MEMORANDUM

TO: Randolph G. Moore  
Chair, Board of Regents

VIA: David Lassner  
President  
University of Hawai‘i System

VIA: Donald Straney  
Chancellor  
University of Hawai‘i at Hilo

FROM: Matthew Platz  
Vice Chancellor for Academic Affairs  
University of Hawai‘i at Hilo

SUBJECT: REQUEST TO APPROVE AS “ESTABLISHED” THE “PROVISIONAL” BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE DEGREE, COLLEGE OF ARTS AND SCIENCES, UNIVERSITY OF HAWAI‘I AT HILO

SPECIFIC ACTION REQUESTED:
It is requested that the University of Hawai‘i Board of Regents approve as “established” the “provisional” Bachelor of Science in Environmental Science degree program within the College of Arts and Sciences, University of Hawai‘i at Hilo (UH Hilo).

RECOMMENDED EFFECTIVE DATE:
Upon approval.

ADDITIONAL COST:
No additional costs are associated with this request.
PURPOSE:

UH Hilo offers the only BS in Environmental Science (ENSC BS) degree program in the UH System. Graduates of the ENSC BS program are qualified for immediate employment in numerous Federal and State agencies, such as the USDA Forest Service, USDA Agricultural Research Services, USGS Biological Resource Division, US Fish & Wildlife Service, US National Park Service, Hawai‘i Department of Land and Natural Resources, Nature Conservancy, and National Oceanographic and Atmospheric Agency. Graduates are also qualified as teachers and researchers within schools and universities. Employment prospects for individuals with formal training in the environmental science field are strong in Hawai‘i and in many other areas of the United States. Graduates of the program will also be able to seek further education primarily by enrolling in Masters or Ph.D. programs. We believe that the ENSC BS prepares students for the rigors of graduate school.

BACKGROUND:

According to Board of Regents Policy III.B.3., related to Provisional Programs, “. . . the board shall determine whether the program is to be awarded established status or terminated.”¹

In 2005 the University of Hawai‘i at Hilo received provisional approval for both the BA in Environmental Studies (ENVS BA) and the BS in Environmental Sciences (ENSC BS) programs. These programs were designed to meet the increased student demand (locally and nationally) for undergraduate programs focused upon human/environment interactions.

Both degrees programs were implemented in 2006, becoming additions to the Department of Geography’s long-running (40+ years) and well-regarded BA degree in Geography. These degree programs also provided a STEM pathway major for students in the College of Arts and Sciences (CAS).

The mission of the interdisciplinary Environmental Studies/Science degree program was to promote a multidisciplinary analysis of a broad range of environmental issues, including policy, management, and physical science analytical perspectives designed to enhance students’ awareness of the complexity and seriousness of local, regional and global environmental problems. Environmental Studies/Science overlapped many academic fields, such as Biology, Geology, Chemistry, Marine Science, Anthropology, Agriculture, Political Science, Economics, and Sociology. The interdisciplinary program

¹ This policy may be viewed at the following URL: http://www.hawaii.edu/policy/?action=viewPolicy&policySection=rp&policyChapter=5&policyNumber=201 &menuView=closed.
depended entirely upon the faculty in the GES department for its administration, with the department chair overseeing the departmental administration of the three-degree programs.

In the fall of 2014, UH Hilo decided to continue with the BS in Environmental Science and to change the BA in Environmental Studies to a track within the combined BA in Geography and Environmental Studies. These measures were taken to strengthen BA enrollment and graduation rates. There will be a stop-out of the BA in Environmental Studies in January 2016.

The provisional ENSC BS program began admitting students in the fall semester of 2006. The program has demonstrated consistent growth—from 5 students in the 2006-2007 academic year to 51 students in the 2013-2014 academic year. See Chart 1: ENSC BS Enrollment During Provisional Years below.

![Chart 1: ENSC BS Enrollment During Provisional Years](chart1.png)

It is projected that student demand for the ENSC BS will continue and slowly increase over the next five academic years. (See Chart 2: ENSC Projected Enrollment on the following page.) The projected increase is based upon two strategic modifications to the ENSC BS program. The modifications are (1) adjusting the upper-level course credit-hour requirements and (2) expanding students’ choices of required course offerings within the Department.
The Department has adjusted the upper-level course credit-hour requirements (from 45 to 39) to accommodate the breadth and depth of lower-level course offerings in the major. The credit-hour adjustment also allows the ENSC BS program to be consistent with other STEM degree programs, such as Biology and Chemistry.

The Department has added more courses and revised course requirements to provide ENSC BS students with broader and more flexible course enrollment options. These changes also provide the Department with greater control over scheduling the courses students need to graduate. Further, these changes enable the Department to engage faculty as efficiently as possible by teaching fewer courses with larger enrollments.

**ACTION RECOMMENDED:**

It is recommended that the University of Hawai‘i Board of Regents approve as “established” the “provisional” Bachelor of Science in Environmental Science degree program within the College of Arts and Sciences, University of Hawai‘i at Hilo (UH Hilo).

Attachment: Bachelor of Science in Environmental Science: A Self-Study in Support of Change from Provisional to Established Status

CC:  Cynthia Quinn, Executive Administrator and Secretary of the Board of Regents