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MEMORANDUM

To:

Donna E. Shalala, President

From:

Richard L. Williamson

Chair, Faculty Senate

Date:

April 30, 2014

Subject: Faculty Senate Legislation #2013-44(B) – Establish a Minor in Climate Science and

Policy, Rosenstiel School of Marine and Atmospheric Science (RSMAS)

The Faculty Senate, at its April 23, 2014 meeting, unanimously approved the proposal of the Rosenstiel School of Marine and Atmospheric Science (RSMAS) to establish a minor in Climate Science and Policy. Since the topic of climate science and policy is simply too broad and interdisciplinary to be encompassed within one major, the minor was proposed to broaden student understanding of how their major area of knowledge is relevant to and can be applied to aspects of climate change science, adaptation and mitigation. Students completing this minor will have a sound understanding in the science underlying the climate change debate and in the sociopolitical concepts to better understand society's responses. As schools, departments and programs dealing with some aspect of climate change are found in much of the University, the proponents consulted widely before bringing this proposal forward.

The proposal is enclosed for your reference.

This legislation is now forwarded to you for your action.

RLW/rh

Enclosure

Thomas LeBlanc, Executive Vice President and Provost Roni Avissar, Dean, Rosenstiel School of Marine and Atmospheric Science Paquita Zuidema, Associate Professor and Coordinator, Undergraduate Meteorology William Drennan, Associate Dean, Undergraduate Education, Rosenstiel School of Marine and Atmospheric Science

CAPSULE: Faculty Senate Legislation #2013-44(B) – Establish a Minor in Climate Science and Policy, Rosenstiel School of Marine and Atmospheric Science (RSMAS)

| APPROVED: DATE: 6/9/2014 (President's Signature) |
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| 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 for the creation of a minor in Climate Science and Policy at the University of Miami Rosenstiel School of Marine and Atmospheric Science

April 7, 2014

This proposal creates a new **Climate Science** and **Policy minor**. The proposal was approved by the RSMAS Undergraduate Academic Committee in October, 2013, passed by the RSMAS School Council at its December 3, 2013 meeting, and approved by Dean Avissar on the same day. The UM PIRA was contacted on February 24, and on February 25 PIRA communicated that the implementation of the minor was not considered substantial enough to require SACS notification. Support letters from the Director of the Abess Center on Ecosystem Science and Policy and from the Chair of the Journalism Department of the School of Communications are attached. The minor has also been approved by the Chair of the Geology Department and of the Biology Department. The Business School has also been contacted.

This 15-credit minor is designed to provide undergraduate students with a grounding in the science underlying the climate change debate and with the sociopolitical concepts with which to understand society's responses. Many, arguably all, majors available at UM have aspects in their curriculum that can be applied in specific ways towards understanding, communicating, preparing, and adapting our society for the local and global impacts of climate change. But the topic of climate science and policy is simply too broad and interdisciplinary to be encompassed within one major. This minor is designed to augment the major area of knowledge with climate-relevant classes from the other disciplines in both STEM and People and Society fields. The purpose is to broaden student understanding of how their major area of knowledge is relevant to and can be applied to aspects of climate change science, adaptation and mitigation. Students graduating with this minor will thereby be better prepared for careers and citizen participation in this rapidly-growing and societally important topic.

The students targeted for this minor are UM wide. As the minor includes a minimum of two STEM courses, and a minimum of two People and Society courses, the Minor satisfies either the STEM Area of Knowledge cognate requirement, or the People and Society Area of Knowledge cognate requirement. The minor can be readily incorporated into a normal 4-year BA/BS degree curriculum. The minor is unique in that it encompasses courses from different knowledge areas, and as such does not compete with traditional minors aligned with a dominant major. The Climate Science and Policy minor is closest in spirit to the Environmental Science and Policy program in College of Arts in Sciences and complements their single-major requirement. It is entirely composed of existing courses. The Minor will be administered by the RSMAS Undergraduate Academic Committee.

The proposed Climate Science and Policy minor consists of 5 three-credit courses for a total of 15 credits. These are currently chosen from among the climate policy and science courses offered by the undergraduate Marine Science (MSC) and Meteorology (ATM) programs at RSMAS, but we anticipate extending the curriculum to include non-RSMAS courses as well. Most courses are offered annually. The minor consists of:

MSC 346 (Climate Science and Policy, 3cr)

Three (if for non-RSMAS/MAF/MSC majors) or two (for ATM majors) science-based classes chosen from:

ATM 102 (Introduction to Weather and Climate, 3cr) or ATM 103 (Survey of Meteorology, 3cr)

ATM/MSC 220 (Climate and Global Change, 3cr)

MSC 222 (Earth's Climate: Past and Future, 3cr)

ATM 307 (Physics of Climate, 3cr)

GSC 462 (Earth's Ancient Atmospheres, Climates and Sea Levels, 3cr)

One (for non-RSMAS/MAF/MSC majors) or two (for ATM majors) policy classes chosen from:

MSC 313 (Coastal Law, 3cr)

MSC 314 (Ocean Law, 3cr)

MSC 340 (Ocean Policy, 3cr)

MSC 342 (Decision Making and the Environment, 3cr)

RSM 520 (Climate and Society, 3cr)

Or suitable alternative with approval of MSC/MAF/ATM program director

Students from a program without a statistics requirement must also take an approved course in statistics (increasing this to an 18-credit minor). Approved statistics courses include the statistics courses offered throughout all of UM programs, including MTH 224, MSC 204, BIL311, ECS204, EPS351, GSC204, HSC202, IEN311, MAS201, MAS311, NUR202, PSY291, PSY292.

Further class choices can be added as they become available.

Budget: No additional budgetary increase is required for the minor. Space issues: Existing MSC space in the second floor of Ungar is sufficient for program needs. Library Support: Library support, at either Richter or RSMAS is adequate for program needs.

UNIVERSITY OF MIAMI
ROSENSTIEL
SCHOOL of MARINE &
ATMOSPHERIC SCIENCE



"RSMAS Minor in Climate Science and Policy"

Office of the Dean 4/23/14 Senate agenda

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MEMORANDUM

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TO:

Professor Richard Williamson, UM Senate Chair

FROM:

Roni Avissar, Dean

DATE:

February 23, 2014

SUBJECT:

Approval of new minor in Climate Science and Policy

Cc:

Will Drennan, Rana Fine, Paquita Zuidema

At our School Council meeting held on 3 December, 2013, the faculty of the Rosenstiel School of Marine and Atmospheric Science voted to approve a new minor in Climate Science and Policy. The new minor, which will take effect with the 2014-2015 Bulletin, satisfies either the STEM Area of Knowledge cognate requirement, or the People and Society Area of Knowledge cognate requirement. The minor will be jointly administered by the Marine Science, Marine Affairs, and Meteorology tracks.

UNIVERSITY OF MIAMI ABESS CENTER for ECOSYSTEM SCIENCE & POLICY



27 March 2014

Dear Faculty Senate:

The Abess Center for Ecosystem Science and Policy is dedicated to interdisciplinary initiatives that bridge the gap between science and environmental policy. Under the College of Arts and Sciences, we offer an undergraduate program in Ecosystem Science and Policy that culminates in a B.A. or B.S. degree.

The proposed Climate Science and Policy minor is within the spirit of Abess Center goals. We envision that this could become the core of a climate change track for our B.S. degree and certainly would be of interest to our B.A. students, as well. It fills an important gap for our undergraduates, as it will augment the ECS curriculum and serve to support further initiatives in the future that serve to expand both the Abess Center offerings as well as the new proposed minor.

We enthusiastically support the creation of the Climate Science and Policy minor and look forward to coordinating the ECS curriculum with the proposed minor.

Sincerely,

Kenneth Broad

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Director, Abess Center for Ecosystem Science and Policy, University of Miami Chair and Professor, Marine Affairs and Policy, RSMAS

UNIVERSITY OF MIAMI SCHOOL of COMMUNICATION



Journalism and Media Management P.O. Box 248127 Coral Gables, FL 33124-2105 Phone: 305-284-5350 Fax: 305-284-5205 http://com.miami.edu

March 27, 2014

Dear Faculty Senate:

The Department of Journalism and Media Management within the UM School of Communication has a longstanding relationship with the Rosenstiel School of Marine and Atmospheric Sciences, through an undergraduate double major in Broadcast Journalism with the Meteorology track, as well as a relationship at the graduate level in the MPS in Broadcast Meteorology program. We also have a small subset of more traditional journalism students who are interested in environmental issues and reporting, for whom the Climate Science and Policy minor would be a very interesting addition to their studies. We therefore enthusiastically support the creation of a Climate Science and Policy minor.

Sincerely,

Terry Bloom, Ph.D. Associate Professor

Chair, Department of Journalism and Media Management