# DEPARTMENT OF NAVAL SCIENCE

## Introduction

The purpose of the NROTC is to provide a source of highly qualified officers to serve on United States Navy ships, submarines, and aircraft, or in the United States Marine Corps. Students (midshipmen) who obtain a baccalaureate degree and who satisfy academic and physical requirements are commissioned as either ensigns in the Navy or second lieutenants in the Marine Corps. Students may participate in NROTC in one of two programs: the NROTC Scholarship Program or the NROTC College Program. NROTC scholarships provide tuition, books, fees, uniforms, and a monthly allowance of \$250 to \$400. Students participating in the college program receive their NROTC books, uniforms, and a monthly allowance of \$350 to \$400 during their junior and senior years. A major advantage of the college program is the excellent opportunity it offers to win two- and three-year NROTC scholarships.

Regardless of enrollment category, many features are common to both programs:

- · Naval science courses carry academic credit.
- All students are welcome to join the program and "test the waters" without incurring a military obligation.
- All midshipmen who successfully complete the program and university graduation requirements will receive a commission as an officer in the United States Navy or Marine Corps.
- Applicants are considered without regard to race, sex, creed, sexual orientation, or religion.

# **Midshipman Life**

We are dedicated to ensuring that each midshipman leads a full and productive University life. Midshipmen are encouraged to participate on University athletic teams as well as in campus politics, fraternities, sororities, intramurals, and other organizations. Additionally, midshipmen are provided an outstanding opportunity to examine and experience many alternative career paths, social events, and experiences through field trips, summer cruises, and the midshipman military organization.

# **NROTC Program**

Courses offered by the Department of Naval Science, in conjunction with courses offered in the Curriculum in Peace, War, and Defense, are designed to equip an individual with the necessary tools to succeed as an officer in the naval service.

Information about applications and admissions in the UNC-Chapel Hill Naval ROTC may be obtained by visiting the Naval Armory on campus; by addressing an inquiry to Professor of Naval Science, CB# 3325, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3325; by calling (919) 962-1198; or by email at NROTC@unc.edu.

# **Advising**

All students pursuing minors have an academic advisor from the Academic Advising Program (https://advising.unc.edu/). Students are strongly encouraged to meet regularly with their advisor. Departmental academic advising appointments can be made through their respective NROTC instructor or by contacting the department's director of undergraduate studies, Lieutenant David Heider (see contact information

above). Further information on courses and careers may be obtained from the department's website (https://nrotc.sites.unc.edu/).

#### Minor

 Naval Science Minor (https://catalog.unc.edu/undergraduate/ programs-study/naval-science-minor/)

## **Professor**

Andrew Hertel, Captain, USN

## **Associate Professor**

Matthew Angel, Major, USMC

### Instructors

Michael Reyes, Lieutenant, USN (Surface Warfare Officer)
Scott Trail, Lieutenant, USN (Aviation Officer)
Derek McNamara, Captain, USMC (Marine Officer Instructor)

## **NAVS-Naval Science**

## **Undergraduate-level Courses**

NAVS 101. Introduction to Naval Science. 1 Credits.

Fundamental orientation to the Naval service emphasizing the mission, organization, regulations, customs and traditions, broad warfare components, and major challenges facing Navy/Marine Corps officers.

#### **Rules & Requirements**

Grading Status: Letter grade.

NAVS 190. Seminar in Topics of Naval Science. 1-12 Credits.
Permission of the department. Seminar of topics regarding the United States Navy.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics; 12 total credits. 4 total completions. **Grading Status:** Letter grade.

#### NAVS 196. Independent Study in Naval Science. 1-12 Credits.

Permission of the department. Readings and research by an individual student on a subject related to the United States Navy.

#### **Rules & Requirements**

Grading Status: Letter grade.

NAVS 201. Naval Leadership and Management. 3 Credits.

A study of organizational principles, management theory, and leadership styles, with emphasis on applications in the Navy and Department of Defense.

#### **Rules & Requirements**

**IDEAs in Action Gen Ed:** FC-KNOWING <u>or</u> FC-POWER. **Grading Status:** Letter grade.

#### NAVS 202. Navigation. 3 Credits.

A comprehensive study of the theory, principles, and procedures of ship navigation, movements, and employment. Course includes spherical trigonometry, mathematics, analysis, study and practices of navigation, sextants, navigation publications, and report logs. Covers rules of the road, lights, signals, navigational aids, and electronic and mechanical positioning devices.

#### **Rules & Requirements**

**Requisites:** Corequisite, NAVS 202L. **Grading Status:** Letter grade.

#### NAVS 202L. Navigation Laboratory. 1 Credits.

Practical application of the theories and principles of navigation as presented in the lecture series.

#### **Rules & Requirements**

**Requisites:** Corequisite, NAVS 202. **Grading Status:** Letter grade.

#### NAVS 211. Marine Option Naval Science Laboratory. 0 Credits.

One laboratory hour per week designed to introduce topics and activities relevant to the professional development of the prospective Marine Corps officer. Required for Marine Option 2/C.

#### **Rules & Requirements**

Grading Status: Letter grade.

## NAVS 301. Naval Ships Engineering Systems. 3 Credits.

An introductory course and survey of ship design, characteristics, propulsion (including nuclear power) and control systems, and the principles of ship stability.

#### **Rules & Requirements**

IDEAs in Action Gen Ed: FC-QUANT.

**Grading Status:** Letter grade.

## NAVS 302. Naval Weapons Systems. 3 Credits.

A descriptive survey course in engineering aspects of ships' weapons guidance, control, and propulsion systems and characteristics of ships' weapons systems.

#### **Rules & Requirements**

DEAs in Action Gen Ed: FC-QUANT.

Grading Status: Letter grade.

#### NAVS 311. Evolution of Warfare. 3 Credits.

Survey of the evolution of warfare through the study of selected campaigns and classic battles, with special emphasis on the principles of war, the military impact of leadership, and the evolution of tactics and weaponry.

#### **Rules & Requirements**

IDEAs in Action Gen Ed: FC-GLOBAL or FC-PAST.

Grading Status: Letter grade.

## **Advanced Undergraduate and Graduate-level Courses**

NAVS 401. Naval Operations. 4 Credits.

A study of the maneuvering of ships in formation, and the operations in which naval vessels engage daily.

#### **Rules & Requirements**

IDEAs in Action Gen Ed: FC-GLOBAL.

**Grading Status:** Letter grade.

## NAVS 402. Naval Leadership and Ethics. 3 Credits.

Capstone leadership course in NROTC curriculum, emphasizing leadership skills and their ethical implications for the competent commissioned officer in areas of human resources and material management.

#### **Rules & Requirements**

IDEAs in Action Gen Ed: FC-KNOWING or FC-VALUES.

Making Connections Gen Ed: PH. Grading Status: Letter grade.

## NAVS 411. Amphibious Warfare. 3 Credits.

A survey of the projection of sea power ashore, with special emphasis on the evolution of amphibious warfare in the 20th century, through the study of historical amphibious landings and campaigns.

#### **Rules & Requirements**

IDEAs in Action Gen Ed: FC-CREATE or FC-POWER.

Grading Status: Letter grade.

#### NAVS 500. Naval Science Laboratory. 0 Credits.

Required of all NROTC students. Meets once a week to provide supplemental military training, including close order drill, physical fitness, inspections, guest lectures, and leadership training.

#### **Rules & Requirements**

Repeat Rules: May be repeated for credit. 0 total credits. 8 total

completions.

**Grading Status:** Letter grade.

#### NAVS 501. Operational Leadership Enhancement Course. 1 Credits.

Provides leadership training in a military environment. Professional development is achieved through academics, physical fitness, marksmanship, and leadership experiences. Course reviews leadership lessons in an at-sea or training environment. Restricted to ROTC members who participate in summer cruise, training, or OCS.

#### **Rules & Requirements**

Making Connections Gen Ed: EE- Field Work.

**Grading Status:** Letter grade.

# **Contact Information**

#### **Department of Naval Science**

Visit Program Website (https://nrotc.sites.unc.edu/) Naval Armory, 221 South Columbia Street, CB# 3325 (919) 843-9279

#### Chair

Captain Andrew Hertel

#### **Director of Undergraduate Studies**

Emily Cossett ecossett@unc.edu