Credit Hour Explanation

<table>
<thead>
<tr>
<th>Program credit hour requirements</th>
<th>A) Number of credit hours in current program (Quarter credit hours)</th>
<th>B) Calculated result for 2/3rds of current (Semester credit hours)</th>
<th>C) Number of credit hours required for proposed program (Semester credit hours)</th>
<th>D) Change in credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total minimum credit hours required for completion of program</td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Required credit hours offered by the unit</td>
<td>Minimum</td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Required credit hours offered outside of the unit</td>
<td>Minimum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required prerequisite credit hours not included above</td>
<td>Minimum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

- Critically analyze past and present military events and leaders through the lens of what is applicable to today's military
- Apply a working knowledge of leadership traits and characteristics to issues of relevance to the United States Navy and Marine Corps
- Develop and acquire the pre-requisite knowledge and skills necessary for success as a junior Navy and Marine Corps officer
- Identify the broad principles, concepts, and elements of war fighting doctrine, particularly these which involve the involvement of Navy and Marine forces during times of peace and conflict

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

Program Specializations/Sub-Plans
If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

**Pre-Major**

Does this Program have a Pre-Major? No

**Attachments**

- Naval Science Minor.pdf: All required attachments

(Please see the Program Proposal. Owner: Sopiak, Jason Gregory)

**Comments**

- The attachment includes all required documentation: Letter from Program-offering unit, Program Rationale Statement, List of Semester Courses, and Semester Advising Sheet (by Sopiak, Jason Gregory on 03/14/2012 01:58 PM)

**Workflow Information**

<table>
<thead>
<tr>
<th>Status</th>
<th>User(s)</th>
<th>Date/Time</th>
<th>Step</th>
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</thead>
<tbody>
<tr>
<td>Submitted</td>
<td>Sopiak, Jason Gregory</td>
<td>03/14/2012 01:59 PM</td>
<td>Submitted for Approval</td>
</tr>
<tr>
<td>Approved</td>
<td>Glaser, Michael H.</td>
<td>03/14/2012 05:14 PM</td>
<td>Unit Approval</td>
</tr>
<tr>
<td>Pending Approval</td>
<td>Cameron, Erin Marie Soave, Melissa A Smith, Kelly Bott</td>
<td>03/14/2012 05:14 PM</td>
<td>College Approval</td>
</tr>
</tbody>
</table>
March 14, 2012

To: Melissa Soave, Program Director, Office of Academic Affairs

From: Michael Glaser, Professor of Naval Science

Subj: Proposed Program Request for Naval Science Minor

Dear Melissa,

On behalf of the Naval Science Department, we recommend approval of the proposed request for Naval Science as an undergraduate minor. The Naval Science minor program is a new program request, as it did not exist under the previous quarter system. However, this initiative has been under consideration by our department for several years. The proposed Naval Science minor draws on courses approved by the Office of Academic Affairs for the current semester conversion. All courses required to complete the program will be offered by the Naval Science Department during each academic year.

Sincerely,

Michael Glaser
Professor of Naval Science
March 14, 2012

Melissa Soave, Program Director
Office of Academic Affairs
203 Bricker Hall

Dear Melissa,

The Naval Science Department is requesting that Naval Science be approved as an undergraduate minor. This is a new program request, as the Naval Science minor program did not exist under the previous quarter system.

Background
The undergraduate Naval Science minor is a new program request at our university. It is developed to provide students with an opportunity to establish a working knowledge of the Navy and Marine Corps as military forces while understanding the elements of leadership and management required by the officers in the sea-going services. The program will not only focus on the implementation of Navy and Marine Corps forces during times of peace and conflict, but will draw on the traits, characteristics, and philosophies that make successful military leaders. Although much of the program will be geared toward prospective Navy and Marine Corps Officers at ROTC, it will be open to all students that desire to enhance their knowledge of Naval Science.

Rationale
The Naval Science Minor is a straightforward request for a new undergraduate program. All courses required by the program will be offered by the Naval Science Department. All Naval Science courses for the semester conversion have been approved.

Sincerely,

Michael Glaser
Professor of Naval Science
## List of Semester Courses

### Required Courses Offered by the Unit

<table>
<thead>
<tr>
<th>Department</th>
<th>Course #</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval Science</td>
<td>1110</td>
<td>3</td>
<td>Survey of Naval Science</td>
</tr>
<tr>
<td>Naval Science</td>
<td>1210</td>
<td>3</td>
<td>Sea Power and Maritime Affairs Seminar</td>
</tr>
<tr>
<td>Naval Science</td>
<td>4110</td>
<td>3</td>
<td>Leadership and Management</td>
</tr>
<tr>
<td>Naval Science</td>
<td>4210</td>
<td>3</td>
<td>Leadership and Ethics</td>
</tr>
</tbody>
</table>

### Courses Offered by the Unit that fulfill program requirements (choose 6 credits)

<table>
<thead>
<tr>
<th>Department</th>
<th>Course #</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval Science</td>
<td>2110</td>
<td>3</td>
<td>Navigation I</td>
</tr>
<tr>
<td>Naval Science</td>
<td>2210</td>
<td>3</td>
<td>Navigation II</td>
</tr>
<tr>
<td>Naval Science</td>
<td>3110</td>
<td>3</td>
<td>Naval Ship Systems</td>
</tr>
<tr>
<td>Naval Science</td>
<td>3210</td>
<td>3</td>
<td>Naval Mission Systems</td>
</tr>
<tr>
<td>Naval Science</td>
<td>3510</td>
<td>3</td>
<td>Evolution of Warfare</td>
</tr>
<tr>
<td>Naval Science</td>
<td>4510</td>
<td>3</td>
<td>Amphibious &amp; Expeditionary Warfare</td>
</tr>
</tbody>
</table>
Naval Science Minor Semester Advising Sheet

Naval Science Minor Curriculum Requirements
A total of 18 credits will be required to complete the Naval Science undergraduate minor program. Of those 18 credits, four core courses (12 credits) must be completed. The student will choose two additional courses (6 credits) that are offered in the Naval Science Department.

A student who completes the minor following the prescribed guidelines need only file their college’s Minor Program Form with their college office. No approval from the Naval Science Department is required.

Core Courses (12 Credits)

**NS 1110: Survey of Naval Science (3 credits)**
Introduction to and survey of disciplines peculiar to naval science including naval tasks & missions, regulations, customs, traditions, & organized relationships.

**NS 1210: Sea Power and Maritime Affairs Seminar (3 credits)**
An analysis of maritime affairs as related to the United States naval forces, from the Revolutionary War to present day.

**NS 4110: Leadership and Management (3 credits)**
A seminar study of effective leadership in a military setting involving examples from naval history as well as modern business management practices.

**NS 4210: Leadership and Ethics (3 credits)**
A study of issues relating to naval law, the Uniform Code of Military Justice, and the moral principles involved in making informed decisions as a military officer.

Additional Courses (6 Credits)

**NS 2110: Navigation I (3 credits)**
A study of navigation and piloting vessels at sea, including the determination of position by dead reckoning, visual bearings, and electronic methods.

**NS 2210: Navigation II (3 credits)**
A study of fleet operations including operations and tactics including the study of relative motion of ships at sea, maneuvering boards, tactics, and naval communications.

**NS 3110: Naval Ship Systems (3 credits)**
Study of fundamental thermodynamics, conventional and nuclear ship propulsion systems.
NS 3210: Naval Mission Systems (3 credits)
Applications of naval weapons systems as they relate to the ships of today’s Navy. Theoretical presentation of fundamental weapons concepts including electromagnetic principles, feedback controls, and basic ballistics.

NS 3510: Evolution of Warfare (3 credits)
A study of the evolution of weapons and tactics, illustrating the principles and variables of war used in certain battles from Alexander through the present day.

NS 4510: Amphibious & Expeditionary Warfare
A study of the concepts and evolution of amphibious warfare from history through present.

Additional Requirements
*No grade below C- will be permitted in courses comprising the minor; the minimum CPHR of the minor shall be 2.00.
*Courses taken on a Pass/Non-Pass basis may not be applied to the minor.