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## Report of the New Program Review Committee for 1992-93: Ph.D. in Marine Affairs

University of Rhode Island Faculty Senate

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UNIVERSITY OF RHODE ISLAND  
Kingston, Rhode Island  
FACULTY SENATE  
BILL  
Adopted by the Faculty Senate

TO: President Robert L. Carothers  
FROM: Chairperson of the Faculty Senate

1. The attached BILL, titled Report of the New Program Review Committee for 1992-93: Ph.D. in Marine Affairs, is forwarded for your consideration.
2. The original and two copies for your use are included.
3. This BILL was adopted by vote of the Faculty Senate on January 28, 1993 (date).
4. After considering this bill, will you please indicate your approval or disapproval. Return the original or forward it to the Board of Governors, completing the appropriate endorsement below.
5. In accordance with Section 10, paragraph 4 of the Senate's By-Laws, this bill will become effective February 18, 1993, three weeks after Senate approval, unless: (1) specific dates for implementation are written into the bill; (2) you return it disapproved; (3) you forward it to the Board of Governors for their approval; or (4) the University Faculty petitions for a referendum. If the bill is forwarded to the Board of Governors, it will not become effective until approved by the Board.

January 29, 1993  
(date)

Leonard M. Kahn  
Leonard M. Kahn  
Chairperson of the Faculty Senate

-----  
ENDORSEMENT

TO: Chairperson of the Faculty Senate  
FROM: President of the University

Returned.

- a. Approved ✓.
- b. Approved subject to final approval by Board of Governors ✓.
- c. Disapproved \_\_\_\_\_.

2-4-93  
(date)

Robert L. Carothers  
President

8/5/93

**UNIVERSITY OF RHODE ISLAND  
Kingston, Rhode Island**

**FACULTY SENATE**

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On January 28, 1993, the Faculty Senate approved the following recommendation of the Program Review Committee for 1992-93:

That the Faculty Senate approve the proposed **Ph.D. in Marine Affairs** with a Class B designation.



November 3, 1988

TO: Sheila Grubman  
FROM: J. Vernon Wyman *J. Vernon Wyman*  
SUBJECT: Ph.D. IN MARINE AFFAIRS - BUDGETARY IMPACT REVIEW

The Graduate School forwarded the documentation supporting the proposed Ph.D. Program in Marine Affairs in order for me to conduct the normal budgetary impact review prior to Faculty Senate consideration.

The process, in this case, differs from other academic program proposals that have come forward in that this office, working with the Office of the Provost, has already assessed the resource requirements of this anticipated program proposal in the context of the development of the University's 1989-90 Budget Request. The results of this review are reflected in that budget request which has been approved by the Board of Governors for Higher Education and is currently being analyzed by the State Budget Office in accordance with the normal annual budget process.

For the 1989-90 fiscal year, the State requested that the University and all State agencies and departments present their budget in three parts. In compliance with these definitional instructions, the University's budget was submitted with a "current services level budget" designed to conform to the 5.5% budget increase guideline, a "restrained funding request" identifying funding needs in excess of this increase level essential to the delivery of current service level programs, and a "new initiatives/expansion request" identifying requirements associated with new program ventures beyond the current services level.

The anticipated first year expenditure needs associated with the Ph.D. in Marine Affairs program totaling \$141,875 are currently included as part of the "new initiatives/expansion" portion of the 1989-90 Budget Request. The breakdown of this expenditure total is displayed on the last page of the enclosed documentation from the budget materials submitted to the Board of Governors and the State. Consistent with the program proposal, two faculty positions, five graduate assistants, operating expenditures, and library acquisition expenditures are requested to initiate the program. The Board of Governors approved this request in anticipation of subsequent submission for program review for approval.

The outcome of the 1989-90 budget process at the State level in which we are engaged at this time will determine the availability

of positions and fiscal resources to initiate the Ph.D. in Marine Affairs. The University administration is actively pursuing these resources in the context of an overall sound budget for the institution next year.

With regard to space availability for graduate assistants, the suggestion that Ruggles House on Upper College might provide space for the program is an avenue that should be explored. Unless program changes or relocations are anticipated which would free up space in Washburn Hall, it would appear unlikely that graduate student space would be available within the next year in Washburn.

JVW:io

cc: David Gitlitz  
M. Beverly Swan  
Dana R. Kester ✓  
Lawrence Juda  
Calvin Peters  
L. Allen Wells  
Larry Mann

areas which are directly relevant to the proposed new graduate program. The areas covered are: operations research, materials processing, manufacturing facilities design, methods engineering, human factors in design, industrial safety and engineering economics. In particular the proposed minor concentration in Manufacturing Processes and Manufacturing Properties of Materials is well supported by over 300 texts in the materials processing category.

The University Library also subscribes to over 40 periodicals and journals for the Department of Industrial and Manufacturing Engineering, providing support for graduate teaching and research in manufacturing processes, organization, control and simulation of manufacturing systems, operations research and quality assurance.

Subsequent to the establishment of the M.S. Program in Manufacturing Engineering, the Graduate Committee of the Department of Industrial and Manufacturing Engineering undertook a critical review of periodical and journal usage. As a result several journal subscriptions were discontinued to enable journals in the areas of computer-aided manufacturing and manufacturing system to be obtained. Eight of these new publications have been funded initially from the IBM grant.

### 3. ACADEMIC COMPUTER CENTER.

Establishment of the proposed Ph.D. program will place no significant extra load on the Academic Computer Center. Efforts are continuing to develop the computer facilities

within the Department and these facilities, together with those of the Engineering Computer Laboratory, will be sufficient for the requirements of all graduate students in the Department.

The active teaching and research program in the IME department currently makes very little use of the facilities of the Academic Computer Center. The College of Engineering has established an extensive computer facility based around a large Digital Vax system, with a large number of Digital workstations distributed around the College. In addition, a PC laboratory for the COE is being established and the IME Department has its own PC laboratory available to students. In the near future, the facilities will be expanded and housed in the new engineering building to be constructed. These facilities are more than sufficient for the needs of the program offered by the IME Department and consequently no additional load on the facilities of the ACC are expected from the proposed Ph.D. program.

A. Program Information

1. Name of Institution: The University of Rhode Island
2. Department: Marine Affairs (College of Arts and Sciences)
3. Degree to be conferred: Doctor of Philosophy in Marine Affairs
4. Intended date of initiation of program: September 1991
5. Anticipated first degree granting: June 1994
6. Intended program location: Kingston campus, URI
7. Description of institutional review and approval process: The proposed Ph.D. program in Marine Affairs followed the complete prescribed policy for new program approval at URI and, accordingly, was considered and evaluated in a variety of university bodies. It was reviewed and adopted by the faculty of the Department of Marine Affairs. It was then sent to the Curricular Affairs Committee of the College of Arts and Sciences which examined and approved it. From there it went to review by a meeting of the faculty of the College of Arts and Sciences which approved it. The proposal was then examined by the URI Graduate Council. An outside consultant's report on the proposed program was prepared by Dean Martin Belsky of the Albany Law School, a specialist in marine policy and former Assistant Director of the National Oceanic and Atmospheric Administration in Washington, D.C. With this report, and following its deliberations, the Graduate Council gave its approval to the Ph.D. program proposal which was then forwarded to the URI New Program Review Committee which approved it with a recommendation of a class "C" priority. This designation indicates that the program should be offered only if additional funding is made available. While the Faculty Senate had indicated its strong support for the substance of the program, this designation was assigned because of concern with continuing budgetary constraints at URI. The proposal was then sent to the Faculty Senate which considered and approved it. Finally, the proposal was approved by URI President Eddy.
8. Summary description of the proposed program change: This proposal calls for the establishment of a Ph.D. program in Marine Affairs.
9. Signature of the President: Edward D. Eddy *Edward D. Eddy*

10. Persons to be contacted during this review:

Dr. Beverly Swan  
Vice-Provost  
792-4410

Prof. Lawrence Juda  
Chair, Department of Marine  
Affairs 792-2596

B. Rationale

This proposal is for the establishment of a doctoral program in Marine Affairs at the University of Rhode Island. Since the mid-1960s the concept of Marine Affairs as a separate academic discipline has been evolving and it appears that the point has been reached where the establishment of a Ph.D. program is now appropriate. As in the case of Oceanography and other integrative fields, Marine Affairs brings together a number of areas of study in order to focus on a particular theme, in this instance, the political, legal, administrative, and socio-economic aspects of the management of the marine environment and its uses. Given the growing concern in the United States and abroad with ocean and coastal issues, it follows that the necessity for effective marine management in both the public and private sectors has increased considerably and will continue to grow in the future. Issues concerning conflict between and among various ocean uses, environmental protection, pressures on shoreline uses, conflicting state claims to jurisdiction in ocean areas, and other problem areas point out the need for careful consideration of the utilization, management, and regulation of marine areas. It is now timely for URI to take the lead in inaugurating a strong doctoral program in Marine Affairs.

In 1969 the Graduate Program in Marine Affairs was begun at URI and provided a curriculum leading to the award of a master's degree in marine affairs (M.M.A.). It was the first program of its type in the world and in 1976 a second master's level degree program leading to the award of the master's of arts in marine affairs (M.A.) degree was established. Similar programs were started later at the University of Washington and the University of Delaware. Since 1969 over 400 masters degrees have been awarded at URI to United States and foreign students. These individuals are now employed in a variety of professional positions in the public and private sector in this country and abroad.

The uses of ocean space have continued to grow tremendously and those uses are evermore intertwined. Since the end of World War II the significance of the world's oceans and coastal margins has increased greatly due to a number of factors including:

- advances in relevant science and technology which allows for new and/or more intensive uses of the marine

environment

- growing pressure worldwide for exploiting the living and non-living resources of ocean space
- the increased need for appropriate and safe locations for disposal of various waste products
- demographic trends which are resulting in greater concentrations of population in coastal areas with consequent pressure on the physical environment of the coastal zone
- increasing conflict of use problems in ocean and coastal areas
- the basic and crucial role of maritime transportation in the world trading system
- changing political dynamics in the field of ocean affairs at the global, regional, and national levels.

The 1982 Law of the Sea Convention provides a basis for expansion of coastal state jurisdiction out to 200 miles, an area encompassing approximately one third of ocean space. In 1983 the United States asserted a claim to such an exclusive economic zone (EEZ). The United States EEZ alone includes an area of over 2.25 million square nautical miles; as in the case of all EEZs this zone will require extensive regulation and management. Private industry is also concerned with developments in coastal and offshore areas.

The Master of Marine Affairs Program was designed to respond to the needs posed by ocean policy and management issues by providing comprehensive education and training for professionals from a wide spectrum of academic backgrounds. The core Marine Affairs faculty itself is interdisciplinary (4 geographers, 1 attorney, 1 political scientist and 1 oceanographer) and over time a melding of interests and expertise has taken place, a process which may well be similar to that which led to the development of oceanography as an academic discipline. It is now believed that both the Graduate Program in Marine Affairs and the discipline itself have grown to a point where more advanced training and wider scholarship is possible. This potential is matched by a need for more sophisticated understanding and in-depth and integrated training for the management of the special ocean and coastal environment and its uses. Since the program's inception the study of Marine Affairs has progressed to the point where the greater in-depth research, analysis, and training associated with education at the Ph.D. level have become justified and necessary. This is particularly the case in those areas of concentration identified in this proposal.

In addition to substantive knowledge of ocean and coastal affairs the Ph.D. program will provide training in the relevant tools and techniques of the management process including: research and data management, resource and environmental management, administrative techniques, and methods of conflict resolution. A significant point of differentiation between the Ph.D. and existing Masters programs is the concentrated and detailed original research performed in the preparation of the student's doctoral dissertation.

With a recent grant from the Champlin Foundations, the Department of Marine Affairs is in the process of establishing a teaching laboratory which, in the near future, will allow it to offer courses in remote sensing and GIS applications for the management of coastal and marine space and resources. This facility will complement the department's existing laboratory which is used now for statistical analysis.

Demand. A number of URI Marine Affairs graduates have indicated an interest in further academic training at the Ph.D. level. While it is not the intent of the designers of the new Ph.D. program to provide an opportunity for a large-scale return of former Marine Affairs graduate students to the Kingston campus, the repeated expressions of interest by these graduates indicate an educational need which should be addressed. We have also received, over the years, a number of external inquiries about study at the Ph.D. level. The University of Delaware is the only school in the United States which now offers an M.A. and a Ph.D. in Marine Affairs. An examination of the program at Delaware revealed that only two faculty members were committed to it. The very limited support for this graduate program by the University of Delaware has prevented it from developing and, on average, it graduates only one person approximately every two years with the Ph.D. degree. Its master's level program is also very small. The situation at the University of Delaware, however, may be in the process of change as that program has recently acquired two new professional staff members.

Ph.D. candidates could come from any one of number of sources. They might have Masters degrees in Oceanography or Ocean Engineering, and wish to earn a Ph.D. in Marine Affairs. They might come from a non-marine related area, and desire to change their focus of interest. A potential market exists among overseas students, particularly those from countries of the developing world. Those states, too, are acquiring EEZs and have significant responsibilities and opportunities in offshore areas which require individuals trained in marine management. Officials of the federal or state governments, and officers of the three services are another source. Finally, there are the former graduates of the URI Masters Program in Marine Affairs. These should not be automatically excluded from consideration, but guidelines should be established to ensure that such students do not merely repeat, in greater depth, what they have

already learned at URI.

Operational Procedure. It is anticipated that, at least in its early stages, the Program would accept no more than five candidates each year. During their first year, the students would take anywhere from 12 to 30 credit hours of study, depending on their backgrounds. A second year or part thereof, may be needed to complete mandated course requirements. Upon completion of the courses required, the Ph.D. candidate will take written and oral comprehensive examinations. Having passed these examinations work begins on the dissertation, the completion and defense of which earns the student 24 credits and completes the Ph.D. program.

In order to manage the Program, some new courses will have to be devised, one of them being a two-semester Marine Management Seminar, with heavy emphasis on in-depth individual research, and on advanced research methods. Many of the graduate courses now being offered in our Master's program can also be used for the doctoral candidates. Several existing 500 level courses will be upgraded to 600 level and some new courses will be developed based on the expertise of new faculty. In designing new courses, or restructuring existing ones, for the doctoral program, care must be taken to avoid excessive overlap with existing non-Marine Affairs offerings at the University.

Although ensuring that our Ph.D. students have a greater breadth and depth of knowledge pertaining to their discipline is an important element of our Ph.D. program, the critical difference between the Ph.D. and Masters programs is the dissertation. The dissertation is particularly important in a non-traditional program such as marine affairs which is only now beginning to emerge as a separate discipline. In 20 years one measure of the success of this program will be the extent to which the research of our faculty and its graduates will have determined the agenda for those marine affairs programs that follow ours. For this reason particular emphasis will be placed upon the Ph.D. dissertation.

Admission to the Ph.D. program in marine affairs would be on a competitive basis. In the admission process consideration will be given to prior academic performance, including scores from the Graduate Record Examination, recommendations from academic and professional sources, publications, if any, professional experience, and an evaluation of the motivation and dedication needed to complete a Ph.D. program. It is the intent of this program to be highly selective of its students so as to establish from the beginning a standard of excellence.

Progress of students, once admitted, would be closely monitored on a regular basis by the faculty of the department and by the candidate's major professor. Before taking the written and oral comprehensive exams, all course work would have

to be completed. Comprehensive exams would provide additional check points and would have to be successfully completed before formal approval of a dissertation proposal. The research, writing, and defense of the dissertation is to be completed within a time frame of seven years from the start of the Ph.D. program.

### C. Institutional Role

The University of Rhode Island, in the "Ocean State," is one of the foremost centers of teaching and research in ocean affairs and should strive to continue its leadership role. A Marine Affairs Ph.D. program would fit in well and complement the existing structure of the university's ocean oriented academic programs and strengthen URI's claim as a preeminent institution world-wide in ocean affairs. Further, a Ph.D. program in Marine Affairs could serve as an integrative force among various departments at URI which may share common interests in ocean management and policy.

A Ph.D. Program in Marine Affairs would utilize, to some extent, course offerings and faculty members from other departments and colleges of the University. Among these are the Departments of Sociology and Anthropology and Political Science in the College of Arts & Sciences, the Graduate School of Oceanography, the Department of Ocean Engineering, the College of Business Administration, and departments in the College of Resource Development. The Program should have a strong interdisciplinary focus, and to this end, persons outside the Department of Marine Affairs would be invited to join the Marine Affairs faculty as adjunct members, to take part in seminars and other Program activities, and, where appropriate, to serve as major professors for student dissertations.

While the bulk of the course work of Ph.D. candidates will be done within the Department of Marine Affairs, it should be noted that URI offers a variety of graduate level courses in other departments that could appropriately be taken as part of a Marine Affairs Ph.D. program of study. Among the potential elective courses available in other departments are the following:

Community Planning (College of Resource Development)  
CPL 511 Planning and Natural Environmental Systems  
CPL 522 Planning Law  
CPL 539 Environmental Law  
CPL 549 Seminar in Ecological Planning

Geology (College of Arts and Sciences)  
GEL 510 Coastal Geomorphology  
GEL 512 Geologic Terrain Remote Sensing  
GEL 577 Coastal Geologic Hazards



Fisheries, Aquaculture, and Pathology (College of Resource Development)

- FST 510 Applied Problems in Marine Fisheries Ecology
- FST 516 Early Life History of Aquatic Resource Animals
- FST 521 Evaluation of Fish Capture System
- FST 591 Special Problems

Natural Resources Sciences (College of Resource Development)

- NRS 524 Wetland Mapping and Evaluation
- NRS 568 Recent Advances in Natural Resources Science
- NRS 591 Special Problems

Ocean Engineering (College of Engineering)

- OCE 522 Dynamics of Waves and Structures
- OCE 523 Coastal Structures
- OCE 540 Environmental Control in Ocean Engineering
- OCE 555 Ocean Energy Systems I
- OCE 556 Ocean Energy Systems II

Oceanography (Graduate School of Oceanography)

- OCG 501 Physical Oceanography
- OCG 521 Chemical Oceanography
- OCG 540 Geological Oceanography
- OCG 561 Biological Oceanography
- OCG 574 Biology of Marine Mammals

Political Science (College of Arts and Sciences)

- PSC 501 Administrative Theory
- PSC 502 Techniques of Public Management
- PSC 524 Seminar in Public Policy Problems

Resource Economics (College of Resource Development)

- REN 534 Economics of Natural Resources
- REN 543 Economic Structure of the Fishing Industry
- REN 635 Marine Resources Policy

Zoology (College of Arts and Sciences)

- ZOO 563 Ichthyology
- ZOO 570 Field Biology of Fishes

The establishment of a Ph.D. program in Marine Affairs will also contribute to the work of existing centers such as the Coastal Resources Center and ICMRD and, in the future, to that of the Coastal Institute which is to be created at URI. A marine affairs Ph.D. program will bring to URI additional expertise, both in terms of faculty and graduate students, who could apply their capabilities to the ongoing work of these centers. At the same time exposure to the work of these centers would enhance the quality of the overall graduate education of the Ph.D. candidates.

D. Content

Marine Affairs is an interdisciplinary field of study which examines the management, policy, and legal aspects of ocean and coastal areas. The Ph.D. program will focus on marine management, a concept which includes the following aspects: 1) administration and regulation of marine-related programs; 2) analysis and resolution of multi-use conflicts; and 3) planning and policy formulation. In examining management, considerable attention must be focused both on what is politically possible and what is legally permissible.

A listing of courses now available or planned for Ph.D. students in the Department of Marine Affairs follows:

- MAF 461 Coastal Zone Uses#
- MAF 502 Research Methods in Geography and Marine Affairs
- MAF 511 Ocean Uses and Marine Science
- MAF 512 Seminar in Marine Science Policy and Public Law
- MAF 516 Seminar on the Urban Waterfront
- MAF 520 Seminar in Coastal Margin Management+
- MAF 521 Coastal Zone Law
- MAF 523 Fisheries Law and Management
- MAF 525 Fisheries in Developing Countries\*
- MAF 526 Landsat Remote Sensing
- MAF 528 GIS Applications for Coastal Management\*
- MAF 533 Management of Large Marine Ecosystems\*
- MAF 562 Admiralty Law
- MAF 563 Maritime Transportation
- MAF 564 Port Operations and Policy
- MAF 571 Marine Geography
- MAF 572 Management of Ocean Regions+
- MAF 577 International Ocean Law
- MAF 578 International Ocean Organizations
- MAF 579 Marine Jurisdictional Issues
- MAF 582 Estuarine Policy
- MAF 586 Environmental Impact Assessment and Analysis
- MAF 602 Federal Ocean Policy and Organization
- MAF 610 History of Marine Policy\*
- MAF 630 International Coastal Zone Issues\*
- MAF 651 Marine Affairs Seminar I
- MAF 652 Marine Affairs Seminar II
- MAF 660 Marine Management Seminar I\*
- MAF 661 Marine Management Seminar II\*
- MAF 699 Dissertation Research

- #Course to be upgraded to 500 level
- +Courses to be upgraded to 600 level
- \*Courses in preparation

Suggested core courses for programs of study in the five areas of concentration are indicated below. The model programs

assume that requirements for the Master's degree have been met; accordingly, courses required for that degree are not included. These model programs are illustrative and could be modified as appropriate for the individual candidate.

Fisheries Management and Law

MAF 523 Fisheries Law and Management  
 MAF 525 Fisheries in Developing Countries  
 MAF 533 Management of Large Marine Ecosystems  
 MAF 571 Marine Geography  
 MAF 572 Management of Marine Regions  
 MAF 578 International Ocean Organizations  
 MAF 660 Marine Management Seminar I  
 MAF 661 Marine Management Seminar II  
 REN 543 Economic Structure of the Fishing Industry

Coastal Zone Management

MAF 512 Seminar in Marine Science Policy and Public Law  
 MAF 520 Seminar in Coastal Margin Management  
 MAF 521 Coastal Zone Law  
 MAF 526 Landsat Remote Sensing  
 MAF 528 GIS Applications for Coastal Management  
 MAF 572 Management of Marine Regions  
 MAF 582 Estuarine Policy  
 MAF 586 Environmental Impact Assessment and Analysis  
 MAF 602 Federal Ocean Policy and Organization  
 MAF 630 International Coastal Zone Issues  
 MAF 660 Marine Management Seminar I  
 MAF 661 Marine Management Seminar II

Maritime Transportation and Ports

MAF 562 Admiralty Law  
 MAF 563 Maritime Transportation  
 MAF 564 Port Operations and Policy  
 MAF 571 Marine Geography  
 MAF 578 International Ocean Organizations  
 MAF 602 Federal Ocean Policy and Organization  
 MAF 660 Marine Management Seminar I  
 MAF 661 Marine Management Seminar II

International and National Ocean Law and Policy

MAF 512 Seminar in Marine Science Policy and Public Law  
 MAF 523 Fisheries Law and Management  
 MAF 571 Marine Geography  
 MAF 572 Management of Ocean Regions  
 MAF 577 International Ocean Law  
 MAF 578 International Ocean Organizations  
 MAF 579 Marine Jurisdictional Issues  
 MAF 602 Federal Ocean Policy and Organization  
 MAF 610 History of Marine Policy  
 MAF 660 Marine Management Seminar I  
 MAF 661 Marine Management Seminar II

Marine Issues in Developing Countries

MAF 525 Fisheries in Developing Countries  
 MAF 571 Marine Geography  
 MAF 572 Management of Ocean Regions  
 MAF 577 International Ocean Law  
 MAF 578 International Ocean Organizations  
 MAF 579 Marine Jurisdictional Issues  
 MAF 630 International Coastal Zone Issues  
 MAF 660 Marine Management Seminar I  
 MAF 661 Marine Management Seminar II

Illustrated below are three examples of possible courses of study for the Ph.D. degree in Marine Affairs. The first two assume that all requirements for the Master of Arts in Marine Affairs have been met while the third assumes that none of those requirements have been met. These illustrated schedules do not include courses in other departments which might be taken.

Example 1: Fisheries Major/ Coastal Zone Minor

Fall Semester

MAF 521 Coastal Zone Law  
 MAF 523 Fisheries Law and Management  
 MAF 630 International Coastal Zone Issues  
 MAF 660 Marine Management Seminar I

Spring Semester

MAF 520 Seminar in Coastal Margin Management  
 MAF 578 International Ocean Organizations  
 MAF 586 Environmental Impact Assessment and Analysis  
 MAF 661 Marine Management Seminar II

Example 2: Ocean Policy and Law Major/ Marine Issues in Developing Countries Minor

Fall Semester

MAF 523 Fisheries Law and Management  
 MAF 525 Fisheries in Developing Countries  
 MAF 630 International Coastal Zone Issues  
 MAF 660 Marine Management Seminar I

Spring Semester

MAF 572 Management of Marine Regions  
 MAF 578 International Ocean Organizations  
 MAF 579 Marine Jurisdictional Issues  
 MAF 661 Marine Management Seminar II

Example 3: Fisheries Management and Law Major/ Ocean Policy and Law Minor

Fall Semester I

REN 514 Economics of Marine Resources  
MAF 571 Marine Geography  
MAF 577 International Ocean Law  
MAF 651 Marine Affairs Seminar I

Spring Semester I

MAF 502 Research Methods in Geography and Marine Affairs  
MAF 482 Quantitative Methods in Geography and Marine Affairs  
MAF 511 Ocean Uses and Marine Science  
MAF 652 Marine Affairs Seminar II

Fall Semester II

MAF 512 Seminar in Marine Science and Public Policy  
REN 543 Economic Structure of the Fishing Industry  
MAF 610 History of Marine Policy  
MAF 660 Marine Management Seminar I

Spring Semester II

MAF 523 Fisheries Law and Policy  
MAF 578 International Ocean Organizations  
MAF 602 Federal Ocean Policy and Organization  
MAF 662 Marine Management Seminar II

Some of the courses referred to above are or will be newly created; brief, catalog descriptions for these courses are found below.

New courses

- MAF 528 - GIS Applications for Coastal Management (3 credits)  
Examination of the utility of GIS for coastal management employing the ARC/INFO system. A variety of exercises in the use of ARC/INFO will supplement lectures.
- MAF 582 - Estuarine Policy (3 credits)  
Policy options, governing structures, and management techniques for estuarine areas are considered with special attention to the effectiveness of the resulting approaches.
- MAF 533 - Management of Large Marine Ecosystems (3 credits)  
An examination of large marine ecosystems and their policy and management implications. Consideration of basic concepts and case studies.

MAF 610 - History of Marine Policy (3 credits)  
An examination of the governmental regulation and promotion of the human use of the coastal and marine environment in the United States. Consideration of changing objectives, approaches, and policies over time.

MAF 630 - International Coastal Zone Management (3 credits)  
Consideration and analysis of attempts to manage the coastal zone outside of the United States. Case studies from the developing and developed worlds.

MAF 660-661 (3 credits each)  
A research seminar for students enrolled in the Marine Affairs Ph.D. program. Student papers and presentations will focus in depth on selected management approaches and efforts in relation to the management of the coastal and marine environment.

Ph.D. Requirements

Students accepted for the Ph.D. program must have a Master's degree or equivalent professional experience in a field related to Marine Affairs. For each Ph.D. candidate the Dean of the Graduate School will appoint a 3 member doctoral committee. Its members will be selected from the graduate faculty and two members will usually come from the Department of Geography and Marine Affairs.

The Ph.D. program would consist of a minimum 48 credit curriculum of study beyond the Masters level. Twenty-four of these credits will be earned for the dissertation. Candidates will select two from among the following five areas of concentration a) fisheries law and management; b) coastal zone management; c) maritime transportation and ports; d) international and national ocean law and policy; and e) marine issues in developing countries.

Candidates for the Ph.D. in Marine Affairs are required to:

- 1) complete a minimum of 48 credit hours beyond the Masters degree, of which 24 credits may be awarded for dissertation research. As part of the 48 credit requirement all candidates must complete a six-credit Marine Management Seminar, and two three-credit courses at the 600 level;
- 2) have completed the basic required courses or their equivalents, for the Master of Arts degree in Marine Affairs. These required courses are: MAF 482, Quantitative Methods in Geography and Marine Affairs; MAF 502, Research Methods in Geography and Marine Affairs; MAF 511, Marine Science and Ocean Uses; MAF 571, Marine Geography; MAF 577, International Ocean Law;

and REN 514, Economics of Marine Resources; MAF 651-652, Marine Affairs Seminar. These courses are not to be counted as meeting the 48 credit requirement stipulated in (1) above;

- 3) pass a written comprehensive examination and, subsequently, an oral examination, based upon two of the Department's five areas of specialization; international law and policy, fisheries law and management, coastal zone management, ports and shipping, and marine management in developing countries. The candidate will major in one area, and minor in the other. For each of the areas, there will be available special tutorials, carrying one to three credits each, in order to prepare the student for the written and oral comprehensive examinations;
- 4) demonstrate competence in an appropriate foreign language and pass a departmental statistics examination;
- 5) write and successfully defend an acceptable Ph.D. dissertation.

Anticipated Costs. The establishment of a Marine Affairs Doctoral Program will involve the following costs and other general operating monies. See attached budget, page 19.

1. We have requested the addition of two tenure track faculty positions to the Department. Each position will require funding at the level of \$35,000 plus fringe benefits (25%) per year.
2. Five additional graduate assistantships (c. \$8,000 each) are budgeted. These assistants will be employed in the Marine Affairs Department and in others, as appropriate, to aid in meeting changing teaching and research needs. With the substantial and continuing growth in undergraduate interest and enrollment in the courses offered by this department, graduate assistants will be needed increasingly to assist with preparation, grading, discussion groups, and assorted other requirements associated with the undergraduate educational program.
3. Tuition remission associated with the five assistantships is estimated at \$21,000 in the first year and is increased by 4.5% each year.
4. Additional annual funding for guest lecturers (\$1500) and travel for guest speakers (\$2000) would be required. Marine Affairs is a policy field in which changes may be rapid. It is imperative that students be kept current with developments in government, industry, and academia. Funding would be used to bring in outside

experts to supplement in house expertise for doctoral seminars which would stress the latest developments in the field. Involvement of outside experts, incidentally, increases the exposure of the Ph.D. program among the relevant professional communities.

5. Additional funding of \$1200 for advertising our Ph.D. program would be needed in the first year. Training of specialists in Marine Affairs at the Ph.D. level is new and must be publicized so as to attract strong and capable degree candidates. The availability of our Ph.D. program must be made known to the relevant publics. Advertising in selected journals should be employed, at least in the program's early years.
6. Additional funding for printing of \$750 is required. The department will need to produce a brochure outlining and explaining the Ph.D. program to prospective students. This is an expense that would be periodic, occurring perhaps every third year as new brochures are needed.
7. The URI Library holdings of journals and documents would need to be increased in the field of Marine Affairs. The estimated cost of this support would be approximately \$4500 in the first year with increases in future years. This material would be needed to support research and instruction at an advanced graduate level.
8. Additional office space for graduate assistants would be needed, preferably in Washburn Hall but, realistically, space in nearby buildings would be workable. Space will be available in Rubbles House, headquarters of the Coastal Resources Center Studies, on Upper College Road when that unit moves into the facilities for the Coastal Institute.

As noted earlier, the adoption of a doctoral program should not be at the expense of the existing Masters Program in Marine Affairs. Nor, members of the Departmental faculty believe, should the undergraduate major be eliminated or seriously curtailed. Indeed, the Department is strengthening its undergraduate curriculum. With judicious planning, and with some rearrangements of the undergraduate curriculum, strong degree-granting programs at all three levels (B.A., M.A., Ph.D.) can be achieved.

#### E. Interinstitutional Considerations

There are no programs of the type proposed at any other institution either in Rhode Island or in New England. This new program, therefore, should not impact other higher education institutional in Rhode Island. Existing graduate programs at the master's level in the Department of Marine Affairs have been covered by the New England Board of Higher Education Regional Student Program as URI is recognized as the regional center for

marine affairs education. The proposed Ph.D. program should also be covered by this regional program.

#### F. Resources

On a day to day basis the Ph.D. program in marine affairs will be administered by the Chair of the Department of Marine Affairs or by the Chair's designee selected from among the senior faculty members in the department. Faculty who would be involved are indicated in Appendix I of this proposal. As noted elsewhere in this proposal two new tenure track faculty positions would be added to the Department of Marine Affairs with anticipated specializations providing an appropriate combination of expertise in the areas of fisheries policy and management, marine environmental protection, and marine regional management.

In order to ensure the Program's interdisciplinary approach, an Interdisciplinary Advisory Committee will be established by the Dean of the Graduate School upon the recommendation of the Chair of the Department of Marine Affairs, the Dean of Arts and Sciences, and the Vice-Provost for Marine Programs. This Committee will oversee and advise upon the Ph.D. curriculum and monitor the Program's operations, at least during its initial years. The Committee would meet on a regular basis under the chairmanship of the Director of the Ph.D. program, who would be a member of the faculty of the Department of Marine Affairs.

There are no plans to charge differential tuitions to students in the proposed program other than in relation to the regional tuition program administered by NEBHE.

	Ph.D. in Marine Affairs Revised Budget			
	1993-94 Year 1	1994-95 Year 2	1995-96 Year 3	1996-97 Year 4
<b>PERSONNEL SERVICES</b>				
Faculty	\$ 78,000	\$ 81,900	\$ 85,995	\$ 90,295
Graduate assistants	40,250	40,750	41,250	41,756
Fringe benefits	24,616	25,846	25,953	26,060
Guest lecturers	1,700	1,785	1,874	1,967
Total Personnel Services	\$144,566	\$150,281	\$155,072	\$160,079
Operating Expenses				
Office, Advertising	\$ 6,500	\$ 4,000	\$ 4,200	\$ 4,410
Printing, Travel, etc.				
Capital				
Library	\$ 5,500	\$ 5,775	\$ 6,064	6,367
Tuition Remission	\$ 28,596	\$ 30,026	\$ 31,527	33,103
<b>TOTAL</b>	<b>\$185,602</b>	<b>\$190,082</b>	<b>\$196,863</b>	<b>\$203,959</b>

\*First-year operating is significantly higher than subsequent years because of initial advertising costs.

\*\*Tuition increase calculated at 5 percent per year.