To: Faculty Senate
From: George L. McLendon
Date: 17 September 2013
Re: Naval Science Minor

The Department of Naval Science reports directly to the Provost, and thus, I write to support the proposed minor in Naval Science, which is fully described in the attached document. On February 24, 1977, the Rice University Board of Trustees signed an agreement with the Secretary of Navy for the purpose of maintaining a Naval Reserve Offices Training Corps (NROTC) unit at Rice University. Rice agreed to establish and maintain a Department of Naval Science as an integral academic and administrative department. Students accepted into and enrolled in the NROTC program must devote a number of class hours to naval science subjects prescribed by the Secretary of the Navy. Thus, Rice has a commitment and obligation to provide Naval Science courses.

The minor would be available to all students majoring in other fields, not only those accepted into the NROTC program. As described in the attached proposal, students who minor in Naval Science would be able to gain knowledge about the mechanics and historical importance of naval science as well as benefit from training in leadership, management, and ethics. The learning outcomes of the coursework are full described in the attached proposal. Students who select Naval Science as a minor will be academically advised by the senior assistant professor (adjunct) of Naval Science.

Should you have any questions about the course content, please contact the commanding officer and adjunct professor of Naval Science, Captain William Fitzgerald. You may contact me for other questions.
PROPOSAL FOR A MINOR IN THE DEPARTMENT OF NAVAL SCIENCE

Title of Minor:
Minor in Naval Science

Intellectual Merit of Minor:

Naval Science has been a heavily studied aspect of national security policy since the formation of the Naval War College on 6 October 1884. The publication of The Influence of Sea Power Upon History by Alfred T. Mahan in 1890, and its unprecedented influence in national policy objectives leading up to World War One, indicates the importance naval science has played in formulating foreign policy objectives in the United States, Europe, and Asia.

Naval Science blends the analytical study of seafaring disciplines with practical leadership training. This allows students to not only understand the mechanics and historical importance of naval science but also gain valuable leadership, management, and ethics training at the undergraduate level. This unique blend makes naval science students stand out from their collegiate peers.

Language for the General Announcements (below):

Course Requirements for the Minor in Naval Science

The minor in Naval Science (NAVA) is available to all students majoring in other fields. A minor in naval science requires the successful completion of at least six courses (a minimum of 18 credit hours), with a minimum minor grade point average of 2.0. At least three of these courses (minimum of 9 hours) must be at the 300-level or higher, and study abroad or transfer courses cannot count for more than 2 courses (total of 6 hours) toward the minor.

Required courses:
• NAVA 101 Naval Orientation
• NAVA 103 Sea Power and Maritime Affairs
• NAVA 203 Leadership Management I
• NAVA 402 Leadership and Ethics

Any two of the following courses:
• NAVA 301 Navigation
• NAVA 302 Naval Operations and Seamanship
• NAVA 303 Evolution of Warfare
• NAVA 304 Naval Weapons
• NAVA 403 Naval Engineering
• NAVA 410 Amphibious Warfare
All naval science courses are offered once every academic year with the exception of NAVA 303 and NAVA 410. These two courses are offered every other academic year.

**Student Learning Outcomes:**

The learning outcomes of the minor in naval science include:

- Gain a broad understanding of the United States Navy and Marine Corps to include their current structure, organization, missions, and national security importance.
- Become familiar through the historical process with the major events, attitudes, personalities, and circumstances that have shaped the naval service and their relative impact on American history.
- An understanding of Western moral traditions and ethical philosophy as they relate to military leadership and the conduct of warfare, to include Aristotle, Bentham, Mill, Kant and Aquinas.
- Develop skills in critical analysis and writing.

The proposed curriculum closely reflects these objectives. All four of the required minor classes incorporate one or more aspects of the student learning outcomes as do the remaining six courses offered.

**Implementation and Course Offerings:**

The minor in naval science will be implemented and maintained by the Department of Naval Science. The Department of Naval Science consists of five active-duty military officers: one Professor of Naval Science (department chair), one Associate Professor of Naval Science, and three Assistant Professors of Naval Science.

**Assessment Plan:**

The Department of Naval Science will assess the effectiveness of the program through departmental reviews and student evaluation sheets. The Professor of Naval Science and the Associate Professor of Naval Science will each attend one class session of every naval science course offered each semester. The Professor of Naval Science and Associate Professor of Naval Science will provide critiques and feedback to instructors. In addition, all students will complete a naval science evaluation form on the last day of class. These evaluations will be reviewed by the Professor of Naval Science and Associate Professor of Naval Science and kept on file with the applicable Assistant Professor.

All students choosing to minor in naval science will be academically advised by the senior Assistant Professor of Naval Science.
Notes for the CUC and Faculty Senate:

- The Rice Naval Reserve Officers Training Corps (NROTC) unit has existed on the Rice University campus since September 1941.
- The Department of Naval Science is the academic component of the NROTC unit. All naval science course offerings are included in the Rice University Course Catalog and count for three hours of academic credit per class.
- Naval Science courses are open to all Rice students.
- The Rice NROTC unit currently has cross-town agreements with the University of Houston, Texas Southern University, and Houston Baptist University. This means that NROTC students at UH, TSU, and HBU participate and take their naval science classes at Rice.
- All NROTC students (Midshipmen) are required to take between 18 and 24 hours of naval science courses over and above the requirements for their major.
- The University of Houston currently offers naval science as a minor to students who take 18 hours of naval science courses. This puts Rice NROTC students at a disadvantage to their peers at UH because they are not currently able to earn a minor.
- Approximately 15-20 Rice students take naval science courses every semester. These students are a mix of NROTC and civilian students.
- The Department of Naval Science has recently partnered with the Rice Center for Engineering Leadership. This partnership includes Rice engineering students taking naval science courses and participating in practical leadership laboratories.