# **College of National Services**

Dean: Colonel Eric W. Brigham

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/2015-16/residentialprogramscatalog/studentservices/corp)

# **Army Military Science**

Professor COL Eric W. Brigham (Chair) Dean of National Services, Army Professor of Military Science; Assistant Professors: LTC Ioannis Kiriazis, MAJ Ethan Orr, MAJ Richard Zubeck, CPT William Jones III, CPT Dana Lafarier, CPT Keith Schnell (Dartmouth Liaison Officer); Assistant Military Instructors: SGM Michael Wolff (Detachment Sergeant Major), MSG Shannon Adkins, MSG Philip Heil, SFC James Close, SFC Ryan Osborne, SFC Darryl Treadmill, Mr. Clifford Mullen, Mr.Cory Ryder. Ms. Julie Craig (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, either on active duty or on reserve duty, in 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/2015-16/residentialprogramscatalog/coursedescriptions/ms), enhancing leadership, physical fitness, and military skills training. Outside of the regular curriculum, there are three, military 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; a *Ranger 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.

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 (MS I and MS II), and demonstrate leadership potential. The Advanced Course requires to completing a thirty-day Cadet Leaders Course (CLC) in the summer, normally following the MS III (junior) year. In addition to the Military Science courses, required to complete a military history course (HI 235, HI 236) or a Military Science history course (MS 499). The Army ROTC program allows both Nursing students, as well as Veterans, to be in a civilian lifestyle pursuing an Army ROTC commission.

#### **Naval Science**

Professor Col Robert C. Kuckuk (Chair); Assistant Professors: CDR August Trottman, Maj Karl Schlegel, Capt Richard Benning JR., LT

Anthony Lozano, LT Seamus O'Brien, LT Matthew Horner, GySgt Christopher Perkins.

The mission of the Department of Naval Science at Norwich University is to develop midshipmen *morally, mentally,* and *physically,* and to imbue them with the highest ideals of duty, honor and 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: Capt James Feiccabrino, Capt Jason P. Rimmelin, and TSgt Gary DeDominick; SSgt Jazmin Williams, and SSgt Crystal Barba.

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; communicative 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), pass an Air Force physical examination, meet physical fitness standards, qualify academically, 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 between the student's sophomore and junior years.

# **Aerospace Studies Courses**

AS 101 The Foundations of the United States Air Force 1 Credit
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. Includes 1 hour lecture. Not eligible for use as part of the 6 ROTC
credits allowed for degree electives. Co-requisite: 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.
Prerequisite: Open to freshmen and sophomore students only.

AS 102 The Foundations of the United States Air Force 1 Credit
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. Includes 1 hour lecture. Not eligible for use as
part of the 6 ROTC credits allowed for degree electives. Co-requisite:
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. Prerequisites: Open to freshmen and
sophomore students only. Completion of AS 101 or equivalent with a C or
higher.

# AS 201 The Evolution of USAF Air and Space Power 1 Credit Focuses 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. Includes 1 hour lecture. Not eligible for use as part of the 6 ROTC credits allowed for degree electives. Co-requisite: 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: Open to freshmen and sophomore students only. Completion of AS 101 and AS 102 or equivalent with a C or higher.

AS 202 The Evolution of USAF Air and Space Power 1 Credit
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. Includes 1 hour lecture. Not eligible for use as part of the 6 ROTC credits allowed for degree electives. Co-requisite: 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: Open to freshmen and sophomore students only. Completion of AS 201 or equivalent with a C or higher.

#### AS 311 Air Force Leadership Studies 3 Credits

A study of leadership and management fundamentals, professional knowledge, ethics, and communication skills required of an Air Force officer. Includes 3 hours lecture. May be used as part of the 6 ROTC credits allowed for degree electives. Co-requisite: 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: Completion of AS 202 or equivalent with a C or higher.

#### AS 312 Air Force Leadership Studies 3 Credits

A continuation of AS 311 focusing on leadership and management fundamentals, professional knowledge, ethics, and communication skills. Includes 3 hours lecture. May be used as part of the 6 ROTC credits allowed for degree electives. Co-requisite: 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: Completion of AS 311 or equivalent with a C or higher.

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

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. Includes: Lecture (3 hours). May be used as part of the 6 ROTC credits allowed for degree electives. Co-requisite: AS 411 LL1. Prerequisite: Completion of AS 312 and restricted to students pursuing a commission.

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

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. Includes 3 hours lecture. May be used as part of the 6 ROTC credits allowed for degree electives. Co-requisite: AS 411 LL1. Prerequisite: Completion of AS 411 and restricted to students pursuing a commission.

# **Military Science Courses**

#### MS 111 Military Science I 1 Credit

Leader Development and Individual Soldier Skills I – An introduction to Army customs, courtesies, and traditions. 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. Not eligible for use as part of the 6 ROTC credits allowed for degree electives. United States Soldiers who have completed both Basic Combat Training (BCT) and Advanced Individual Training (AIT) will receive credit for MS 111 and MS 112 courses with a Joint Service Transcript. Prerequisite: Open to freshmen and sophomores only, or by permission from the Military Science Instructor.

#### MS 112 Military Science I 1 Credit

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. Not eligible for use as part of the 6 ROTC credits allowed for degree electives. United States Soldiers that have completed both Basic Combat Training (BCT) and Advanced Individual Training (AIT) will receive credit for MS 111 and MS 112 courses with a Joint Service Transcript. Prerequisite: Open to freshmen and sophomores only, or permission by the Military Science Instructor. Completion of MS 111 or equivalent with a C or higher.

#### MS 211 Military Science II 2 Credits

The Principles of Small Unit Tactics-Leadership Laboratory. Teaches individual soldier skills for survival in modern combat and leadership roles required for infantry team and squad leader in developing technically and tactically proficient soldiers. Training in intelligence gathering, radio communication, individual and crew served weapons; introduced to collective tasks; such as, tactical movements and formations needed to conduct squad offensive, defensive, and patrolling missions. Includes 2 lecture hours. 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. Not eligible for use as part of the 6 ROTC credits allowed for degree elective. Prerequisite: Completion of MS 111 and MS 112 or equivalent with a C or higher.

# MS 212 Military Science II 2 Credits

Principles of Leadership and Small Unit Tactics II – Examines the leader's role in directing and coordinating the efforts of subordinates. Decision making skills, problem solving skills and troop leading procedures continue to be honed through leadership roles. Laboratory work: Small unit tactics, advanced land navigation, physical fitness, and troop leading procedures. Includes 2 lecture hours. Not eligible for use as part of the 6 ROTC credits allowed for degree elective. 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: Completion of MS 211 or equivalent with a C or higher.

#### MS 311 Military Science III 3 Credits

Adaptive Team Leadership -- A comprehensive study and application of light infantry squad tactical operations. Continues to develop oral and written communication skills through preparation and briefing of warning, fragmentary, and operations orders; individual Soldiers' skills to include land navigation and terrain analysis; and leadership and management skills through tactical squad missions and the conduct of physical training. The course further integrates the Army's problem solving methodology while exhibiting dynamic leadership; and technical and tactical expertise when conducting offensive and defensive operations at the squad level. Includes 3 lecture hours. Students pursuing an Army commission must also register for MS 311 LL1, which includes 2 hours of Leadership Lab plus 3 hours of Physical Training, weekly. May be used as part of the 6 ROTC credits allowed for degree electives. Prerequisite: Completion of MS 212 or equivalent with a C or higher.

#### MS 312 Military Science III 3 Credits

Applied Team Leadership -- A comprehensive study and application of light infantry and ranger patrolling operations. Teaches learning leadership techniques by 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. Students pursuing an Army commission must also register for MS 312 LL1, which includes 2 hours of Leadership Lab plus 3 hours of Physical Training, weekly. May be used as part of the 6 ROTC credits allowed for degree electives. Prerequisite: Completion of MS 311 or equivalent with a C or higher.

#### MS 411 Military Science IV 3 Credits

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 Revolutionary War 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. May be used as part of the 6 ROTC credits allowed for degree electives. Prerequisite: Completion of MS 312 or equivalent with a C or higher. Restricted to students pursuing a commission.

#### MS 412 Military Science IV 3 Credits

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: Completion of MS 411 or equivalent with a C or higher. Restricted to students pursuing a commission.

#### MS 499 Topics in Military Science 3 Credits

A 45-hour, distant learning (DL) course covering the gamut of U.S. Military History from pre-colonial through Global War on Terror; gives requisite understanding of military history and the military's role as one component of national power. Developed by: KARTA/MTS Technologies, as a synchronous/asynchronous instructional program; Materials provided by: The Ambrose-Hesseltine, Assistant Professor of U.S. Military History at the University of Wisconsin-Madison; Development and resourced through: Combat Studies Institute at the United States Army Combined Army Center (Fort Leavenworth, KS); is proctored by a Military History Instructor Course, qualified ROTC Cadre member. Requirements may be waived by the Military Science Instructor. May be used as part of the six ROTC credits allowed for degree electives. Prerequisite: Completion of all MS 111, 112, 211, 212, 311, 312, or equivalent with a C or higher.

# **Naval Science Courses**

#### **NS 121 Introduction to Naval Science 2 Credits**

Required for all freshman midshipmen. Provides a comprehensive overview of the Navy and Marine Corps organization, military courtesies and traditions. 2 lecture hours and (2 lab hours contracted students only). Course Attributes: Not eligible for use as part of the six ROTC credits allowed for degree electives.

#### NS 122 Sea Power and Maritime Affairs 3 Credits

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 and (2 lab hours contracted students only). Course Attributes: Not eligible for use as part of the six ROTC credits allowed for degree electives.

# NS 221 Leadership and Management 3 Credits

Required for all sophomore midshipmen. Provides an introduction to the principles of both leadership and management for future leaders. 3 lecture hours and (2 lab hours contracted students only). Course Attributes: Not eligible for use as part of the six ROTC credits allowed for degree electives.

#### **NS 222 Navigation 3 Credits**

Required for all sophomore Navy midshipmen. Provides an introduction to the principles of navigation and basic seamanship. 3 lecture hours and (2 lab hours contracted students only). Course Attributes: Not eligible for use as part of the six ROTC credits allowed for degree electives.

#### NS 242 Marine Corps Weapons Systems 2 Credits

Required for all sophomore Marine midshipmen. Provides a comprehensive overview of weapons in the Marine Corps inventory. 2 lecture hours and (2 lab hours contracted students only). Course Attributes: Not eligible for use as part of the six ROTC credits allowed for degree electives.

#### NS 321 Naval Ship Systems I 3 Credits

Required for all junior Navy midshipmen (except Nurses). Provides an introduction to basic naval engineering concepts and naval propulsion systems. 3 lecture hours and (2 lab hours contracted students only). Course Attributes: May be used as part of the six ROTC credits allowed for degree electives.

## NS 322 Naval Ship Systems II 3 Credits

Required for all junior Navy midshipmen (except Nurses). Provides an introduction to basic naval weapons engineering concepts and weapons systems. 3 lecture hours and (2 lab hours contracted students only). Course Attributes: May be used as part of the six ROTC credits allowed for degree electives.

#### NS 331 Evolution of Warfare 2 Credits

Required for all junior Marine midshipmen and MECEPs. Provides the student with a basic understanding of the art, science, and concepts of warfare through the ages. 2 lecture hours and (2 lab hours contracted students only). Course Attributes: May be used as part of the six ROTC credits allowed for degree electives.

## NS 342 Small Unit Leadership Skills 2 Credits

Required of all junior Marine midshipmen and freshman MECEPs. Provides candidates with all basic skills, knowledge and physical preparation for attending OCS during summer cruise. 2 lecture hours and (2 lab hours contracted students only). Course Attributes: May be used as part of the six ROTC credits allowed for degree electives.

#### NS 421 Naval Operations and Seamanship 3 Credits

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 and (2 lab hours contacted students only). Course Attributes: May be used as part of the six ROTC credits allowed for degree electives.

# NS 422 Leadership and Ethics 3 Credits

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). Course Attributes: May be used as part of six ROTC credits allowed for degree electives.

#### NS 431 Amphibious Warfare 2 Credits

Required for all senior Marine midshipmen and MECEPs. Provides an overview of the history of amphibious warfare, with a focus on Marine Corps operations. 2 lecture hours and (2 lab hours contacted students only). Course Attributes: May be used as part of the six ROTC credits allowed for degree electives.