## Naval Science

*Chairperson: Matthew Vandersluis, CAPT, USN*

Department of Navy ROTC website (http://www.marquette.edu/rotc/navy)

The Marquette University Department of Naval Science offers a naval science minor area of study for undergraduate students interested in pursuing a commission as an officer in the United States Navy or Marine Corps. The primary purpose of this minor is to teach prospective Naval and Marine Corps Officers the history of the Navy, current naval affairs, maritime strategy and the evolution of that strategy throughout the Navy and Marine Corps, operations and functions of current naval vessels, as well as a strong and continuing emphasis on leadership and moral decision making throughout every one of the classes. The course work provides students with the opportunity to acquire sound judgment, leadership, historical knowledge and current naval functions which are essential in becoming an officer in the Navy and Marine Corps.

### Minor in Naval Science

The minor in naval science consists of a minimum of 21-23 credit hours of Naval Science courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>NASC 1009</td>
<td>Introduction to Naval Science</td>
<td>2</td>
</tr>
<tr>
<td>NASC 1022</td>
<td>Sea Power and Maritime Affairs</td>
<td>3</td>
</tr>
<tr>
<td>NASC 2151</td>
<td>Navigation</td>
<td>3</td>
</tr>
<tr>
<td>NASC 2185</td>
<td>Leadership and Management</td>
<td>3</td>
</tr>
<tr>
<td>NASC 3142</td>
<td>Naval Ship Systems 1</td>
<td>3</td>
</tr>
<tr>
<td>NASC 3162</td>
<td>Naval Ship Systems 2</td>
<td>3</td>
</tr>
<tr>
<td>NASC 4152</td>
<td>Naval Operations and Seamanship</td>
<td>3</td>
</tr>
<tr>
<td>NASC 4186</td>
<td>Leadership and Core-Value-Based Decision-Making</td>
<td>3</td>
</tr>
<tr>
<td>or NASC 4995</td>
<td>Independent Study in Naval Sciences</td>
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Total Credit Hours: 23

### Marine Option:

Students are required to complete 21 credit hours in NASC courses, as listed below.

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<td>NASC 3191</td>
<td>Fundamentals of Maneuver Warfare</td>
<td>3</td>
</tr>
<tr>
<td>NASC 3964</td>
<td>Practicum in U.S. Marine Corps Leadership and Management</td>
<td>4</td>
</tr>
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<td>NASC 4186</td>
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<td>3</td>
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Total Credit Hours: 21

### Additional Requirements for Navy Option Scholarship Students:

- **Calculus** - Must complete by end of sophomore year:
  - MATH 1450 & MATH 1451: Calculus 1 and Calculus 2
  
- **Physics** - Must complete by end of junior year:
  - PHYS 1003 & PHYS 1004: General Physics with Introductory Calculus 1 and General Physics with Introductory Calculus 2
  
- **History or Political Science Course** - Choose one of the following:
  - HIST 3118 or POSC 4376: American Military History or American National Security Policy
  
- **English** - Must complete two courses
  
*World Culture Courses - Choose one of the following courses:

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### History Courses:
HIST 1301 History of Latin America
HIST 1401 Africa
HIST 1501 East Asia
HIST 3455 Modern Middle East Since 1500
HIST 4450 North Africa
HIST 4500 Modern Japan
HIST 4555 Modern China
HIST 4931 Topics in History (if relevant to Third World and/or Middle Eastern cultures)

Political Science Courses:
POSC 4521 Chinese Politics
POSC 4561 Politics of the Developing World
POSC 4721 International Politics of the Middle East
POSC 4731 International Politics of Asia

Theology Courses:
THEO 4520 Jewish Thought and Practice
THEO 4530 Islam: Faith and Practice

Total Credit Hours 28

Notes:
- NROTC students should note that most programs will probably entail more than the minimum credits normally required for graduation.
- Core and major requirements may dictate which combination of calculus courses must be taken.
- "Other world culture courses must be approved by NROTC.
- To be competitive for selection for a scholarship, non-scholarship students should plan on completing two terms of calculus: MATH 1450 Calculus 1 and MATH 1451 Calculus 2 by the end of the freshman year and two terms of physics PHYS 1003 General Physics with Introductory Calculus 1 and PHYS 1004 General Physics with Introductory Calculus 2 by the end of the sophomore year. For specific details, contact the professor of Naval Science.

Courses

NASC 1001. Drill and Information Briefing. 0 cr. hrs.
Weekly formations focusing on Marine Corps and Navy drill, ceremonies, and inspections. Classroom instruction on special interest areas to the prospective naval officer such as financial responsibilities, career opportunities, leadership, maritime strategy and national security. Instruction and application of the fundamentals of unit organization, the chain of command, and how to properly wear and inspect uniforms. Designed to develop teamwork, leadership, management, and initiative. Required of all NROTC students. SNC/UNC grade assessment.

NASC 1009. Introduction to Naval Science. 2 cr. hrs.
General introduction to seapower and the naval service. The instruction places particular emphasis on the mission, organization, regulations and broad warfare components of the Navy. Included is an overview of officer and enlisted rank and rating structures, procurement and recruitment, training and education, promotion and advancement, and retirement policies. Non-NROTC students require cons. of dept. ch.

NASC 1022. Sea Power and Maritime Affairs. 3 cr. hrs.
Influence of U.S. Sea Power and Maritime Affairs on international economic and political relationships. Classroom discussions based on independent reading. Prereq: NROTC students or cons. of dept. ch.

NASC 2151. Navigation. 3 cr. hrs.

NASC 2185. Leadership and Management. 3 cr. hrs.
Experiential approach to leadership and management with military emphasis. Utilizes motivation and communication theory and practice, group dynamics and decision making techniques and lines of control and organizational structure. Case studies, experiential exercises and situational problems are used. Prereq: NROTC students or cons. of dept. ch.

NASC 3142. Naval Ship Systems 1. 3 cr. hrs.
Ship design, construction, types and missions. Ship compartmentalization, interior communications, propulsion, auxiliary power and ship control systems. Elements of ship design for safe operation. Ship stability characteristics. Prereq: Non-NROTC students require cons. of dept. ch.

NASC 3161. Evolution of the Art of War. 3 cr. hrs.
Military principles and concepts throughout history. Tactical and strategic applications in selected engagements. Prereq: Non-NROTC students require cons. of dept. ch.
NASC 3162. Naval Ship Systems 2. 3 cr. hrs.

NASC 3191. Fundamentals of Maneuver Warfare. 3 cr. hrs.
Broad aspects of warfare and their interactions with maneuver warfare doctrine. Specific 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 in current and future operations. Prereq: Non-NROTC students require cons. of dept. ch.

NASC 3964. Practicum in U.S. Marine Corps Leadership and Management. 4 cr. hrs.
Provides instruction and practical application of leadership and management techniques used in the Marine Corps and Naval Service. The course is held at the Officer Candidate School at Quantico, Virginia. S/U grade assessment. Prereq: Jr. stndg. in USMC option.

NASC 4152. Naval Operations and Seamanship. 3 cr. hrs.

NASC 4186. Leadership and Core-Value-Based Decision-Making. 3 cr. hrs.
Application of techniques and theories learned in NASC 1185. Practical application of sound leadership and ethics to Navy situations. Investigation of levels of ethical decision-making: legal, constitutional , utilitarian, divine. Examination of role of honor, courage and commitment in leadership. Prereq: NASC 2185. Non-NROTC students require cons. of dept. ch.

NASC 4995. Independent Study in Naval Sciences. 1-3 cr. hrs.
Independent study of special topics in Military Science under faculty supervision. Topics selected by student/faculty conference. Prereq: cons. of dept. ch.