

## College of National Services

Dean: Colonel Andrew C. Hird

The College is comprised of the Departments of Army Military Science, Naval Science and Aerospace Science; each having a department chair and staff.

**Corp of Cadets & ROTC Requirements** (<http://catalog.norwich.edu/archives/2017-18/residentialprogramscatalog/studentservices/corp>)

### Army Military Science

Professor COL Jeremy B Miller, Army Professor of Military Science; Assistant Professors: CPT Therese Farrell, SGM Sherwood Gatts, MAJ Ethan Orr, CPT William Jones III, CPT Keith Schnell (Dartmouth Liaison Officer); Assistant Military Instructors: MSG Philip Heil, MSG Darryl Treadmill, SFC James Close, SFC Robert Gamez, SFC Danny Rodriguez, SFC Jason Boyle, SSG Rundell Logan, SSG Thomas Walker, SSG Thomas York, CPT Maxim Howard (Army ROTC Recruiting Operations Officer).

The program of Military Science (MS) attracts, motivates, and prepares selected students to serve as commissioned officers in the U. S. Army total force, either on active duty or on reserve duty with the National Guard or Army Reserve. It provides an appreciation and understanding of the history and future efforts of land power in the defense of the United States. It develops the dynamic leadership required in the 21st century and complements the baccalaureate degree, in the chosen course of study.

The MS Leadership Laboratory is a weekly, two-hour period of practical instruction and an integral part of the Military Science curriculum (<http://catalog.norwich.edu/archives/2017-18/residentialprogramscatalog/coursedescriptions/ms>), enhancing leadership, physical fitness, and military skills training. Outside of the regular curriculum, there are three, Practical Military Training companies offering additional training and development: Mountain and Cold Weather Company develops leader skills and attributes while conducting military mountaineering, cold weather survival, and small unit light infantry tactics. Ranger Company offers further leadership development and training in small unit operations and patrolling. The *Bold Leader Challenge Team* competes each fall at Fort Knox, Kentucky, with other senior military colleges demonstrating military skills. The Norwich Artillery Battery offers additional leadership and development by training on Army artillery equipment. The Battery provides all ceremonial cannon fire support for University events.

The Army ROTC Basic Course provides basic military instruction laying the foundation for the Advance course. Cadets may attend Basic Camp held at Fort Knox during Cadet Summer Training (CST). To qualify for enrollment in the Army ROTC Advanced Course, MS III and MS IV, requirement of a minimum academic cumulative 2.0 GPA, established physical requirements, a 2.0 or higher GPA in the Army ROTC Basic Course, and demonstrate leadership potential. The Advanced Course requires completing a thirty-day Advance Camp in the summer, normally following the MS III (junior) year. Additional training opportunities include Army professional schools (Airborne, Air Assault, Mountain Warfare, etc.), Cultural Understanding Language Proficiency, and Project Global Officer (GO).

In addition to the Military Science courses, Cadets are required to complete a military history course: (HI 235 and HI 236 are the preferred courses, however, the following courses also meet the requirement; HI 214, HI 224, HI 326, HI 329, HI 332, HI 334, HI 338, HI 339, HI 355, HI 372 and HI 373). The Army ROTC program is integrated with the Corps of Cadets. Membership in the Corps of Cadets is required to contract and pursue an Army ROTC commission.

### Naval Science

Professor Col Robert C. Kuckuk (Chair) Dean of National Services, Professor of Naval Science; Assistant Professors: CDR August Trottman, Maj Karl Schlegel, Capt Richard Benning JR., LT Seamus O'Brien, LT Matthew Horner, LT Bryan McKniff.

The mission of the Department of Naval Science at Norwich University is to develop future officers **mentally, morally, and physically**, and to instill in them with the highest ideals of duty, loyalty, and with the core values of Honor, Courage and Commitment in order to commission college graduates as Naval officers who possess a basic professional background, are motivated toward careers in the Naval Service, and have a potential for future development in mind and character so as to assume the highest responsibilities of command, citizenship and government.

The primary goals of the Naval ROTC Program are to provide students:

- A strong sense of personal integrity, honor, and individual responsibility;
- Leadership training enabling them to successfully lead others under stressful and demanding conditions;
- An understanding of the fundamental concepts of naval science and a basic level of military aptitude;
- An academic background allowing them to successfully undertake demanding leadership and managerial positions;
- A high state of physical fitness for personal health and performance.

The Naval Science Leadership Laboratory is a weekly two-hour period conducted during each academic semester. Emphasis is placed on non-academic professional training. The laboratory is intended for such topics as drill and ceremonies, leadership and ethics, physical fitness and swim testing, cruise preparation, cruise evaluation, sail training, safety awareness, preparation for commissioning, personal finances, insurance, and applied exercises in naval ship systems, navigation, naval operations, naval administration, and military justice. Enrollment into Naval Science Laboratory is restricted to students contracted to U.S. Navy and U.S. Marine Corps.

### Air Force Aerospace Science

Professor Col Andrew C. Hird Professor of Aerospace Science (Chair); Assistant Professors: Lt Col Jason Zimmermann , Capt Jason P. Rimmelin, Capt Zachariah Kovarik; and NCOs: TSgt Gary DeDominick; SSgt Crystal Barba, and SSgt John Roy.

The Air Force ROTC program provides professional preparation for future Air Force officers. The AFROTC is divided into two major programs: the General Military Course (GMC) and the Professional Officer Course (POC). The GMC is offered during the freshman and sophomore years. The GMC deals with the structure, doctrine, and function of the Air Force, communication skills and the historical role of air power. Admission to the advanced course (POC) is on a competitive basis. To enroll in the POC, a student must pass the Air Force Officer Qualifying Test (AFOQT), and an Air Force physical examination, meet academic and physical fitness standards, successfully complete the AFROTC field

training program, and be selected by a board of Air Force officers. The first year of the POC is leadership theory and practice, Air Force management theory and practice, and other aspects of being a professional officer. The second and final year of the POC addresses a broad range of civil/military relations, and the overall social and political context in which U.S. defense policy is formulated and affected. Leadership Laboratory meets one period per week for two hours throughout the student's enrollment in Air Force ROTC. Instruction is conducted within the framework of an Air Force organization with a progression of experience designed to develop each student's leadership potential. The cadet physical training program is an essential part of leadership laboratory and is mandatory for all cadets. A detailed introduction and orientation to life on an active Air Force base occurs during a field encampment (field training) between the student's sophomore and junior years.

## Aerospace Studies Courses

### AS 101 The Foundations of the United States Air Force 1 Cr.

Basic introduction to the United States Air Force and Air Force Reserve Officer Training Corps. Topics: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force opportunities, group leadership problems and communication skills. One hour lecture. Corequisite: Students pursuing an Air Force commission must also register for AS 101 LL1 (which includes 2 hours of Leadership Laboratory and 3 hours of Physical Training, weekly).

### AS 102 The Foundations of the United States Air Force 1 Cr.

A continuation of AS101, introducing the United States Air Force and Air Force Reserve Officer Training Corps. Topics: mission and organization of the Air force, officership and professionalism, military customs and courtesies, Air Force opportunities, group leadership problems and communication skills. One hour lecture. Corequisite: Students pursuing an Air Force commission must also register for AS 102 LL1 (which includes 2 hours of Leadership Laboratory and 3 hours of Physical Training, weekly). Prerequisite: Students pursuing an Air Force commission must have completed AS 101 (or equivalent) with a C- or higher.

### AS 201 The Evolution of USAF Air and Space Power 1 Cr.

A focus on the history of airpower and the military doctrine for its employment. Topics: Air Force heritage, Air Force leaders, general aspects of air and space power and communication skills. One hour lecture. Corequisite: Students pursuing an Air Force commission must also register for AS 201 LL1 (which includes 2 hours of Leadership Laboratory and 3 hours of Physical Training, weekly). Prerequisite: Students pursuing an Air Force commission must have completed AS 102 (or equivalent) with a C- or higher.

### AS 202 The Evolution of USAF Air and Space Power 1 Cr.

A continuation of AS 201, focusing on the history and uses of airpower through the late 20th century and into the 21st century. Topics: airpower doctrine and strategy, and communication skills. One hour lecture. Corequisite: Students pursuing an Air Force commission must also register for AS 202 LL1 (which includes 2 hours of Leadership Laboratory and 3 hours of Physical Training, weekly). Prerequisite: Students pursuing an Air Force commission must have completed AS 201 (or equivalent) with a C- or higher.

### AS 311 Air Force Leadership Studies 3 Cr.

A study of leadership and management fundamentals, professional knowledge, ethics and communication skills required of an Air Force officer. Three hour lecture. Corequisite: Students pursuing an Air Force commission must also register for AS 311 LL1 (which includes 2 hours of Leadership Laboratory and 3 hours of Physical Training, weekly). Prerequisite: Students pursuing an Air Force commission must have completed AS 202 with a C- or higher.

### AS 312 Air Force Leadership Studies 3 Cr.

A continuation of AS 311 focusing on leadership and management fundamentals, professional knowledge, ethics and communication skills. Three hour lecture. Corequisite: Students pursuing an Air Force commission must also register for AS 312 LL1 (which includes 2 hours of Leadership Laboratory and 3 hours of Physical Training, weekly). Prerequisite: Students pursuing an Air Force commission must have completed AS 311 with a C- or higher.

### AS 411 National Security Affairs/Preparation for Active Duty 3 Cr.

Examines the national security process, regional studies, advanced leadership ethics and Air Force doctrine. Topics: officership as a profession, military justice, civil-military relations, preparation for active duty and current issues affecting the military profession. Three hour lecture. Corequisite: Students pursuing an Air Force commission must also register for AS 411 LL1 (which includes 2 hours of Leadership Laboratory and 3 hours of Physical Training, weekly). Prerequisite: Students pursuing an Air Force commission must have completed AS 312 with a C- or higher.

### AS 412 National Security Affairs/Preparation for Active Duty 3 Cr.

A continuation of AS 411 focusing on the national security process, regional studies, advanced leadership ethics and Air Force doctrine. Topics: officership as a profession, military justice, civil-military relations, preparation for active duty and current issues affecting the military profession. Three hour lecture. Corequisite: Students pursuing an Air Force commission must also register for AS 412 LL1 (which includes 2 hours of Leadership Laboratory and 3 hours of Physical Training, weekly). Prerequisite: Students pursuing an Air Force commission must have completed AS 411 with a C- or higher.

## Military Science Courses

### MS 111 Military Science I 1 Cr.

Leader Development and Individual Soldier Skills I – an introduction to Army customs, courtesies, and traditions. An introduction to leadership development, values and ethics of the Army; physical wellness and fitness, and stress management. Laboratory work: Basic land navigation skills, field craft skills, and basic rifle marksmanship. Includes 1 lecture hour and 2 other hours enrolled in MS 111 LL1, plus 3 hours of Physical Training, weekly. United States Armed Service members who have completed Basic Combat Training (BCT) may receive credit for MS 111 and/or MS 112 courses with a JST [Joint Service Transcript]. Norwich Army ROTC office also needs students' DD 214 form [Certificate of Release from Active Duty] or form NGB-22 [Government National Guard Bureau]. Prerequisite: freshmen and sophomores only.

**MS 112 Military Science I 1 Cr.**

Leader Development and Individual Soldier Skills II - Introduction to basic leadership fundamentals: as setting direction, problem-solving, listening, presenting briefs, providing feedback, and using effective writing skills. Exploration of the dimensions of leadership attributes and core leader competencies in the context of practical, hands-on, and interactive exercises. Introduction to the professional challenges and competencies that are needed for effective execution of the profession of arms and Army communication. Class training and labs prepare students to advance basic Soldier skills and tactical techniques. Laboratory work: Advanced land navigation skills, basic rifle marksmanship, and troop leading procedures. Includes 1 lecture hour and 2 other hours enrolled in MS 112 LL1, plus 3 hours of Physical Training, weekly. This requirement may be waived by the Military Science Instructor. United States Armed Service members who have completed both Basic Combat Training (BCT) and an equivalent course may receive credit for MS 111 and/or MS 112 courses with a with a JST [Joint Service Transcript]. Norwich Army ROTC office also needs students' DD 214 form [Certificate of Release from Active Duty] or form NGB-22 [Government National Guard Bureau]. Prerequisites: MS 111, freshmen and sophomores only.

**MS 211 Military Science II 2 Cr.**

The Principles of Small Unit Tactics-Leadership Laboratory. Explores the dimensions of creative and innovative tactical leadership strategies while examining team dynamics and leadership theories that form the basis of the Army leadership framework. Practical exercises include Operations Orders, briefings, and planning are emphasized in order to develop problem solving abilities and confidence building. Includes 2 lecture hours. United States Armed Service members who have completed both Basic Combat Training (BCT) and an equivalent course may receive credit for MS 111 and/or MS 112 courses with a with a JST [Joint Service Transcript]. Students pursuing an Army commission must also register for MS 211 LL1, which includes 2 hours of Leadership Lab plus 3 hours of Physical Training, weekly. Prerequisites: MS 111 and MS 112 or equivalent.

**MS 212 Military Science II 2 Cr.**

Principles of Leadership and Small Unit Tactics II – Examines the challenges of leading teams in the complex operational environment. The course highlights dimensions of terrain analysis, patrolling, and operation orders. Further study of the theoretical basis of the Army Leadership Requirements Model explores the dynamics of adaptive leadership in the context of military operations. Cadets develop greater self-awareness as they assess their own leadership styles and practice communication and team building skills. Laboratory work: Small unit tactics, advanced land navigation, physical fitness, and troop leading procedures. Includes 2 lecture hours. United States Armed Service members who have completed both Basic Combat Training (BCT) and an equivalent course may receive credit for MS 111 and/or MS 112 courses with a with a JST [Joint Service Transcript]. Students pursuing an Army commission must also register for MS 212 LL1, which includes 2 hours of Leadership Lab plus 3 hours of Physical Training, weekly. Prerequisite: MS 211 or equivalent.

**MS 311 Military Science III 3 Cr.**

Training Management and the Warfighting Functions – A comprehensive study and application of the Army Training Management System as well as an introduction to the Army Warfighting Functions. Students will continue to develop oral and written communication skills through preparation and presentation of classes and information briefs as well as develop training plans geared toward individual Soldiers' skills to include land navigation, terrain analysis, and route planning. The course further integrates the Army's problem solving methodology while exhibiting dynamic leadership. Includes 3 lecture hours and students must enroll in MS 311 LL1, which includes 2 hours of Leadership Lab plus 3 hours of Physical Training, weekly. Prerequisite: MS 212 or equivalent.

**MS 312 Military Science III 3 Cr.**

Applied Leadership in Small Unit Operations – A comprehensive study and application of light infantry patrolling operations. Students learn leadership techniques while gaining a comprehensive understanding of the mission and organization of combat and reconnaissance patrols and the methods utilized by effective combat leaders. Explores historical examples to illustrate the critical importance of dynamic leadership. Activities used to demonstrate an understanding of the Army's problem solving processes, fully integrating leadership, technical knowledge, and applying doctrinally sound tactics while conducting full-spectrum operations at the platoon level. Includes 3 lecture hours and students must enroll in MS 312 LL1, which includes 2 hours of Leadership Lab plus 3 hours of Physical Training, weekly. Prerequisite: MS 311 or equivalent.

**MS 411 Military Science IV 3 Cr.**

Transition from Cadet to U.S. Army 2nd Lieutenant -- The first of two senior capstone courses in Military Science. Training includes Army operations, training management, communications and leadership skills; will participate in selected studies of Military History including a visit to the Saratoga battlefield; will attain knowledge and proficiency in several critical areas, as follows: Army training management system, coordinating activities with staffs, and counseling skills. These skills will assist in leading Junior Army ROTC cadets throughout the school year. Instruction will include lecture/seminar, case studies, practical exercises and military laboratories to include field-training exercises. One third of the grade will include a measurement of the student's ability to develop subordinate leaders and personnel. With the addition of MS 412 in the spring, this training assists in the transition to the Branch specific Basic Course as Commissioned Army Officers possessing high moral character, instilled with Army values, physically fit, knowledgeable in basic soldier skills and a meaningful understanding of leadership and management. Includes 3 lecture hours and also is required to enroll in MS 411 LL1, which is 2 Leadership Lab hours plus 3 hours of Physical Training, weekly. Prerequisites: MS 312 or equivalent and students pursuing a commission.

**MS 412 Military Science IV 3 Cr.**

Transition from Cadet to U.S. Army 2nd Lieutenant – The second of two senior capstone courses. Study of origins, development, and implementation of U.S. National Security Policy as it applies to the application of land power; focus on understanding and conducting Military Operations, the parameters in which the U.S. will participate, and the role of the military in PKOs. Intense understanding how to prepare and the students' particular organization to ensure their objectives support the National policy; case studies of recent Military Operations; how tactical decisions can affect strategic outcomes, and the study of current events. Further development of individual leadership skills and knowledge through class seminars, leadership laboratories, and field training exercises; will assess the level of training in their organizations, develop a training plan to correct deficiencies and re-enforce strengths, and how to evaluate training results. The second half of the semester will further develop an understanding of leadership in organizations, team building, counseling subordinates, and the various support systems available to leaders. Advanced oral and written communications skills--preparing written assignments in the military writing style, along with oral presentations. Includes 3 lecture hours and also is required to enroll in MS 412 LL1, which is 2 Leadership Lab hours plus 3 hours of Physical Training, weekly. May be used as part of the six ROTC credits allowed for degree electives. Prerequisite: MS 411 or equivalent and students pursuing a commission.

## Naval Science Courses

### **NS 121 Introduction to Naval Science 2 Cr.**

Required for all freshman midshipmen. Provides a comprehensive overview of the Navy and Marine Corps organization, military courtesies and traditions. 2 lecture hours.

### **NS 122 Sea Power and Maritime Affairs 3 Cr.**

Required for all freshman midshipmen. Provides a comprehensive overview of the Navy's heritage, mission and role in the development of the United States. 3 lecture hours.

### **NS 131 Naval Science Laboratory 0 Cr.**

Required for all contracted, MECEP, and STA-21 students. This course enforces the concepts of Military drill, customs and courtesies, elements of unit leadership, physical fitness, administration, equal opportunity, safety, sexual harassment/sexual assault, military justice, force protection, operational security, watch standards, nutrition, stress management, and other professional development subjects to train prospective Naval Officers. This lab develops students morally, mentally, and physically to instill in them the highest ideals of honor, courage, and commitment and is required for Naval (Navy and Marine Corps) Midshipmen and may be repeated with change in topics. Attendance to field training exercise and one formal event are mandatory. Instructor permission required. 2 hour lab.

### **NS 221 Leadership and Management 3 Cr.**

Required for all sophomore midshipmen. Provides an introduction to the principles of both leadership and management for future leaders. 3 lecture hours.

### **NS 222 Navigation 3 Cr.**

Required for all sophomore Navy midshipmen. Provides an introduction to the principles of navigation and basic seamanship. 3 lecture hours.

### **NS 242 Marine Corps Weapons Systems 2 Cr.**

Required for all sophomore Marine midshipmen. Provides a comprehensive overview of weapons in the Marine Corps inventory. 2 lecture hours.

### **NS 321 Naval Ship Systems I 3 Cr.**

Required for all junior Navy midshipmen (except Nurses). Provides an introduction to basic naval engineering concepts and naval propulsion systems. 3 lecture hours.

### **NS 322 Naval Ship Systems II 3 Cr.**

Required for all junior Navy midshipmen (except Nurses). Provides an introduction to basic naval weapons engineering concepts and weapons systems. 3 lecture hours.

### **NS 331 Evolution of Warfare 3 Cr.**

This course is required for NROTC (Marine option) midshipmen 2nd class and MECEP students. Students trace the development of warfare to the present day. This course covers the causes of continuity and change in the means and methods of warfare. It addresses the influence of political, economic, and societal factors on the conduct of war, with significant attention focused on the role of technological innovation in changing the battlefield. Students will explore the contribution of preeminent military theorists and battlefield commanders to our modern understanding of the art and science of war. 3 lecture hours.

### **NS 342 Small Unit Leadership Skills 2 Cr.**

Required for all junior Naval ROTC contracted Marine option Midshipmen and non OCS complete seniors. Optional for Students/Cadets who are approved to attend Officer Candidate School (OCS) through a Marine Corps Recruiting Command commission program. Provides candidates with all basic skills, knowledge, and physical preparation before attending OCS during summer training. Candidates will continue to develop their oral and written communications skills through preparation of warning, fragmentary, and operation orders; and their leadership and management skills through analytical and decision making abilities. Co-Requisite: NS 342L. 2 lecture hours.

### **NS 342L Small Unit Leadership Skills Lab 1 Cr.**

Required for all junior Naval ROTC contracted Marine option Midshipmen and non OCS complete seniors. Optional for Students/Cadets, pending medical waivers and approval by the Professor of Naval Science, who are approved to attend Officer Candidate School (OCS) through a Marine Corps Recruiting Command commission program. Lab is also referred to "bulldog training" and will test the physical and mental standards candidates are expected to achieve while attending OCS. Students/Candidates will be evaluated based upon the application of military topics discussed in Small Unit Leadership Skill lecture. In this course students acquire an understanding and application of USMC military terms and small unit level operations. Co-Requisite: NS 342. Pre-Requisite: Naval ROTC contracted members or instructor approval.

### **NS 421 Naval Operations and Seamanship 3 Cr.**

Required for all senior Navy midshipmen (except Nurses). Provides an introduction to advanced navigation and seamanship, shipboard operations and naval warfare doctrine. 3 lecture hours.

### **NS 422 Leadership and Ethics 3 Cr.**

Required for all commissioning seniors. Provides all prospective commissionees with advanced leadership, ethics, service etiquette, and junior training. 3 lecture hours and (2 lab hours contacted students only).

### **NS 435 Fundamentals of Maneuver Warfare 3 Cr.**

Required for all senior Naval ROTC Marine option Midshipmen. This course analyzes the United States Marine Corps as the overarching case study for the advent of maneuver warfare based upon historic events and doctrine. Students learn the characteristics, requirements, and problems on maneuver warfare. The study of history is not simply to learn from the past, but as practitioners of maneuver warfare, to use the lessons of the past as the basis for making practical judgments for the present and future. Maneuver warfare is merely a subset of warfare in general; it exhibits certain unique characteristics within the broader field. The required case studies focus in the overall concepts of warfare itself. Three discussion/lecture hours are required. Prerequisite: NS 331 Evolution of Warfare or instructor approval. 3 lecture hours.