UNIVERSITY
OF MIAMI
FACULTY SENATE

Faculty Senate Office
Ashe Administration Building, #325
1252 Memorial Drive
Coral Gables, FL 33146

facsen@miami.edu
web site: www.miami.edu/fs
P: 305-284-3721
F: 305-284-5515

MEMORANDUM

To: Donna E. Shalala, President

From: Richard L. Williamson
Chair, Faculty Senate

Date: February 2, 2012

Subject: Faculty Senate Legislation #2011-27(B) – Split the Marine and Atmospheric Science Program in Two Undergraduate Programs in the Rosenstiel School of Marine and Atmospheric Science: Marine Science, and Atmospheric Science

****

At its January 25, 2012 meeting, the Faculty Senate unanimously approved the proposal to split the Marine and Atmospheric Science Program in two undergraduate programs in the Rosenstiel School of Marine and Atmospheric Science: Marine Science, and Atmospheric Science. The split is administrative only – program curricula and degrees would remain unchanged. Both programs will continue to be operated by RSMAS at the School level, and will share existing administrative support on both Coral Gables and Virginia Key campuses. The split will bring enhanced visibility of Atmospheric Science at UM, which should enhance freshman recruitment.

The supporting materials are enclosed for your reference.

This legislation is now forwarded to you for your action.

RW/rh

Enclosure

cc: Thomas LeBlanc, Executive Vice President and Provost
Roni Avissar, Dean, Rosenstiel School of Marine and Atmospheric Science
William Drennan, Presenter, and Associate Dean for Undergraduate Education

CAPSULE: Faculty Senate Legislation #2011-27(B) – Split the Marine and Atmospheric Science Program in Two Undergraduate Programs in the Rosenstiel School of Marine and Atmospheric Science: Marine Science, and Atmospheric Science

PRESIDENT'S RESPONSE

APPROVED: _____ DATE: 2/27/12
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: DEAN AVISSAR

EFFECTIVE DATE OF LEGISLATION: IMMEDIATELY
(if other than June 1 next following)

NOT APPROVED AND REFERRED TO: _____

REMARKS (IF NOT APPROVED): _____

Proposal to split the Marine and Atmospheric Science undergraduate program into two separate programs: Marine Science and Atmospheric Science

Rosenstiel School of Marine and Atmospheric Science
December 30, 2011

I. Executive Summary

At a school-wide general faculty meeting on 11 November 2011, assembled RSMAS faculty voted unanimously in support of the motion "To split the existing Marine and Atmospheric Science undergraduate program into two programs: Marine Science, and Atmospheric Science." The split is administrative only – program curricula and degrees would remain unchanged. Both programs would continue to be operated by RSMAS at the School level, and would share existing administrative support on both Coral Gables and Virginia Key campuses. The split will bring enhanced visibility of Atmospheric Science at UM, which should enhance freshman recruitment.

II. Background

The Rosenstiel School of Marine and Atmospheric Science (RSMAS) currently operates a single undergraduate program, Marine and Atmospheric Science (MSC), with tracks in Marine Science, Marine Affairs and Meteorology. This structure dates back over a decade to the time when a fledgling Meteorology component was added to the well established Marine Science program. A dozen years later, the Meteorology track is well established, with a current enrollment of 33 students. Over the past five years, the enrollment numbers have fluctuated between 33 and 42. In comparison, the Marine Science and Marine Affairs tracks have current enrollments of 274 and 63 respectively, and both have seen significant growth over the past few years[1].

The Marine Science and Marine Affairs tracks are strongly related by a common "Ocean" theme, which is reflected in several shared core courses as well as a significant flow of students (ie change of majors) between the two tracks. Meteorology (MET), on the other hand, is a distinct discipline. The MET curriculum is based on the guidelines provided by the American Meteorology Society (http://www.ametsoc.org/policy/2010degree_atmosphericscience_amsstatement.html). There is very little core course overlap in curriculum with the Marine tracks. There is also virtually no movement of students between the MET and Marine tracks. The tracks draw from very different freshman populations.

In preparation for an external review of the MSC program planned for 2012, an internal review was conducted during 2011. It was apparent that the Marine Science track within MSC is thriving. Marine Science at UM has a national reputation, and the program is regarded as among the strongest in the

[1] Meteorology includes major codes RSMM, RSMT, MRJ, MRT, MSM. Marine Science includes codes RSMB, RSMC, RSMG, RSMI, RSMP, as well as MSB, MSC, MSG, MSI, MSP and MSX. Marine Affairs includes codes RSMA and MSA.

country. This is reflected by the program attracting and enrolling applicants with the highest average SATs at the university. The smaller Meteorology track does not have quite the same success at attracting and enrolling top-ranked students. In particular, while 50% of top students (selectivity categories 1A – 2I) accepted into the Marine Science tracks enrolled at UM, the figure for the MET track is only 22%.

To a large degree this is due to competition from larger and better known Meteorology/Atmospheric Science[2] programs, such as those at Oklahoma and Penn State. That said, the UM program has a well defined niche in Tropical Meteorology (including hurricanes), as well as climate, both areas where RSMAS research is particularly strong. However, with the Meteorology track currently structured as part of the Marine and Atmospheric Science program, the MET aspects of the program tend to be lost. All MSC program materials (poster, web site, advising guide, etc) are Marine focused, with the MET material given much less emphasis. This leads to the perception of a lack of identity of the program, especially as viewed by potential applicants.

Marine Science and Atmospheric Science are generally considered as separate disciplines. In most ways, the MET track acts already as a separate program with separate advising, separate student clubs, and almost no overlap between courses taken by Marine Science and MET students. In practice, the MET coordinator already fulfills most of the roles of program director by setting the curriculum, advising students, etc. The proposed change would i) better reflect the situation already existing, and ii) allow the Atmospheric Science program to develop its own brand within the University, and to use that brand to attract more applicants, and to strengthen the program.

III. Specifics of the proposal

- The Marine and Atmospheric Science program would be split into separate Marine Science and Atmospheric Science programs. Both programs would be run by the school.
- The curricula and degrees of the two programs would remain unchanged.
- Marine Science would retain the MSC program code, and remain under the Directorship of Dr. Gary Hitchcock.
- Atmospheric Science would use new code, tentatively ATM.
- The coordinator for the MET track, Dr. Paquita Zuidema, would be appointed ATM Director.
- A separate advisory committee for the ATM program would be appointed by the Director, in consultation with the RSMAS Associate Dean for Undergraduate Education.
- Administrative support for both MSC and ATM programs would be provided by existing support personnel on both Coral Gables and Virginia Key campuses. No increase in the level of administrative support is anticipated at this time.

---

[2] The distinction between the terms Meteorology and Atmospheric Science is a cause of frequent and vociferous debate in some academic circles. Some use the two terms interchangeably. We use Atmospheric Science in the broader sense to include Meteorology, with a focus on forecasting, as well as Atmospheric Chemistry, Atmospheric Physics and Climate. The UM degree at present is the "Bachelor of Science in Marine and Atmospheric Science" in Meteorology. This would remain unchanged. In future, subject to demand and university approval, additional degree tracks in e.g. Atmospheric Physics, could be offered.

IV. School Support

The proposal has the support of
i) Dean Avissar, per attached letter of support
ii) RSMAS faculty, per unanimous faculty vote on 11 November 2011
iii) RSMAS undergraduate advisory committee, per unanimous vote on 6 September 2011
iv) faculty teaching within the MET track, per vote September 2011

V. Budget

No additional budgetary increase is anticipated at this time.

VI. Space

No additional office space is required.

VII. Library support

Library support, at either Richter or RSMAS, is adequate for program needs.

UNIVERSITY OF MIAMI
ROSENSTIEL
SCHOOL of MARINE &
ATMOSPHERIC SCIENCE

Office of the Dean
Science and Administration Building 107
4600 Rickenbacker Causeway
Miami, Florida 33149-1031
Phone: 1 305 421-4000
Fax: 1 305 421-4711
Web Site: http://www.rsmas.miami.edu

MEMORANDUM

TO: Professor Richard Williamson, UM Senate Chair
FROM: Roni Avissar, Dean
DATE: January 3, 2012
SUBJECT: Proposal to split Marine and Atmospheric Science undergraduate program

At a general faculty meeting held on 11 November 2011, the RSMAS faculty voted unanimously to split the Marine and Atmospheric Science undergraduate program into two programs, Marine Science and Atmospheric Science. I support the proposal and I am happy to endorse this decision of the faculty. The proposed changes will be to the administrative structure only, and will not affect the program curricula or degrees. No budgetary impact is expected from this change.

Roni Avissar, Ph.D.
Professor and Dean
Phone: 1 305 421-4000 • Fax: 1 305 421-4711 • E-mail: ravissar@rsmas.miami.edu