

# MILITARY NAVY (MN)

## MN 1004 - Introduction to Naval Science (3 credits)

A basic introduction to the Naval profession and concept of sea power. Explores the role of the commissioned officer and covers uniform regulations, the Uniform Code of Military Justice, Naval terminology, the Oath of Office, the Navy Ethos, and customs and courtesies. Also covers basic communication and the importance of training and qualification. The relationship to sea power and maritime strategy explained through the missions of the Navy and Marine Corps, briefly touching on the mission of other branches. Explains how directives are revised and published, as well as possible threats against platforms. Basic shipboard damage control covered with an emphasis on combating naval casualties.

**Instructional Contact Hours:** (3 Lec, 3 Crd)

## MN 1014 - Naval Fitness (1 credit)

Reflects a culture of physical fitness as way of life within the United States Navy & the United States Navy Reserve Officer Training Corps (NROTC). Structured to motivate members to participate and implement year-round physical fitness conditioning program emphasizing total-body wellness to demonstrate expeditionary mission requirements. Prepares midshipmen to demonstrate competency in fitness programs upon entering active duty. Class is limited to students currently enrolled in the Virginia Tech NROTC program. Comprised of evolving content and may be repeated 9 times for a maximum of 10 credit hours. Pre: Enrollment in the Virginia Tech Naval ROTC program.

**Instructional Contact Hours:** (3 Lab, 1 Crd)

**Repeatability:** up to 10 credit hours

## MN 1104 - Naval Ships Systems I: Engineering (3 credits)

Ship characteristics and types. Includes ship design, hydrodynamic forces, stability, main propulsion, electrical and auxiliary systems, interior communications, ship control, and damage control. One semester of college level science required.

**Prerequisite(s):** MN 1004

**Instructional Contact Hours:** (3 Lec, 3 Crd)

## MN 1984 - Special Study (1-19 credits)

**Instructional Contact Hours:** Variable credit course

## MN 2004 - Naval Ships Systems II: Weapons (3 credits)

Theory and employment of naval weapons systems. Includes threat detection, evaluation, weapon selection, delivery systems, guidance, and warhead design. Elements of command, control, and communications.

**Instructional Contact Hours:** (3 Lec, 3 Crd)

## MN 2104 - Seapower and Maritime Affairs (3 credits)

A survey of naval history from the American Revolution to the present with emphasis on major developments in strategy, tactics, and technology. Discussion of the geopolitical theory of Alfred Thayer Mahan. Explores present concerns in seapower and maritime affairs, including the economic and political dimensions of ocean commerce, the Law of the Sea, a comparison of U.S. and Soviet maritime strategies, and current naval affairs.

**Instructional Contact Hours:** (3 Lec, 3 Crd)

## MN 2974 - Independent Study (1-19 credits)

**Instructional Contact Hours:** Variable credit course

## MN 2984 - Special Study (1-19 credits)

**Instructional Contact Hours:** Variable credit course

## MN 3005 - Navigation and Naval Operations (3 credits)

3005: An in-depth study of the theory and practice of piloting and introduction to celestial navigation. Students develop practical skills in the use of charts, visual and electronic aids. A study of the International Rules of the Nautical Road. 3006: Relative motion, vector-analysis theory, and ship employment. Includes an introduction to naval operations, ship characteristics, shiphandling, and afloat communications. I

**Instructional Contact Hours:** (3 Lec, 3 Crd)

## MN 3006 - Navigation and Naval Operations (3 credits)

3005: An in-depth study of the theory and practice of piloting and celestial navigation. Students develop practical skills in the use of charts, visual and electronic aids. 3006: A study of the International Rules of the Nautical Road, relative motion, vector-analysis theory, and ship employment. Includes an introduction to naval operations, ship characteristics, shiphandling, and afloat communications. II

**Instructional Contact Hours:** (3 Lec, 3 Crd)

## MN 3204 - Evolution of Warfare (3 credits)

Development of warfare focusing on impact of major military theorists, strategists, and technicians. Ancient times to present. I

**Prerequisite(s):** MN 2104

**Instructional Contact Hours:** (3 Lec, 3 Crd)

## MN 4005 - Leadership and Management/Ethics (3 credits)

4005: Examines leadership skills, strategies, and contexts as interpreted through the lenses of the leader, the follower, and the situation.

Contrasts the roles of leader and manager within diverse constructs.

Focuses on building and sustaining high-performance teams through transformational, charismatic and servant leadership. Challenges

students to develop individual leadership skill development programs. Introduces general ethical theories and moral reasoning skills in the

context of ethical decision making case studies, dark side trait analysis, and associated mitigation strategies. 4006: Explores philosophical

schools of ethical thought in the context of targeted/representative

case studies, both historical and contemporary in nature. Applies

theoretical approaches to moral reasoning specifically as they pertain

to ethical dilemmas within the rubrics of distributive justice and just war theory. Analyzes moral obligations as entailed by a voluntary oath of

service. Examines strategies for mentorship, behavior reinforcement, and disciplinary options to optimize organizational success. Pre: Sophomore

Standing.

**Pathway Concept Area(s):** 3 Reasoning in Social Sciences, 10 Ethical Reasoning, 11 Intercultural&Global Aware.

**Instructional Contact Hours:** (3 Lec, 3 Crd)

**MN 4006 - Leadership and Management/Ethics (3 credits)**

4005: Examines leadership skills, strategies, and contexts as interpreted through the lenses of the leader, the follower, and the situation.

Contrasts the roles of leader and manager within diverse constructs.

Focuses on building and sustaining high-performance teams through transformational, charismatic and servant leadership. Challenges students to develop individual leadership skill development programs.

Introduces general ethical theories and moral reasoning skills in the context of ethical decision making case studies, dark side trait analysis, and associated mitigation strategies.

4006: Explores philosophical schools of ethical thought in the context of targeted/representative case studies, both historical and contemporary in nature. Applies theoretical approaches to moral reasoning specifically as they pertain to ethical dilemmas within the rubrics of distributive justice and just war theory. Analyzes moral obligations as entailed by a voluntary oath of service. Examines strategies for mentorship, behavior reinforcement, and disciplinary options to optimize organizational success. Pre: Sophomore Standing.

**Pathway Concept Area(s):** 3 Reasoning in Social Sciences, 10 Ethical Reasoning, 11 Intercultural&Global Aware.

**Instructional Contact Hours:** (3 Lec, 3 Crd)

**MN 4204 - Amphibious Warfare (3 credits)**

Historical survey of the development of amphibious doctrine and the conduct of amphibious operations. Emphasis is on amphibious operations in World War II. Present day potential and limitations on amphibious operations are explored. I

**Instructional Contact Hours:** (3 Lec, 3 Crd)

**MN 4974 - Independent Study (1-19 credits)**

**Instructional Contact Hours:** Variable credit course

**MN 4984 - Special Study (1-19 credits)**

II

**Instructional Contact Hours:** Variable credit course