

# NS - NAVAL SCIENCE

NS Class Schedule (<https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/NS/>)

## Courses

**NS 100 Leadership Laboratory credit: 0 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/100/>)

Noncredit course designed to give the Naval ROTC student, through practical application, a better grasp of the naval science subjects taught in the classroom and a working knowledge of close order drill. Approved for S/U grading only. May be repeated.

**NS 101 Introduction to Naval Science credit: 2 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/101/>)

Naval organization and management practices examined within the context of the naval service, command and control, organization for logistics, service and support, functions and services of major components of the Navy and Marine Corps, and shipboard organization with emphasis on management and leadership functions. Prerequisite: Consent of instructor. No prerequisite for non-NROTC students.

**NS 102 Sea Power and Maritime Affairs credit: 2 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/102/>)

Investigates the characteristics of sea power and their impact on the affairs of our nation; discusses those characteristics with historical and modern applications to the United States and other world powers. Prerequisite: No prerequisite for non-NROTC students.

**NS 120 Intro to US Armed Forces credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/120/>)

Same as AFAS 120 and MILS 120. See MILS 120.

This course satisfies the General Education Criteria for: Humanities - Hist Phil

**NS 204 Navigation/Naval Operations I credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/204/>)

Introduces the basic concepts of marine navigation, international and inland rules for vessels at sea and the use of maneuvering boards in safe ship maneuvering. Explores principles of navigation and methods used to aid in navigation. Provides a solid foundation of the fundamentals of marine navigation and its importance to the United States Navy. Prerequisite: Consent of instructor.

**NS 303 Leadership and Management credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/303/>)

Leadership and Management is a study of organizational behavior and management with an emphasis on situational leadership. Students will explore a variety of leadership and management topics including the classical theories of management, motivation, and communication to help prepare students for leadership challenges in any environment and any industry. Prerequisite: No prerequisite for non-NROTC students.

**NS 305 Introduction to Naval Engineering credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/305/>)

Fundamentals of ship compartmentalization, propulsion systems, engine theory and turbine theory, and naval warship control. Examines elements of ship design, damage control, and ship stability. Thermodynamic processes and their application to conventional and nuclear power generation. Energy storage systems such as hydraulics and compressed air systems. Electrical theory and distribution applications. Applications and case studies of engineering documentation, maintenance, and material management. Prerequisite: Consent of instructor.

**NS 306 Naval Weapons Systems credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/306/>)

Introduction to concepts and properties of electronic, physical, electromagnetic and mechanical systems and the underlying principles for operation of shipboard and aircraft weapons systems. Course emphasizes types of weapons and fire control systems, capabilities and limitations, theory of target acquisition, identification and tracking, trajectory and ballistics principles, and basic theory of radar and sonar. Prerequisite: Consent of instructor.

**NS 307 Navigation/Naval Operations II credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/307/>)

Explores numerous aspects related to the efficient and professional manner of U.S. Navy ship operations. Teaches the fundamentals of the U.S. Navy systems of communications used on sea-going vessels and Naval Warfare, Command and Control, and Joint Operations. Discusses the many issues relating to ship handling and Naval Officer responsibilities. Prerequisite: NS 204 Prerequisite: NS 204 or consent of instructor.

**NS 308 Leadership and Ethics credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/308/>)

Leadership and Ethics prepares future leaders by exploring and applying a diverse range of leadership and ethical tools to enhance objective, sound, and timely decision-making in the most challenging environments. This course emphasizes the importance of leadership that adheres to the highest standards of character and integrity. It is a "Leadership Seminar" where fundamentals and applications of leadership and ethics will be discussed. The primary purpose of this course is to help you develop your personal leadership philosophy and style based on a solid ethical foundation. Prerequisite: NS 303 for NROTC students only. No prerequisite for non-NROTC students.

**NS 321 Evolution of Warfare credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/321/>)

Open to all students on campus, not just ROTC students. The course provides the student with a basic overview of Marine Corps history combined with its mission within the Department of Defense. To that end, three general topics are discussed: (1) Leadership and Ethics, (2) Seapower and Naval History, and (3) Technical Foundations of Naval Warfare. This course is well suited for anyone interested in learning more about what makes the Marine Corps so effective as a warfighting organization as well as students seeking to develop their leadership skills.

**NS 323 Maneuver Warfare Fundamentals credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/NS/323/>)

Open to all students on campus, not just ROTC students. Throughout the course we will discuss modern tactical principles, current military developments, and other aspects of warfare along with their interactions with and influences on maneuver warfare doctrine. There is a specific focus on the United States Marine Corps as the premier maneuver warfighting organization. Additionally, study will include historical influences on tactical, operational, and strategic levels of maneuver warfare practices in the current and future operating environments. This course is well suited for anyone interested in learning more about what makes the Marine Corps so effective as a warfighting organization as well as students seeking to develop their leadership skills. Prerequisite: Advanced undergraduate standing or consent of instructor.