in order to compete for a scholarship while still in high school. Students will find application procedures, forms and deadlines online (<http://www.afrotc.com/>).

Air Force ROTC scholarships cover up to 100% of tuition, laboratory fees, and incidental expenses. ROTC scholarship students will also receive \$900 annually for textbooks and a monthly tax-free stipend of up to \$500. Students must apply and be accepted into the AFROTC program and agree to accept an Air Force officer commission and service commitment upon graduation.

For details on AFROTC or on Air Force scholarships, contact the AFROTC Detachment, McAlexander Fieldhouse, Room 303, (541)737-3291, (800)633-7352 or email: [afrotc@oregonstate.edu](mailto:afrotc@oregonstate.edu). Website: <http://flyingbeavs.com/> or <http://www.afrotc.com/>.

## Allowances, Uniforms, Textbooks

Students on an Air Force ROTC scholarship or enrolled in the ROTC Professional Officer Course are paid a monthly stipend of up to \$500. Uniforms and textbooks for all Aerospace Studies courses are provided by the Air Force.

## Four- or Three-Year Program

The four- or three-year program consists of the General Military Course: six quarters of lower-division Air Force Studies classes, including a laboratory each term, and the Professional Officer Course: six quarters

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If you're already in college, it's not too late to experience the benefits of joining Air Force ROTC. There are numerous options for you even if you start after your freshman year. Previous military experience—ROTC, Academy, or military service—may allow the Professor of Aerospace Studies to waive all or part of the General Military Course (freshman and sophomore years) for students enrolled in the four-year AFROTC program. This program provides an opportunity for students who did not enter ROTC previously. Entry is on a competitive basis and the accelerated three-year program is available to students who join no later than Fall term with no fewer than 3 years remaining in school.

Students may enter the first-year class during the fall, winter, or spring term. Sophomore students may take the 100 and 200 level courses concurrently. Prior to enrolling in the last two years of the program, the Professional Officer Course, the student must meet AFROTC qualification standards and requirements.

## SPECIAL Program

Special programs are also open for Law Students and graduate Law Programs. Students already attending law school wishing to serve as Air Force Judge Advocate Generals (JAGs) may apply for the program through the Air Force JAG website. Officer training will be provided by the AFROTC detachment at an accelerated pace to meet Air Force recruiting goals.

## General Military Course (GMC)

The 100- and 200-level courses for AFROTC cadets consist of one classroom hour, two hours of leadership laboratory, and two hours of physical fitness per week during the freshman and sophomore years. Uniforms and textbooks are provided. Students may enter the freshman class at the start of autumn or winter quarters. Sophomore students may enter at the start of Fall, Winter or Spring terms. A field training-course, normally taken during the summer between the sophomore and junior years, is required for entry into the professional officer courses. Students will receive pay and travel costs for field training.

## Professional Officer Course (POC)

Cadets selected for enrollment in professional officer courses are enlisted in the Air Force Reserve and receive tax-free monthly subsistence stipends ranging from \$300 - \$500 a month. They are furnished text books and uniforms. Junior- and senior-level classes consist of three hours of academic classes, two hours of leadership laboratory and two hours of physical fitness per week.

## Commitments

Students in the four-year program incur no obligation during their first two years in AFROTC unless on scholarship. The student agrees to accept a commission, if offered, only after enrolling in AS 311. High school scholarship students incur a commitment at the beginning of their sophomore year. Upon accepting their commissions, students incur a 4 year commitment; pilots incur a 10 year obligation after completion of pilot training; combat systems officers and air battle managers incur a 6 year obligation after initial training. Graduates pursuing medical school incur a 4 year commitment after medical school.

## Standards

Cadets must be U.S. citizens of sound physical condition, maintain academic standards and high moral character. Air Force physical fitness standards must be met prior to activating a scholarship, attending field training and commissioning.

Cadets must be commissioned as Air Force officers prior to age 39, unless commissioned as rated officers who must be commissioned prior to age 29.

## Further Educational Opportunities

After completion of AFROTC requirements, advanced degrees may be sought by delaying active duty commitments. Some commissioned officers continue advanced studies through fully-funded Air Force Institute of Technology or other DoD-sponsored programs.

## Field Training

Under the Air Force ROTC program, one summer field training session is required, normally after the AS 200 year. Successful completion of field training is required for all cadets prior to membership in the Professional Officer Course. Students are paid varying amounts during field training.

## Undergraduate Programs

### Minor

- Aerospace Studies (<http://catalog.oregonstate.edu/college-departments/rotc/aerospace-studies/aerospace-studies-minor/>)

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## Faculty

**Professor** Lt Col Michael W. Rue, U.S. Air Force

**Assistant Professors** Maj Michael Vanderlaan, Capt Renee Bohac

## AS 111, FOUNDATIONS OF THE AIR FORCE PART I, 1 Credit

The introduction to the Air Force mission and organization. Featured topics include Air Force dress and appearance standards; military customs and courtesies, Air Force heritage, overview of the Department of the Air Force, and Air Force core values. Basic oral and written communication will be assessed.

## AS 112, FOUNDATIONS OF THE AIR FORCE PART II, 1 Credit

Second part of the introduction to the Air Force mission and organization. Featured topics include Air Force career opportunities, Air Force benefits, military communication skills, Air Force installations, and look at the basic characteristics of war. Basic oral and written communication will be assessed.

## AS 113, FOUNDATIONS OF THE AIR FORCE PART III, 1 Credit

Third part of the introduction of what the Air Force is about and what the Air Force has to offer. Featured topics include basic leadership, team building, interpersonal skills, diversity in the Air Force, and the oath of office and commissioning. Basic oral and written communication will be assessed.

## AS 120, LEADERSHIP LABORATORY, 1 Credit

Cadets learn officership, leadership, drill and ceremony, and customs and courtesies. Lab. Graded P/N.

*This course is repeatable for 3 credits.*

## AS 211, THE EVOLUTION OF AIR AND SPACE POWER 1860-1945, 1 Credit

Study of the development of air power, concepts, and doctrine from its beginnings to the end of World War II. Historical examples examined include balloons, dirigibles, Wright Brother's first flight, and the role of air power in World War I and II. Oral and written communication skills will be assessed.

## AS 212, THE EVOLUTION OF AIR AND SPACE POWER 1945-1990, 1 Credit

Study of the development of air power, concepts, and doctrine during the Cold War. Historical examples examined include the Berlin Airlift, nuclear deterrence, and the role of air power employment in the Korean and Vietnam conflicts. Oral and written communication skills will be assessed.

## AS 213, THE EVOLUTION OF AIR AND SPACE POWER 1991-2025, 1 Credit

Study of the factors contributing to the development of air power, concepts, and doctrine from the Persian Gulf War in 1990 to the present and beyond. Historical examples examined include the air campaigns used in the Gulf War, Kosovo crisis, Operations Enduring Freedom, Iraqi Freedom, and the Global War on Terrorism. Oral and written communication skills will be assessed.

## AS 220, LEADERSHIP LABORATORY, 1 Credit

Cadets are placed in element leadership positions in order to know and comprehend the Air Force concepts of command, discipline, tradition, and courtesies. Lab. Graded P/N.

*This course is repeatable for 10 credits.*

## AS 299, SPECIAL TOPICS IN AIR FORCE STUDIES, 1-16 Credits

Supervised individual work.

*This course is repeatable for 99 credits.*

## AS 304, FIELD TRAINING, 6 Credits

Four-week field training supplements campus courses in developing leadership and discipline. Mission, organization, and functions of an Air Force base; marksmanship, survival, and physical training; aircrew and aircraft indoctrination; orientation on specific opportunities in career fields. Conducted at an Air Force base. Graded P/N.

## **AS 311, LEADERSHIP FUNDAMENTALS, TEAM BUILDING AND PROBLEM SOLVING, 3 Credits**

Emphasis on leadership and management fundamentals, team building and problem solving. Case studies are used to examine leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. Unique exercises will be utilized to emphasize team building and problem solving. Oral and written communication skills will be assessed.

## **AS 312, EFFECTIVE SUPERVISION AND GROUP CONFLICT MANAGEMENT, 3 Credits**

Emphasis on situational leadership, group conflict management, effective supervision, professional knowledge, and communicative skills required of an Air Force officer. Unique case studies on leadership and management situations, and group conflict management will be utilized. Oral and written communication skills will be assessed.

## **AS 313, LEADERSHIP, ETHICS, AIR FORCE CORE VALUES AND ACCOUNTABILITY, 3 Credits**

Emphasis on leadership ethics, leadership core values, leadership accountability, and professional knowledge. Unique case studies on leadership ethics and accountability will be utilized. Oral and written communication skills will be assessed.

## **AS 320, LEADERSHIP LABORATORY, 1 Credit**

Cadets are placed in line and staff leadership positions as a preparation for Air Force active duty. Cadet responsibilities include planning, organizing, directing, and controlling the activities of the cadet corps. Lab. Graded P/N.

*This course is repeatable for 3 credits.*

## **AS 405, READING AND CONFERENCE, 1-16 Credits**

Supervised individual work.

*This course is repeatable for 16 credits.*

## **AS 411, NATIONAL SECURITY AFFAIRS, 3 Credits**

Emphasis on the needs for national security, evolution of American defense strategy, policy, and organization. Examination of methods for managing conflict, alliances and regional security to preserve American interests. Arms control, terrorism, and current military issues will also be addressed. Refinement of oral and written communication skills will be assessed.

## **AS 412, WORLD REGIONAL CULTURAL STUDIES, 3 Credits**

Study key transnational issues and religious or ethnic factors that shape the environment Air Force professionals must operate in. Emphasis will be on national security perspective of Africa, South Asia, East Asia, Latin America, Europe, Middle East and former Soviet Republics in transition. Refinement of oral and written communication skills will be assessed.

## **AS 413, PREPARATION FOR ACTIVE DUTY, 3 Credits**

Emphasis on current military issues, evaluation systems, military commission, and risk management. Final preparation for the Air Force professional before commissioning. Refinement of oral and written communication skills will be emphasized.

## **AS 420, LEADERSHIP LABORATORY, 1 Credit**

The senior-level Leadership Laboratory program places cadets in command, line, and staff positions as a preparation for commissioned Air Force service. Cadet responsibilities include planning, organizing, directing, coordinating, and controlling leadership laboratory and the activities of the cadet corps. Lab. Graded P/N.

*This course is repeatable for 6 credits.*