### NAVAL SCIENCE (NAVA)

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<th>Course Code</th>
<th>Course Title</th>
<th>Department</th>
<th>Grade Mode</th>
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<tr>
<td>NAVA 100</td>
<td>NAVAL SCIENCE LABORATORY</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Lecture/Laboratory</td>
<td>3</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Lower-Level</td>
<td>Practical applications of leadership principles as a Junior Naval Officer. Repeatable for Credit.</td>
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<td>NAVA 101</td>
<td>NAVAL ORIENTATION</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Lecture/Laboratory</td>
<td>3</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Lower-Level</td>
<td>An introduction to naval traditions and customs, seamanship, naval organization and missions, and the fundamental concepts of sea power.</td>
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<td>NAVA 103</td>
<td>SEA POWER AND MARITIME AFFAIRS</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Lecture/Laboratory</td>
<td>3</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Lower-Level</td>
<td>Readings, discussions, and research on selected topics related to the history, importance, and impact of sea power on modern civilization.</td>
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<td>NAVA 203</td>
<td>LEADERSHIP AND MANAGEMENT I</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Lecture/Laboratory</td>
<td>3</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Lower-Level</td>
<td>An introduction to the principles and concepts of management, organization, leadership, information systems, and decision making.</td>
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<td>NAVA 238</td>
<td>SPECIAL TOPICS</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Seminar, Lecture, Laboratory, Internship/Practicum</td>
<td>1-4</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Lower-Level</td>
<td>Topics and credit hours may vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.</td>
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<tr>
<td>NAVA 301</td>
<td>NAVIGATION I</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Lecture/Laboratory</td>
<td>3</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Upper-Level</td>
<td>Marine navigators and laws of vessel operations. Includes coastal piloting, navigational aids, nautical astronomy, satellite and inertial systems, and rules of the nautical road.</td>
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<tr>
<td>NAVA 302</td>
<td>NAVAL OPERATIONS &amp; SEAMANSHIP</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Lecture/Laboratory</td>
<td>3</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Upper-Level</td>
<td>An analysis of ship movements, formations, and fleet operations; includes Rules of the Road, maneuvering board, tactical publications and communications.</td>
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<td>NAVA 303</td>
<td>EVOLUTION OF WARFARE</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Lecture/Laboratory</td>
<td>3</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Upper-Level</td>
<td>Historical survey of the evolution of the conduct of warfare. Strategy, tactics, weapons, organization, and military leaders/thinkers are studied. Course is taught in the NROTC Building.</td>
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<td>NAVA 304</td>
<td>NAVAL WEAPONS-NAVAL SHIP SYSTEMS II</td>
<td>Naval Science</td>
<td>Standard Letter</td>
<td>Lecture/Laboratory</td>
<td>3</td>
<td>Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.</td>
<td>Undergraduate Upper-Level</td>
<td>The theory and employment of weapons systems. The student explores the processes of detection, evaluation, threat analysis, weapon selection, delivery, guidance, and explosives. The physical aspects of radar and underwater sound are described in detail.</td>
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NAVA 402 - LEADERSHIP AND ETHICS
Short Title: LEADERSHIP AND ETHICS
Department: Naval Science
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): NAVA 203
Description: Leadership principles, with particular emphasis on ethics, human resources management, military law and discipline, and administration. The Capstone course for NROTC seniors. Recommended prerequisite(s): Spring semester of senior year.

NAVA 403 - NAVAL ENGINEERING
Short Title: NAVAL ENGINEERING
Department: Naval Science
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Ship propulsion systems, auxiliary systems, steering systems, electrical power distribution, ship design, ship stability and damage control measures.

NAVA 411 - FUNDAMENTALS OF MANEUVER WARFARE
Short Title: FUND OF MANEUVER WARFARE
Department: Naval Science
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Mutually Exclusive: Credit cannot be earned for NAVA 411 and NAVA 410.

NAVA 477 - SPECIAL TOPICS
Short Title: SPECIAL TOPICS
Department: Naval Science
Grade Mode: Standard Letter
Course Type: Internship/Practicum, Lecture, Seminar, Laboratory
Credit Hours: 1-4
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Topics and credit hours may vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.