NAVLS - Naval Science

NAVAL SCIENCE Courses

NAV 101. Introduction to Naval Science. 2 Credits.
General introduction to the naval service. Particular emphasis placed on
the mission, organization, regulations and broad warfare components of the
Navy and Marine Corps. Includes customs, discipline, courtesies, leadership,
core values and shipboard nomenclatures.

NAV 103. Introduction to Naval Science. 2 Credits.
The study of the evolution of the major world naval and maritime nations.
The role of American naval and maritime affairs in the rivalries of the
great world powers during the colonial period, the spread of revolutionary
movements, and the era of civil and international conflicts in the 19th and
20th centuries.

NAV 111+. Naval Laboratory I. 1 Credit.
Covers basic military formations, drill movements, commands, customs,
courtesies, honors and inspection. Lecture and discussion topics include
security, equal opportunity and military justice. First year Naval Science
students only. Prerequisite: departmental permission.

NAV 112+. Naval Laboratory I. 1 Credit.
Continues basic military formations, drill movements, commands, customs,
courtesies, honors and inspections. Lecture and discussion topics include
preparation, safety education, administration, security, equal
opportunity and military justice. First year Naval Science students only.
Prerequisite: departmental permission.

NAV 201. Naval Ships Systems I. 3 Credits.
Familiarizes students with types, structure and purpose of naval engineering
systems, propulsion systems, auxiliary power systems, electrical systems and
ship control. Ship design and stability characteristics are examined.

NAV 202. Naval Ships Systems II. 3 Credits.
Introduction to theory and principles of operation of naval weapons systems.
Covers types of weapons and fire control systems, capabilities/limitations,
target acquisition, identification and tracking, trajectory principles and
basics of naval ordnance.

NAV 211+. Naval Laboratory II. 1 Credit.
Covers military formations, drill movements, commands, customs,
courtesies, honors and inspections. Lecture/discussion topics include cruise
preparation/evaluation, security, administration and military justice. Second
year Naval Science students only. Prerequisite: departmental permission.

NAV 212+. Naval Laboratory II. 1 Credit.
Military formations, drill movements, commands, customs, courtesies,
honors and inspections. Lecture and discussion topics include cruise
preparation and evaluation, safety, administration, security, equal
opportunity and military justice. Second year Naval Science students only.
Prerequisite: departmental permission.

NAV 301. Navigation and Naval Operations I. 3 Credits.
In-depth study of piloting including theory, principles and procedures.
Includes use of charts, visual and electronic aids, and theory and operation of
compasses. Other topics include tides, currents, effects of wind and weather,
and nautical rules of the road. Prerequisite: departmental permission.

NAV 302. Navigation and Naval Operations II. 3 Credits.
Relative motion vector-analysis theory, relative motion problems, formation
tactics, and ship employment. Also includes an introduction to naval
operations and operations analysis, ship behavior and characteristics in
manoeuvring, applied aspects of ship handling, and afloat communications.
Concepts in naval leadership and naval operations reinforced through case
studies. Prerequisite: departmental permission.

NAV 310. Evolution of Warfare. 3 Credits.
Explores the basic concepts for understanding the operational art of
warfare from the beginning of recorded history to the present. Prerequisite:
departmental permission.

NAV 311+. Naval Laboratory III. 1 Credit.
Military formations, drill movements, commands, customs, courtesies,
honors and inspections. Lecture/discussion topics include cruise preparation
and evaluation, security and military justice. Third year Naval Science
students only. Prerequisite: departmental permission.

NAV 312+. Naval Laboratory III. 1 Credit.
Military formations, drill movements, commands, customs, courtesies,
honors and inspections. Lecture and discussion topics include cruise
preparation and evaluation, safety, administration, security, equal
opportunity and military justice. Third year Naval Science students only.
Prerequisite: departmental permission.

NAV 395. Topics. 3 Credits.
Study of selected topics. Prerequisite: departmental permission.

NAV 401. Leadership and Management I. 3 Credits.
The fundamentals of the managerial process (planning, organization,
directing, and controlling) are considered in their relationship to the
effectiveness of naval organization and readiness. Coverage includes human
resources management, naval personnel management, material management
and administration of division discipline. Prerequisite: NROTC Junior or
Senior Midshipman or STA-21/MECEP; departmental permission required
for non-ROTC students.

NAV 402. Leadership and Ethics. 3 Credits.
Capstone course, designed to equip the student with the critical thinking
skills to address moral and ethical dilemmas frequently faced by naval
officers. Prerequisite: completion of all previous NAVS courses.

NAV 410. Fundamentals of Maneuver Warfare. 3 Credits.
Broad aspects of warfare and their interactions with maneuver warfare
doctrine. Focus on the United States Marine Corps as the premier maneuver
warfare fighting institution. Historical influences on current tactical,
operational, and strategic implications of maneuver warfare practices.
Case studies. Enrollment preference to NROTC students. Prerequisites:
departmental permission.

NAV 411+. Naval Laboratory IV. 1 Credit.
Covers military formations, drills, commands, customs, courtesies, honors
and inspections. Lecture and discussion topics include precommissioning
preparation, administration, equal opportunity, safety and military justice.
Fourth year Naval Science students only. Prerequisite: departmental permission.

NAV 412+. Naval Laboratory IV. 1 Credit.
Military formations, drill movements, commands, customs, courtesies,
honors and inspections. Lecture and discussion topics include
precommissioning preparation, safety, administration, security, equal
opportunity and military justice. Fourth year Naval Science students only.
Prerequisite: departmental permission.