



# NAVAL SCIENCE (NAVS)

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## NAVS 100 Naval Orientation Lab

**Description:** Naval Orientation requires one and one-half hours participation per week. Continuing program offering an introduction to the various aspects of Navy life. Conducted each semester in the NROTC program.

**Credit Hours:** 0

**Max credits per semester:**

**Max credits per degree:**

**Grading Option:** Pass No Pass

## NAVS 111 Introduction to Naval Science

**Description:** Introduction to seapower and the naval service. The mission, organization, regulations, and broad warfare components of the Navy and Marine Corps. Officer and enlisted rank and rating structures; training; promotions; naval customs and courtesies; ship nomenclature; leadership and discipline. Throughout the course students are apprised of the major challenges facing today's naval officer.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Grading Option:** Graded

## NAVS 112 Sea Power & Maritime Affairs

**Notes:** This is a 3 credit course.

**Description:** This course surveys sea power in terms of "national" domestic environments, foreign policy, technology, leadership, doctrine, strategy and tactics, and "inter-service relations". An understanding of the historical impact of these factors on maritime warfare has direct application to present day and future maritime warfare. Discussions examine the history of the Navy as a force in diplomacy and an instrument of U.S. foreign policy. Relationships between Congress and the military for determining the national defense policy are also explored. An integrated examination of current events and issues lends historical perspective throughout the course. The objective is to challenge you to think critically, objectively, and systemically in order to permit you to function more effectively as a leader in charge of complex maritime systems and organizations in dynamic environments.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded with Option

## NAVS 222 Naval Ship Systems II

**Description:** Concepts of naval weapons systems, automatic control systems, and communication systems are explored. Components of the weapon system, including sensors and detection systems, tracking systems, computational systems, launching devices, and projectiles. Once the weapon systems have been defined, they are analyzed solving classic fire control problems and in more modern "total system integration." Command, control, and intelligence (C4ISR) and the impact that computers play in this area. Student presentations are utilized to help them understand how the theory presented is used in modern naval weapons system.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

## NAVS 231 Naval Ship Systems I

**Description:** Basic considerations for hull design for naval vessels, related to buoyancy, equilibrium, stability, and the effects of flooding on the design characteristics of naval vessels; basic principles and components of a ship's propulsion system and their relation to all other ship's systems; and the interrelationships and interdependency of all of a ship's systems to the successful mission of a ship.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

## NAVS 321 Evolution of Warfare

**Prerequisites:** Junior or senior standing

**Description:** History of warfare and its evolution from the beginning of recorded history to the present.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

## NAVS 322 Naval Operations and Seamanship

**Prerequisites:** NAVS 331.

**Description:** Principles essential for an understanding of and a working capability in both safe navigation and decision making. Comprised of a detailed and applied analysis of relative motion, ship handling, and "rules of the sea.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

## NAVS 331 Navigation

**Description:** Theories, computations, practices, and techniques of terrestrial and celestial navigation. The theory involved in advanced electronic navigation systems.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

**Prerequisite for:** NAVS 322

## NAVS 401 Naval Leadership and Management

**Description:** Designed to provide a scholarly basis for leadership and management studies for both future military officers and private sector leaders. Creates a deeper understanding of the topic through case studies, selected readings, and focused research that provides the student with a deeper understanding of leadership theory and management tools that can be used in future leadership roles.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

## NAVS 412 Leadership and Ethics

**Description:** Equips the Navy NROTC student with the skills and abilities needed for competence as a commissioned officer. Theory of leadership and management and practical application. Professional ethics and law within the scope of the military environment. Capstone course builds upon and focuses the managerial and professional competencies developed during prior at-sea training and naval science courses.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

**NAVS 421 Introduction to the Fundamentals of Maneuver Warfare**

**Prerequisites:** Junior or senior standing, or permission of department chair.

**Notes:** Open to all students and required for US Marine Corps students.

**Description:** Studies broad aspects of warfare and its interaction with current maneuver warfare doctrine. Case study examination of the historic influences of current tactical, operational and strategic implications of maneuver warfare practices. Specific focus on the United States Marine Corps as the premier maneuver warfare fighting institution.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded with Option