MEMORANDUM

TO: Virginia S. Hinshaw
    Chancellor

VIA: Reed W. Dasenbrock
     Vice Chancellor for Academic Affairs

FROM: Alan H. Teramura
      Interim Dean

SUBJECT: Reorganization Proposal for the Merger of the Department of Biology,
         Department of Zoology, and the Marine Option Program in the College of Natural
         Sciences

SPECIFIC ACTION REQUESTED:
We request your approval of the reorganization proposal to merge the Department of Biology,
Department of Zoology, and the Marine Option Program to form a new and stronger
Department of Biology in the College of Natural Sciences.

RECOMMENDED EFFECTIVE DATE:
Upon your approval.

ADDITIONAL COST:
No additional costs are associated with this reorganization.

PURPOSE:
The purpose of this reorganization is to create an integrated Department of Biology that
reflects the modern view of biology in both research and education.

BACKGROUND:
Pursuant to Administrative Procedure A3.101 University of Hawai‘i Organizational and
Functional Changes dated March 2008, reorganizations that:
a) do not have an impact on BOR policy and/or laws;
b) do not create, eliminate, or significantly change responsibilities of programs reporting
directly to the Board or President;
c) do not incur significant additional expenses; or
d) do not have significant programmatic impact on the University may be approved under
delegated authority by the Chancellor for reorganizations that are two (2) supervisory levels
below (APM A3.101, Section 3b).

This reorganization proposal has been reviewed and discussed with appropriate units and staff
members. The details of the reorganization are outlined in the attached Executive Summary
and narrative.

**ACTION RECOMMENDED:**
It is recommended that the attached reorganization proposal for the merger of the Department
of Biology, Department of Zoology, and the Marine Option Program into a new and stronger
Department of Biology in the College of Natural Sciences be approved.

Should you have any questions, please contact Alan H. Teramura at 956-6451 or at
teramura@hawaii.edu

Attachments

**APPROVED / DISAPPROVED:**  See approved organization charter.

Virginia S. Hinshaw
Chancellor

S. 29-17
Date
Reorganization Proposal  
College of Natural Sciences  
Merger of the Department of Biology, Department of Zoology,  
and the Marine Option Program  
to form a single new Department of Biology  
University of Hawai'i at Mānoa

Executive Summary

Instructions: Complete each section below and clearly indicate “None” or “N/A” where appropriate.

I. **Purpose:**  
Explain the purpose of this reorganization and the anticipated overall impact.

The purpose of this reorganization is to merge the existing Department of Biology, Department of Zoology, and the Marine Option Program to form a single new Department of Biology.

This proposed merger will provide students with a more integrated training in the biological sciences. In addition, students enrolled as Biology majors will have greater access to support services of the newly formed Department of Biology.

II. **Major Elements of the Proposal:**  
Explain or list the key changes being proposed in this reorganization relative to purpose and results.

1. Faculty and staff in the current Department of Biology, Department of Zoology, and the Marine Option Program will report to the Chair of the new Department of Biology, leading to clear lines of responsibilities.
2. Courses with ZOOL Alpha will change to BIOL Alpha and course mergers and integration will take place, leading to a more integrated educational experience.
3. Future students will receive degrees in Biology (possibly with specializations), reflecting the modern integrated view of Biological Sciences, where fundamental processes are considered the same from bacteria to humans.

III. **Resource Impact:**  
Explain the resources impacted as a result of this reorganization. If there is no impact, reflect “None” for each category as appropriate.

   A. **Budget**  
      1. What is the estimated cost of the reorg? None  
      2. Are additional funds needed? No. If so, how will the cost of the reorg be funded? N/A  
      3. Will the reorg result in cost savings or be cost neutral? Cost savings.  
   B. **Operational**
1. What is the overall impact on faculty and staffing responsibilities, if any? None
2. Will additional faculty/support personnel be required? No. If so, what is the plan to obtain the additional faculty/staffing to successfully implement the reorganization? N/A
3. Will there be a reduction in faculty/staff? No. If so, what steps are planned or have been taken to ensure proper consultation? N/A
4. Identify faculty/staff positions impacted by the anticipated changes.

<table>
<thead>
<tr>
<th>Position #</th>
<th>Classification Title</th>
<th>Anticipated Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>82015, 82167, 82243, 82269, 82424, 82434, 83079, 83141, 83232, 83948, 84144, 84162, 84248, 84378, 84472, 88135, 88993</td>
<td>Instructional Faculty</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>85031, 88016, 88068, 88081, 88105, 88275, 88321, 88337, 88387, 88442, 88447, 84249T</td>
<td>Graduate Assistants</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>11894</td>
<td>Secretary II, SR-14</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>15271</td>
<td>Office Assistant III, SR-08</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology.</td>
</tr>
<tr>
<td>81425</td>
<td>Administrative Officer, PBA</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>80681</td>
<td>Redescribed from Scientific Illustrator, PBB to Admin &amp; Fiscal</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the</td>
</tr>
<tr>
<td>Code</td>
<td>Position</td>
<td>Change Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>51337</td>
<td>Office Assistant III, SR-08</td>
<td>Change from the Department of Zoology, Hawai‘i Cooperative Fishery Research Unit to the Department of Microbiology. The supervisor will be the appointed Chair of the Department of Microbiology.</td>
</tr>
<tr>
<td>83579</td>
<td>Position updated from Specialist, S5 to Assistant Specialist, S3</td>
<td>Change from the Marine Option Program to Academic Affairs. No change in supervisor.</td>
</tr>
</tbody>
</table>

C. **Space**

1. Will additional space outside own resources/allocations be required? No. If so, has the Vice Chancellor for Administration, Finance, and Operations (VCAFO) or designee been consulted? N/A

IV. **Consultation:**

Explain or list the individuals and groups consulted and the key comments/feedback received.

Faculty and staff in the Biology Program and the Zoology Department have been consulted. All feedback has been positive. The faculty in the College of Natural Sciences and the Arts and Sciences Senate Executive Committee has also been consulted. The SEC supports the proposed reorganization and we have not received any comments from the Natural Sciences faculty.

Consultation also occurred with Mānoa HR, Mānoa Finance & Accounting, Mānoa Budget Office, Mānoa Faculty Senate Executive Committee, the Hawai‘i Government Employees Association and the University of Hawai‘i Professional Assembly. There were no key comments.

V. **Implementation:**

Explain when and how this reorganization will be implemented. Identify anticipated effective date.

Effective date will be upon approval by the Chancellor. Upon approval, reporting lines will be modified and all appropriate position descriptions will be updated as necessary. Additionally, the Biology Curriculum Committee will submit the necessary Course Alpha changes to the College Curriculum Committee via the Chair of the Biology Department. When existing students have all graduated, the undergraduate Zoology degrees will be proposed for
removal in favor of the Biology degrees with specialization in Zoology. The new Biology Department will offer MS and PhD degrees in both Biology (new degrees to be proposed) and Zoology (existing degrees).
Reorganization Proposal  
College of Natural Sciences  
Merger of the Department of Biology, Department of Zoology,  
and the Marine Option Program  
to form a single new Department of Biology  
University of Hawai‘i at Mānoa  

Narrative  

I. INTRODUCTION:  
A. Provide an overview of the College/School/Department and a snapshot outlining the current situation of the unit(s) involved in the reorganization.  

The College of Natural Sciences was established by the Board of Regents in 1985 as a result of the separation of the (then) College of Arts and Sciences into four independent units. The College consists of 8 academic units (Biology, Botany, Chemistry, Information and Computer Sciences, Mathematics, Microbiology, Physics and Astronomy, and Zoology) and one certificate program (Marine Option Program). A separately accredited professional program (Library and Information Science) is located in the Department of Information and Computer Sciences. These academic units and programs include 143 faculty members and 40 staff that maintain active research programs, with external funding of approximately $23M/year.  

The Department of Biology has 4 APT staff positions and 1 faculty position. Courses in the department are taught cooperatively by faculty from the Departments of Botany, Cell and Molecular Biology, Microbiology, Molecular Biosciences and Biosystems, Engineering, and Zoology. The department offers a BA degree for pre-professional students, a BS degree with five specializations: cell molecular biology, ecology/evolution/conservation biology, marine/aquatic biology, organismic biology and general biology, a BS in marine biology, and a minor in biology.  

The Department of Zoology includes 17 faculty and 4 staff (2 APT and 2 clerical). The department offers BS, BA, and minor degrees in zoology, and MS and PhD degrees in zoology. Faculty in the department teach both biology and zoology courses. They actively conduct research in zoology, receiving research and training grants totaling about $860,000/year.  

The Marine Option Program (MOP) has 1 faculty position. MOP is administered by the Department of Biology and awards certificates to students who complete the MOP requirements in addition to their degree requirements.  

B. Specify the objectives/goals of the new/restructured unit(s) involved in the reorganization.  

All of the biological sciences are changing and becoming much more integrated. Well-established principles taught in zoology courses are equally valid for courses in the
other biological sciences. We now speak of biogeography, for example, rather than zoogeography. When we teach genetics we use biological examples from bacteria to humans. In short, the separation of zoology from biology is becoming less important from a disciplinary perspective, and the courses that are required of students in the Biology and Zoology degree programs are quite similar.

The proposed merger of the Department of Biology, Department of Zoology, and the Marine Option Program is predicated on two major arguments: 1) there are over 1,100 undergraduate students in the Department of Biology who have no true academic home and support structure equivalent to a department. This is due to the fact that the Department of Biology is a department in name only, without sufficient faculty and staff support; and 2) the curricula of the Department of Zoology and Department of Biology are very similar and so could be joined. The Marine Option Program will be administered by the new Department of Biology and will no longer report directly to the Dean of Natural Sciences as it does currently. This reorganization is consistent with the University’s strategic and financial plans, and will lead to a more cohesive academic program for biological science majors and MOP students.

II. RATIONALE FOR THE REORGANIZATION:
A. Provide background and relevant historical information.

When the College of Arts and Sciences was first established in 1920, one of the four groups of subjects was the Natural & Physical Sciences (Group III). At this time the Zoology program was organized as a department within Group III. Since 1962, the Department of Zoology has been located in Edmondson Hall, and offers the following degrees and certificates with year approved included in parentheses; BA degree (1920), MS degree (1927), PhD degree (1949), BS degree (1998), Zoology minor (1991).

In 1966 the Biology Program was also established within Group III. It was not a department, nor a nascent one, but rather a cooperative effort developed between the three departments (Botany, Microbiology and Zoology) concerned with teaching the basic biological sciences at UHM. It was strictly an undergraduate program offering the following degrees and certificates: BA degree for pre-professional students, a BS degree with five specializations: cell molecular biology, ecology/evolution/conservation biology, marine/aquatic biology, organismic biology and general biology, a BS in marine biology, a minor in biology, and a MOP certificate.

In 1985, the College of Arts and Sciences was divided into the four colleges that exist today and at that time the (then) Biology Program and the Department of Zoology moved into the College of Natural Sciences where they reside today. Discussions were begun in 2007-2008 as to the feasibility of amalgamating all biological science departments (Biology, Botany, Microbiology and Zoology) into one Department of Biology. Initially, all units appeared in favor of this scenario. However, by July 2008, it was apparent that only the Department of Zoology agreed with the amalgamation. In December 2008, the Zoology Chair assumed the Chair of the Department of Biology.
and has been moving, albeit slowly, toward full amalgamation of the two programs, under the title of Department of Biology. This also includes the integration of MOP.

On the 20th of January 2009, the Department of Zoology submitted to the Dean of the College of Natural Sciences a proposal for the merger. In that proposal, a number of facts involving personnel, student numbers and budget were assumed and an organizational chart constructed. However, due to the ensuing and ongoing financial crisis, positions were lost and/or consolidated, changing the nature of the organizational chart. In addition, during the same year, the College went through the prioritization process and it was recommended that a full amalgamation of the biological science units would be beneficial. To this date, only the Departments of Zoology and Biology and the Marine Option Program are involved in the merger which is in line with the strategic plan of the College and are moving forward with submission of this reorganization proposal. This will create a new Department of Biology that will have over 1,100 undergraduate majors (1,140 as of September 2010) and 110 graduates.

B. Provide a detailed explanation of the conditions and/or factors prompting the proposed reorganization and how they will be addressed by the reorganization. Explain why the current organization is inadequate and whether the reorg is consistent with the University’s strategic, program, and financial plans.

The current organizational structure is adequate but does not fully allow for the complete integration of the Biological sciences; as stated above the separation of Zoology from Biology is becoming less important from a disciplinary perspective. The proposed merger will allow for a much more complete integration of the courses required for biological science students. This is consistent with the recommendations of the College of Natural Science prioritization committee and with the University’s strategic, program, and financial plans.

C. Explain other alternatives explored.

Other alternatives studied were to remain with the present structure, but the Zoology faculty did not agree with this. Another alternative was to develop two departments from the whole; one being the Department of Cell & Molecular Biology and the other the Department of Ecology, Evolution and Conservation Biology. However, it is felt that this would result in the first department consisting mainly of undergraduate majors with few graduates and the second department being the opposite. In addition it would leave a large number of biology majors (particularly Marine Biology) and faculty belonging to neither specialization.

Among the various peer institutions, there are a number of different organizational models, including those discussed above and others that are structured within a division or College of Life Sciences. In fact, the Biology/Zoology faculty has discussed for the past ten years the feasibility of structuring a school of Biological Sciences within the College of Natural Sciences.
D. Explain how the proposed changes will affect current relationships and workflows, including impact on services and relations with other University segments.

There will be no effects of the proposed reorganization on current workflows and faculty and staff numbers will remain the same. The relationships between the expanded Department of Biology and the existent Departments of Botany and Microbiology will remain the same in terms of undergraduate teaching duties. However, because of the movement towards centralization, services will be more streamlined. All faculty and staff in the biological sciences have been fully consulted on the merger and more than one vote has been taken approving the plan. Most impacted of these are the staff who will be working together for the first time. A gradual move towards the merger has in actuality begun two years ago. During this time, the office staff from both Zoology and Biology has integrated well and have dealt with shifting workloads with very few problems.

E. List the groups that will be impacted by the reorganization and indicate whether they have been informed/consulted.

Groups that will be impacted by the reorganization include Biology/Zoology faculty and staff, undergraduate/graduate students, MOP and the Departments of Botany and Microbiology. All of these groups have been consulted and fully informed as to the details of the merger and its timeline. The title of the Department of Biology was unanimously agreed upon by all faculty concerned in the merger. The faculty in the College of Natural Sciences and the Arts and Sciences Senate Executive Committee has also been consulted. The SEC supports the proposed reorganization and we have not received any comments from the Natural Sciences faculty.

Consultation also occurred with Mānoa HR, Mānoa Finance & Accounting, Mānoa Budget Office, Mānoa Faculty Senate Executive Committee, the Hawai‘i Government Employees Association and the University of Hawai‘i Professional Assembly. There were no key comments.

F. Outline the benefits that will be achieved by the reorganization, including efficiencies and service improvements. Explain whether the supervisor/subordinate reporting relationships are properly identified and whether the reorganization will minimize confusion over authority, roles, and responsibilities.

The benefits from the merger are mainly seen in the streamlining and more complete integration of the biological sciences curriculum. We feel that this will increase the efficiency of completing degrees within a four-year plan and will undoubtedly improve our ability to service a large body of students. With regards to the modified curriculum, some undergraduates feel that they would still like a Zoology degree, but this can be addressed by having biological science degrees with specializations in zoological fields. However, it should be realized that plans for changing degree offerings will not be implemented until the merger is fully approved and all students currently on Zoology
degrees will be grandfathered through even when approval is given. At time of approval, all Zoology course alphas will be converted to Biology alphas and conflicts will be resolved through the Biology Curriculum Committee. Course equivalencies will be clearly articulated by the same committee. Consultation with the VCAA and OVCAFO on this merger was actually undertaken during the prioritization process and we were informed that higher administration was fully supportive of the merger.

All supervisor/subordinate reporting relationships have been fully identified leading to minimum confusion in the chain of command. The reorganization definitely minimizes confusion over authority, roles and responsibilities, with undergraduates and staff being under the umbrella of one department with one chair.

A two-year admissions stop-out for the BA and BS degrees in Zoology will be requested immediately after approval of this merger request. At the completion of the requested stop-out, a request for an additional stop-out period sufficient to accommodate all students desiring to complete an undergraduate Zoology degree will be submitted to the Board of Regents. After all Zoology students have completed their degrees, a request to delete the Zoology BA and BS degree programs will be submitted. The existing BA and BS degrees in Biology as well as the existing BS in Marine Biology will continue to be offered. New MS and PhD degrees in Biology will be proposed following approval of the merger. The existing Zoology MS and PhD degrees will continue to be offered.

III. IMPACT ON RESOURCES AND THE UNIVERSITY

Provide a detailed description of the resource requirements and the programmatic impacts of the reorganization on the University.

The resource requirements for the new Department of Biology will remain the same, provided student enrollments do not significantly increase over the coming years. We do not foresee any programmatic impacts of the merger on the University except that the new department will be large in terms of undergraduate majors and graduate students, but should function more efficiently because of personnel streamlining and accessibility. With respect to staffing and resources, it is difficult to comment as student numbers in the Department of Biology continue to rise. Since 1999 to present the Department of Biology has seen a 100% increase in numbers of majors. Increases in enrollment over the past two years have constituted 21% of this. These increases do not include the graduate student population. The Department of Biology’s student enrollment is the largest on campus, surpassing that of some colleges and schools.

A. Impact on budget resources:
   1. What is the estimated cost of the reorg?
      The proposed reorganization will be resource neutral.
   2. Are additional funds needed? If so, how will the cost of the reorg be funded?
      Presently, no additional funds are needed.
   3. Will the reorg result in cost savings or be cost neutral?
      So far, with the partial merger of the Departments of Biology and Zoology, and the Marine Option Program the College of Natural Sciences has realized a salary
savings of approximately $103,576 from the vacant Marine Option Program Director position. Presently, approximately $70,000 of these savings is being used to hire a STEM Coordinator, a faculty specialist to coordinate courses and curricular changes occurring due to increased student enrollment, especially in the biological sciences. In addition, there is also a salary saving for the MOP Director (appointed from faculty position) with NOAA contributing 25% of the total or $18,724. Total salary savings of $52,300.

B. Impact on operational resources:

1. What is the overall impact on faculty and staffing responsibilities, if any? Explain reasons for the anticipated changes/relocation/reassignment/etc.
   There is no overall impact on faculty and staffing responsibilities, as long as all vacant faculty positions are eventually filled.

2. Will additional faculty/support personnel be required? If so, what is the plan to obtain the additional faculty/staffing to successfully implement the reorganization? What is the impact of the increase?
   Additional faculty/support personnel may be required, and is dependent on future student enrollment. These problems have already been identified and addressed by the Dean of the College of Natural Sciences and the Vice Chancellor of Academic Affairs to a certain degree. It is appreciated by all parties that continued support will be necessary considering the size of the department.

3. Will there be a reduction in faculty/staff? If so, what steps are planned or have been taken to ensure proper consultation? What is the impact of the reduction?
   There will not be a reduction in faculty/staff.

4. Identify the positions impacted by position number, classification title, and anticipated changes.

<table>
<thead>
<tr>
<th>Position #</th>
<th>Classification Title</th>
<th>Anticipated Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>82015, 82167, 82243, 82269, 82424, 82434, 83079, 83141, 83232, 83948, 84144, 84162, 84248, 84378, 84472, 88135, 88993</td>
<td>Instructional Faculty</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>85031, 88016, 88068, 88081, 88105, 88275, 88321, 88337, 88387, 88442, 88447, 84249T</td>
<td>Graduate Assistants</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>11894</td>
<td>Secretary II, SR-14</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The</td>
</tr>
<tr>
<td>Code</td>
<td>Position Description</td>
<td>Change Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>15271</td>
<td>Office Assistant III, SR-08</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>81425</td>
<td>Administrative Officer, PBA</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>80681</td>
<td>Redescribed from Scientific Illustrator, PBB to Admin &amp; Fiscal Support Spec, PBA</td>
<td>Change in departments from the Department of Zoology to the new Department of Biology. The supervisor will be changed to the appointed Chair of the Department of Biology.</td>
</tr>
<tr>
<td>51337</td>
<td>Office Assistant III, SR-08</td>
<td>Change from the Department of Zoology, Hawai‘i Cooperative Fishery Research Unit to the Department of Microbiology. The supervisor will be the appointed Chair of the Department of Microbiology.</td>
</tr>
<tr>
<td>83579</td>
<td>Position updated from Specialist, S5 to Assistant Specialist, S3 (STEM Coordinator)</td>
<td>Change from the Marine Option Program to Academic Affairs. No change in supervisor. The STEM Coordinator will coordinate courses and curricular changes occurring due to increased student enrollment.</td>
</tr>
</tbody>
</table>

5. Will there be changes to supervisory/subordinate relationships? If so, identify the impact. Will the changes streamline operations, reduce supervisory span of control, etc.?

All supervisor/subordinate reporting relationships for support staff, instructional faculty, and graduate assistants have been fully identified leading to streamlined operations and minimum confusion in the chain of command. The reorganization minimizes confusion over authority, roles and responsibilities, with undergraduates and staff being under the umbrella of one department with one chair. Additionally, the change of the Director of MOP reporting to the Department Chair of Biology rather than directly to the Dean will facilitate faster responses to student needs. Currently there are chairs in the
Departments of Biology and Zoology. Upon approval of the merger, there will be a chair of the newly formed Department of Biology which will reduce supervisory span of control. Based on the proposed reorganization, position descriptions for impacted positions will be submitted for update to reflect the appropriate new supervisors and duties and responsibilities as necessary.

C. Impact on space resources:
1. Will additional space outside own resources/allocations be required? If so, has the Vice Chancellor for Administration, Finance, and Operations (VCAFO) or designee been consulted?

Additional space for the merger will not be required. Presently, the Department of Zoology is housed in Edmondson Hall and the Department of Biology and MOP in Dean Hall. The funds have already been identified by the Mānoa Chancellor for the renovation of Edmondson Hall which would have occurred with or without the merger. This has been scheduled to start at the end of summer 2011, and will take approximately 2 years. During the interim, most of the Zoology faculty will be housed in the Biomedical Sciences Building. All staff and the chair will be concentrated in Dean Hall allowing undergraduates full access to all professional amenities. Alternate classrooms have already been identified in Snyder (2nd & 4th floor) and St. John and are under renovation. Once Edmondson Hall is completed, the new Department of Biology will occupy this building and 4th floor Snyder with the departmental office, conference room and MOP complex located on the 2nd floor of Edmondson.
CURRENT
ORGANIZATIONAL CHARTS
AND
FUNCTIONAL STATEMENTS
STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

OFFICE OF THE DEAN – Org Code: MADNNS

The Office of the Dean of the College of Natural Sciences provides leadership and overall vision for the college and coordinates all of its activities including, curricular, personnel, and budget affairs of the College and its ancillary support components including budget management, staff supervision, community relations, grievance and litigation, and travel.

The Dean reports to the Office of the Vice Chancellor for Academic Affairs, University of Hawai‘i at Mānoa and functions with the authority delegated by the President and Vice Presidents.

Manages the personnel, budgeting and planning functions.

Initiates and oversees curriculum development and reform, program review, and workload activities.

Manages the development of College research related programs.

Serves on intra-university committees.

Serves as chair of the Council of Arts and Sciences Deans on a rotating basis.

Manages community relations and development including fundraising, representing the College at professional meetings, and meeting with alumni groups.

ACADEMIC AFFAIRS – Org Code: MAAANS

Coordinates major curricular policy activities on behalf of the Dean.

Reviews proposals for adding, deleting, or modifying courses, certificates and degrees.

Initiates college-wide curricular innovations, such as certificate programs, interdisciplinary/multidisciplinary programs, across college and school lines.

Assists in establishing and maintaining inter-college coordination relative to cross-disciplinary core requirements.

ADMINISTRATIVE SERVICES – Org Code: MAASNS

In conjunction with the Dean, manages the budget preparation/execution for the College including developing criteria for departmental budget allocations.

Directs and advises departments in all matters related to personnel.

Provides guidance on labor-relations issues.

Supervises the purchasing activities of the College.

Provides financial management for all College funds.
<table>
<thead>
<tr>
<th>Position</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair (Appointed from Faculty Positions)</td>
<td>4.00</td>
</tr>
<tr>
<td>Educational Specialist, PBB:</td>
<td></td>
</tr>
<tr>
<td>#77953, #79023, #80637, #81177</td>
<td></td>
</tr>
<tr>
<td>Instructional Faculty:</td>
<td>1.00</td>
</tr>
<tr>
<td>#85803</td>
<td></td>
</tr>
<tr>
<td>Graduate Assistants:</td>
<td>9.50</td>
</tr>
<tr>
<td>#63905, #65524, #88014, #88021, #88070, #88114, #88150, #88153, #88157, #88161, #88162, #88302, #88312, #88354, #88394, #88461, #88472, #88515, #88599, #88522*, #88534*, #88541*, #88453*, #88604*, #87056*</td>
<td></td>
</tr>
</tbody>
</table>

*Appropriated Temporary Positions
DEPARTMENT OF BIOLOGY – Org Code: MABIOL

The Department of Biology is a cooperative program whose faculty members are from the Department of Biology, Botany, Cell and Molecular Biology (JABSOM), Microbiology, Molecular BioSciences and BioEngineering (CTAHR), and Zoology. It provides an academic home to students who wish to pursue a broad training in biological sciences. It offers a BA degree for pre-professional students, a BS degree with five specializations: cell and molecular biology, ecology/evolution/conservation biology, marine/aquatic biology, organismic biology and general biology, a BS degree in marine biology, and a minor in biology.
OFFICE OF THE DEAN

DEPARTMENT OF BOTANY
Org Code: MABOT

Chair (Appointed from Faculty Positions)
Secretary II, SR-14, #50090
Office Assistant III, SR-68, #17564
Administrative Officer, PBA, #80550

1.00
1.00
1.00

Instructional Faculty:
#82301, #82411, #82552, #82674,
#82735, #83297, #83344, #83568,
#83691, #83765, #83963, #84169,
#84189, #84576, #85019, #85414,
#85790, #86150

18.00

Graduate Assistants:
#88063, #88173, #88177, #88351,
#88479, #88496, #88523, #88530,
#88628

4.50

General Fund FTE: 25.50
DEPARTMENT OF BOTANY – Org Code: MABOT

The UH Mānoa has the only botany department located in a tropical environment in the U.S. Both aquatic and terrestrial tropical ecosystems provide the subjects of research and teaching. The department is committed to broad-based botanical training that focuses on developing an understanding of Hawai‘i’s unique island environment. While it maintains traditional areas of botanical study, the department also uses new approaches and current technologies. It has faculty in anatomy, ecology, systematics, ethnobotany, physiology, and population and evolutionary biology. Participation in the interdepartmental undergraduate biology program and the graduate program in ecology, evolution and conservation biology provides interactions with other departments and expands opportunities for breadth in research and instruction. The department offers BA, BS, and minor degrees in botany, a BS degree in ethnobotany; and MS and PhD degrees in botany.

Research programs focus on ecology, evolution and conservation of Hawai‘i's ecosystem and unique endemic flora; the ecology and physiology of marine macroalgae; ethnobotany; invasion biology by alien weeds; and the uses of plants by humans.
### DEPARTMENT OF CHEMISTRY

**Org Code:** MACHCH

<table>
<thead>
<tr>
<th>Position</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair (Appointed from Faculty Positions)</td>
<td>1.00</td>
</tr>
<tr>
<td>Secretary II, SR-14, #13484</td>
<td>1.00</td>
</tr>
<tr>
<td>Clerk-Stenographer II, SR09, #14356</td>
<td>1.00</td>
</tr>
<tr>
<td>Admin &amp; Fiscal Support Spec, PBA, #78992</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Support Activities**

**Org Code:** MASACH

<table>
<thead>
<tr>
<th>Position</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Chair (Appointed from Faculty Positions)</td>
<td></td>
</tr>
<tr>
<td><strong>Storeroom Services</strong></td>
<td></td>
</tr>
<tr>
<td>Educational Specialist, PBB, #60086</td>
<td>1.00</td>
</tr>
<tr>
<td>Chemical Stores Clerk, SR-09: #13930, #45199</td>
<td>2.00</td>
</tr>
<tr>
<td><strong>Instrument/Computer Services</strong></td>
<td></td>
</tr>
<tr>
<td>Supervision Temporarily Provided by #80362</td>
<td>1.00</td>
</tr>
<tr>
<td>Electronics Engineer, PBB, #80722</td>
<td></td>
</tr>
<tr>
<td>Electronics Technician, PBB, #80747</td>
<td></td>
</tr>
<tr>
<td><strong>Analytical Services</strong></td>
<td></td>
</tr>
<tr>
<td>Research Support Staff, PBB, #80362</td>
<td>1.00</td>
</tr>
<tr>
<td>Research Support Staff, PBB, #80892</td>
<td>1.00</td>
</tr>
<tr>
<td>Research Associate, PBB, #80121</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Glassblowing Services</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Instructional Activities**

**Org Code:** MACHEM

<table>
<thead>
<tr>
<th>Position</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instructorial Faculty:</strong></td>
<td>18.00</td>
</tr>
<tr>
<td>#82051, #82217, #82455, #82618, #82624,</td>
<td></td>
</tr>
<tr>
<td>#82749, #83065, #83430, #83692, #84076,</td>
<td></td>
</tr>
<tr>
<td>#84116, #84190, #84305, #84641, #84737,</td>
<td></td>
</tr>
<tr>
<td>#84852, #84860, #86062</td>
<td></td>
</tr>
<tr>
<td><strong>Graduate Assistants:</strong></td>
<td>15.00</td>
</tr>
<tr>
<td>#85020, #85021, #85023, #85049, #85091,</td>
<td></td>
</tr>
<tr>
<td>#85158, #85523, #88022, #88041, #88106,</td>
<td></td>
</tr>
<tr>
<td>#88116, #88163, #88220, #88234, #88274,</td>
<td></td>
</tr>
<tr>
<td>#88316, #88330, #88356, #88419, #88459,</td>
<td></td>
</tr>
<tr>
<td>#88466, #88471, #88496, #88547, #88550,</td>
<td></td>
</tr>
<tr>
<td>#88554, #88567, #88570, #88580, #88590</td>
<td></td>
</tr>
</tbody>
</table>
STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MÂNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

DEPARTMENT OF CHEMISTRY – Org Code: MACHCH

Chemistry stands at the crossroads between physics and biology. As biological processes are examined in ever finer detail, chemistry is increasingly called upon to provide the insights, techniques, and materials needed to understand the workings of living organisms, including ourselves.

Support Activities – Org Code: MASACH

Associate Chair
The Associate Chair of the Department of Chemistry manages the support activities of the department which include storeroom services; instrument/computer services; analytical services; and glassblowing services.

Storeroom Services
The Department of Chemistry is home to two well-supplied stockrooms, containing an array of materials necessary for undergraduate instructional courses and graduate research for the entire University of Hawai‘i community.

Instrument/Computer Services
The Department of Chemistry also provides design and construction services of analog and digital devices not available commercially. Instrument/Computer Services provide repair and maintenance of departmental instruments in the fields of Gas Chromatography, UV-visible, Infrared and Atomic Absorption Spectroscopy, X-ray diffractometry, etc. Support services include the instrument shop, the machine shop and the electronics shop.

Analytical Services
The Department has a strong commitment to maintaining state-of-the-art instrumentation. Instrumentation includes Nuclear Magnetic Resonance spectrometers and Mass Spectrometry. These facilities are regularly used by members of the Department of Chemistry, in addition to other research units within the University of Hawai‘i system and across the United States.

Glassblowing Services
The Chemistry Department provides glassblowing services for the entire University system including repair, design, modification and fabrication of glass apparatus not commercially available.

Instructional Activities – Org Code: MACHEM

The department offers a BA, BS and minor degrees in chemistry and MS and PhD degrees in chemistry.

The faculty of the Department of Chemistry has research interests in bioinorganic, organic, inorganic, physical, and analytical chemistry. The graduate faculty participates in a number of collaborative efforts with colleagues at the Cancer Research Center of Hawai‘i, the Hawai‘i Natural Energy Institute, the Cell and Molecular Biology Program, the NASA Astrobiology Institute, and the W.M. Keck Astrochemistry Laboratory.
DEPARTMENT OF INFORMATION AND COMPUTER SCIENCES
Org Code: IAICS

Chair (Appointed from Faculty Positions)
Secretary II, SR-14, #18055 1.00
Network Specialist, PBA, #61194 1.00
Computer Specialist, PBB, #79024 1.00
System Programmer, PBB, #61447 1.00
Admin & Fiscal Support Specialist, PBA, #81985 1.00

Instructional Faculty:
#82070, #82120, #82287, #82446,
#82468, #82626, #82649, #82737,
#82787, #82794, #82835, #83074,
#83083, #83203, #83381, #83393,
#83406, #83443, #83602, #83657,
#83889, #83916, #83989, #84029,
#84270, #84282, #84427, #87503,
#87504, #88680, #85651T (0.50)

Graduate Assistants: 5.00
#8550, #85422, #86464, #86465,
#86466, #86467, #87556, #87557,
#87558, #85563

*Appropriated Temporary Position
DEPARTMENT OF INFORMATION AND COMPUTER SCIENCES – Org Code: MAICS

Information and Computer Sciences is the study of the description and representation of information and the theory, design, analysis, implementation, and application of algorithmic processes that transform information. The curriculum covers all major areas of computer science with special emphasis on software engineering, computer networks, artificial intelligence, human-computer interaction and bioinformatics. Information and Computer Sciences offers BA, BS, and minor degrees in information and computer science, MS in computer sciences, MLISc in library and information science, PhD in computer science, and PhD in communication and information sciences (interdisciplinary).

Information and Computer Sciences faculty members have research interests in algorithms; artificial intelligence and robotics; biomedical informatics and bioinformatics; collaborative systems; compilers; computer vision; databases; human computer interaction; library and information science; machine learning; mobile and ubiquitous computing; security and information assurance; software engineering; and systems, networking, and high-performance computing.
DEPARTMENT OF MATHEMATICS
Org Code: MAMATH

Chair (Appointed from Faculty Positions)
Secretary II, SR-14, #12467
Clerk Stenographer III, SR-11:
#14365, #21976

1.00
2.00

Instructional Faculty:
#82035, #82177, #82202, #82254,
#82455, #82473, #82658, #82738,
#82942, #82943, #82993, #83200,
#83285, #83332, #83426, #83478,
#83709, #83761, #83994, #84092,
#84178, #84183, #84503, #84508,
#84513, #84515, #84558, #84645,
#84657

29.00

Graduate Assistants:
#85024, #88013, #88073, #88111,
#88142, #88148, #88253, #88426,
#88611, #88672, #70195T*, #83855T*

5.00

*Appropriated Temporary Positions

General Fund FTE: 37.00
General Fund FTE: 1.00 (Auth Temp)
DEPARTMENT OF MATHEMATICS – Org Code: MAMATH

The Department of Mathematics offers preparation in the full spectrum of mathematical sciences, including algebra, geometry, differential equations, real and complex analysis, topology, logic, number theory, and probability and statistics, as well as various topics in applied mathematics. The math department offers BS, BA and minor degrees in mathematics, and MA and PhD degrees in mathematics.

Faculty of the Department of Mathematics has research interests in algebra & number theory; analysis; applied mathematics; geometry & topology; and logic, lattices & universal algebra.
DEPARTMENT OF MICROBIOLOGY
Org Code: MAMICR

Chair (Appointed from Faculty Positions)
Secretary II, SR-14, #13979 1.00
Educational Specialist, PBA, #80521 2.00
Educational Specialist, PBA: #80296, #78359
Admin & Fiscal Support Spec, PBA, #78993 1.00

Instructional Faculty:
#82007, #82157, #82206, #82337,
#82355, #82021, #83436, #84037 8.00

Graduate Assistants:
#85040, #88034, #88097, #88159,
#88226, #88256, #88271, #88273,
#88278, #88311 5.00

General Fund FTE: 18.00
Microbiology, one of three basic fields in the biological sciences, is an extremely diverse and complex field. It is essential to the fabric of medicine, the allied health sciences, agriculture, ocean sciences, and the vital growing biotechnology industry (genetics, cell and molecular biology, etc.) of the present era. The Department of Microbiology has concentrated on highly essential areas vital to the State of Hawai‘i such as general and applied microbiology (including biotechnology), microbial genetics, microbial physiology (molecular biology), medical microbiology, microbial ecology, and bioremediation, food microbiology, immunology, animal virology (includes marine animal virology) and cell biology. The Department of Microbiology offers BS, BA, and minor degrees in microbiology, and MS and PhD degrees in microbiology.

Faculty of the Department of Microbiology have research interests in microbial signal transduction; prokaryotic biology; marine microbiology; medical microbiology; biochemistry, physiology, and genetics of bacterial systems; molecular virology; and invasive bacterial pathogens.
<table>
<thead>
<tr>
<th>Role</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair (Appointed from Faculty Positions)</td>
<td>1.00</td>
</tr>
<tr>
<td>Secretary II, SR-14, #12918</td>
<td></td>
</tr>
<tr>
<td>Office Assistant III, SR-08, #14355</td>
<td>1.00</td>
</tr>
<tr>
<td>Scientific Instrument Technician, PBB, #80706</td>
<td>1.00</td>
</tr>
<tr>
<td>Scientific Instrument Technician, PBB, #80703</td>
<td>1.00</td>
</tr>
<tr>
<td>Instructional Faculty:</td>
<td>21.00</td>
</tr>
<tr>
<td>#82266, #82314, #82633, #82770,</td>
<td></td>
</tr>
<tr>
<td>#82875, #63534, #83547, #83790,</td>
<td></td>
</tr>
<tr>
<td>#83813, #83861, #83910, #83915,</td>
<td></td>
</tr>
<tr>
<td>#83926, #84235, #84240, #84398,</td>
<td></td>
</tr>
<tr>
<td>#84494, #84587, #84675, #88615,</td>
<td></td>
</tr>
<tr>
<td>#94773</td>
<td></td>
</tr>
<tr>
<td>Graduate Assistants:</td>
<td>7.00</td>
</tr>
<tr>
<td>#85506, #88055, #88057, #88170,</td>
<td></td>
</tr>
<tr>
<td>#88198, #88270, #88309, #88385,</td>
<td></td>
</tr>
<tr>
<td>#88393, #88441, #89478, #89524,</td>
<td></td>
</tr>
<tr>
<td>#88695, #89650, #70197T, #83844T*,</td>
<td></td>
</tr>
<tr>
<td>#83845T*, #84184T*</td>
<td></td>
</tr>
</tbody>
</table>

*Appropriated Temporary Positions*
Physics is the study of matter and energy and how they interact at the most basic levels. Areas include mechanics, optics and lasers, thermodynamics, phenomena, condensed matter, and elementary particles. Physics is widely regarded as the most basic of all the sciences. Astronomy is the branch of science that studies the structure and development of the physical world beyond earth. It includes the study of planets and other objects of the solar system; the sun and stars and their evolution; the interstellar medium; the nature and dynamics of star clusters, galaxies, and clusters of galaxies; and the study of the nature and history of the universe itself - of the physical world taken in its largest extent in space and time. Faculty members in Physics are joined by visiting faculty members from the Institute for Astronomy to present a balanced program of teaching and research. The Department of Physics and Astronomy offers BS, BA, and minor degrees in physics, and MS and PhD degrees in physics as well as MS and PhD degrees in astronomy.

Faculty of the Department of Physics and Astronomy has research interests in elementary particle physics, free-electron laser physics (including application in medical physics), condensed matter physics, particle astrophysics and high energy physics.
DEPARTMENT OF ZOOLOGY
Org Code: MAZ00L

Chair (Appointed from Faculty Positions)
  Secretary II, SR-14, #111894  1.00
  Office Assistant III, SR-08, #15271  1.00
  Administrative Officer, PBA, #81425  1.00
  Scientific Illustrator, PBB, #60561  1.00

Instructional Faculty:
  #62015, #82167, #82243, #82269,
  #82424, #82434, #83075, #83141,
  #63232, #83848, #84144, #84102,
  #84248, #84378, #84472, #85135,
  #85933  17.00

Graduate Assistants:
  #85031, #86016, #88068, #88081,
  #88105, #88275, #88321, #88337,
  #88367, #88442, #88447, #88249T**  5.50

Hawai'i Cooperative Fishery Research Unit
Org Code: MACFZ0

Office Assistant III, SR-08, #51337  1.00

** Appropriated Temporary Position
DEPARTMENT OF ZOOLOGY - Org Code: MAZOO1

The biology of Hawai'i - the environments and the organisms - is extraordinary, and offers unique opportunities for research and graduate education. The Department of Zoology's emphasis is on tropical marine biology and evolutionary biology in its education and research. Many members of the graduate faculty in Zoology are affiliated with other research institutions, both within and outside the University, such as the Hawai'i Institute of Marine Biology, the Pacific Biomedical Research Center, the Kewalo Marine Laboratory, the Békésy Laboratory of Neurobiology, the Center for Conservation Research and Training, the Bishop Museum, and the Hakalau Forest Biological Field Station. The Department of Zoology offer BS, BA, and minor degrees in zoology, and MS and PhD degrees in zoology.

The research focus of the faculty of the Department of Zoology is in Hawai'i's unique natural resources, especially its endemic and indigenous marine and terrestrial animals and their habitats.

Hawai'i Cooperative Fishery Research Unit - Org Code: MACFZO
Established in 1966 the Hawai'i Cooperative Fishery Research Unit is a collaboration between the University of Hawai'i; the Department of Land and Natural Resources; and the U.S. Department of the Interior, Bureau of Sport Fisheries and Wildlife. The objective of the cooperative undertaking is for the advancement, pursuit, and application of research, management, education, extension, and demonstration programs concerned with sport fisheries.
State of Hawaii
University of Hawaii
University of Hawaii at Ma'noa
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
MARINE OPTION PROGRAM
POSITION ORGANIZATION CHART
CHART II-H

OFFICE OF THE DEAN

MARINE OPTION PROGRAM
Org Code: MAMOP

Specialist, S5, #83579  1.00

General Fund FTE: 1.00
MARINE OPTION PROGRAM – Org Code: MAMOP

The Marine Option Program offers undergraduates of all majors throughout the University system, the opportunity to discover and develop their marine and marine-related interests and talents. The program is responsible for the development and management of one certificate-granting program offered at all UH campuses, including the Community Colleges, for those students who elect to complete selected academic seminars, symposia, field trips, workshops, baseline surveys and other hands-on experiences designed to promote marine education and training.
PROPOSED
ORGANIZATIONAL CHARTS
AND
FUNCTIONAL STATEMENTS
OFFICE OF THE CHANCELLOR

OFFICE OF THE VICE CHANCELLOR FOR ACADEMIC AFFAIRS

OFFICE OF THE DEAN
Org Code: MADNNS
Dean, #89197 1.00
Secretary III, SR-16, #50075 1.00

ACADEMIC AFFAIRS
Org Code: MAAANS
Assistant Specialist, S3, #83579 1.00

Department of Biology
Org Code: MABIOL
CHART II-A

Department of Botany
Org Code: MABOT
CHART II-B

Department of Chemistry
Org Code: MACHCH
CHART II-C

Department of Information and Computer Sciences
Org Code: MAICS
CHART II-D

Department of Mathematics
Org Code: MAMATH
CHART II-E

Department of Microbiology
Org Code: MAMICR
CHART II-F

Department of Physics and Astronomy
Org Code: MAPA
CHART II-G

PROPOSED ORGANIZATION CHART
State of Hawai‘i
University of Hawai‘i
University of Hawai‘i at Mānoa
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
OFFICE OF THE CHANCELLOR
ORGANIZATION CHART

CHART I
Grand Total G-Funds Permanent FTE: 248.50
Grand Total G-Funds Temporary FTE: 8.00

ADMINISTRATIVE SERVICES
Org Code: MAASNS
Administrative Officer, PBC, #80155 1.00
Administrative Officer, PBB: #80184, #80400, #80181, #80710
Personnel Officer, PBB, #77177 1.00
Admin & Fiscal Support Spec, PBA: #77275, #79952
1.00 (T)

*Appropriated Temporary Positions

APPROVED:
Virginia Hinshaw, Chancellor
Date
NO CHANGE

STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

OFFICE OF THE DEAN – Org Code: MADNNS

The Office of the Dean of the College of Natural Sciences provides leadership and overall vision for the college and coordinates all of its activities including, curricular, personnel and budget affairs of the College and its ancillary support components including budget management, staff supervision, community relations, grievance and litigation and travel.

The Dean reports to the Office of the Vice Chancellor for Academic Affairs, University of Hawai'i at Mānoa, and functions with the authority delegated by the President and Vice Presidents.

Manage the personnel, budgeting and planning functions.

Initiates and oversees curriculum development and reform, program review, and workload activities.

Manage the development of College research related programs.

Serve on intra-university committees.

Serve as chair of the Council of Arts and Sciences Deans on a rotating basis.

Manage community relations and development including fundraising, representing the College at professional meetings, and meeting with alumni groups.

ACADEMIC AFFAIRS – Org Code: MAAANS

Coordinates major curricular policy activities on behalf of the Dean.

Review proposals for adding, deleting, or modifying courses, certificates and degrees.

Initiate college-wide curricular innovations, such as certificate programs, interdisciplinary/multidisciplinary programs, across college and school lines.

Assist in establishing and maintaining inter-college coordination relative to cross-disciplinary core requirements.

ADMINISTRATIVE SERVICES – Org Code: MAASNS

In conjunction with the Dean, manages the budget preparation/execution for the College including developing criteria for departmental budget allocations.

Directs and advises departments in all matters related to personnel.

Provide guidance on labor-relations issues.

Supervise the purchasing activities of the College.

Provide financial management for all College funds.
PROPOSED FUNCTIONAL STATEMENTS

STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

DEPARTMENT OF BIOLOGY – Org Code: MABIOL

The biology of Hawai'i is extraordinary, and offers unique opportunities for research, teaching and graduate education. The Department of Biology is the academic home for students who wish to pursue broad training in the biological sciences. Many members of the graduate faculty of the Department of Biology are affiliated with other units, both within and outside the University, such as the Hawai'i Institute of Marine Biology, the Pacific Biosciences Research Center, the Kewalo Marine Laboratory, the Békésy Laboratory of Neurobiology, the Center for Conservation Research and Training, the Bishop Museum, and the Hakalau Forest Biological Field Station. The department offers a BA degree and a BS degree with various specializations including cell and molecular biology, ecology/evolution/conservation biology, marine/aquatic biology, and organismic biology, a BS degree in marine biology, and a minor in biology. The Department of Biology offers MS and PhD degrees in zoology.

The research focus of the faculty of the Department of Biology is in Hawai'i's unique natural resources, especially its endemic and indigenous marine and terrestrial animals and their habitats.

Hawai'i Cooperative Fishery Research Unit – Org Code: MACFZO

Established in 1966 the Hawai'i Cooperative Fishery Research Unit is a collaboration between the University of Hawai'i; the Department of Land and Natural Resources; and the U.S. Department of the Interior, U.S. Fish & Wildlife Service. The objective of the cooperative undertaking is for the advancement, pursuit, and application of research, management, education, extension, and demonstration programs concerned with sport fisheries.

Marine Option Program – Org Code: MAMOP

The Marine Option Program offers undergraduates of all majors throughout the University system, the opportunity to discover and develop their marine and marine-related interests and talents. The program is responsible for the development and management of one certificate-granting program offered at all UH campuses, including the Community Colleges, for those students who elect to complete selected academic seminars, symposia, field trips, workshops, baseline surveys and other hand-on experiences designed to promote marine education and training.

APPROVED/DISAPPROVED:

[Signature]

Virginia S. Hinshaw
Chancellor

Date: 5-24-11
### No Change

#### State of Hawai'i
University of Hawai'i
University of Hawai'i at Mānoa
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
DEPARTMENT OF BOTANY
POSITION ORGANIZATION CHART

#### Chart II-B

<table>
<thead>
<tr>
<th>Department of Botany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Org Code: MABOT</td>
</tr>
</tbody>
</table>

Chair (Appointed from Faculty Positions)
- Secretary II, SR-14, #50090: 1.00
- Office Assistant III, SR-08, #17564: 1.00
- Administrative Officer, PBA, #80950: 1.00

Instructional Faculty:
- L82301, #82411, #82552, #82674, #82735, #83297, #83344, #83598, #83691, #83755, #83963, #84169, #84189, #84576, #85019, #85414, #85790, #86159: 18.00

Graduate Assistants:
- #88063, #88173, #88177, #88351, #88479, #88480, #88523, #88530, #88628: 4.50

General Fund FTE: 25.50
NO CHANGE

STATE OF HAWAI'II
UNIVERSITY OF HAWAI'II AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

DEPARTMENT OF BOTANY – Org Code: MABOT

The UH Mānoa has the only botany department located in a tropical environment in the U.S. Both aquatic and terrestrial tropical ecosystems provide the subjects of research and teaching. The department is committed to broad-based botanical training that focuses on developing an understanding of Hawai'i's unique island environment. While it maintains traditional areas of botanical study, the department also uses new approaches and current technologies. It has faculty in anatomy, ecology, systematics, ethnobotany, physiology, and population and evolutionary biology. Participation in the interdepartmental undergraduate biology program and the graduate program in ecology, evolution and conservation biology provides interactions with other departments and expands opportunities for breadth in research and instruction. The department offers BA, BS, and minor degrees in botany, a BS degree in ethnobotany; and MS and PhD degrees in botany.

Research programs focus on ecology, evolution and conservation of Hawai'i's ecosystem and unique endemic flora; the ecology and physiology of marine macroalgae; ethnobotany; invasion biology by alien weeds; and the uses of plants by humans.
OFFICE OF THE DEAN

DEPARTMENT OF CHEMISTRY
Org Code: MACHCH

Chair (Appointed from Faculty Positions)
Secretary II, SR-14, #13484 1.00
Clerk-Stenographer II, SR09, #14356 1.00
Admin & Fiscal Support Spec, PBA, #78992 1.00

Support Activities
Org Code: MASACH

Associate Chair (Appointed from Faculty Positions)

Storeroom Services
Educational Specialist, PBB, #80086 1.00
Chemical Stores Clerk, SR-09: #13930, #45199 2.00

Instrument/Computer Services
Supervision Temporarily Provided by #80362
Electronics Engineer, PBB, #80722 1.00
Electronics Technician, PBB, #80747 1.00

Analytical Services
Research Support Staff, PBC, #80362 1.00
Research Support Staff, PBB, #80892 1.00
Research Associate, PBB, #80121 1.00

Glassblowing Services

Instructional Activities
Org Code: MACHEM

Instructional Faculty:
#82051, #82217, #82455, #82618, #82624, #82749, #83065, #83430, #83592, #84078,
#84116, #84190, #84305, #84641, #84737, #84852, #84860, #86062

Graduate Assistants:
#85020, #85021, #85023, #85049, #85091,
#85158, #86523, #88022, #88041, #88106,
#88116, #88183, #88220, #88234, #88274,
#88316, #88330, #88356, #88419, #88459,
#88468, #88471, #88496, #88497, #88520,
#88554, #88567, #88570, #88580, #88590

General Fund FTE: 44.00
NO CHANGE

STATE OF HAWAII
UNIVERSITY OF HAWAII AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

DEPARTMENT OF CHEMISTRY – Org Code: MACHCH

Chemistry stands at the crossroads between physics and biology. As biological processes are examined in ever finer detail, chemistry is increasingly called upon to provide the insights, techniques, and materials needed to understand the workings of living organisms, including ourselves.

Support Activities – Org Code: MASACH

Associate Chair
The Associate Chair of the Department of Chemistry manages the support activities of the department which include storeroom services; instrument/computer services; and analytical services.

Storeroom Services
The Department of Chemistry is home to two well-supplied stockrooms, containing an array of materials necessary for undergraduate instructional courses and graduate research for the entire University of Hawai‘i community.

Instrument/Computer Services
The Department of Chemistry also provides design and construction services of analog and digital devices not available commercially. Instrument/Computer Services provide repair and maintenance of departmental instruments in the fields of Gas Chromatography, UV-visible, Infrared and Atomic Absorption Spectroscopy, X-ray diffraction, etc. Support services include the instrument shop, the machine shop and the electronics shop.

Analytical Services
The Department has a strong commitment to maintaining state-of-the-art instrumentation. Instrumentation includes Nuclear Magnetic Resonance spectrometers and Mass Spectrometry. These facilities are regularly used by members of the Department of Chemistry, in addition to other research units within the University of Hawai‘i system and across the United States.

Glassblowing Services
The Chemistry Department provides glassblowing services for the entire University system including repair, design, modification and fabrication of glass apparatus not commercially available.

Instructional Activities – Org Code: MACHEM

The department offers a BA, BS and minor degrees in chemistry and MS and PhD degrees in chemistry.

The faculty of the Department of Chemistry has research interests in bioinorganic, organic, inorganic, physical, and analytical chemistry. The graduate faculty participates in a number of collaborative efforts with colleagues at the Cancer Research Center of Hawai‘i, the Hawai‘i Natural Energy Institute, the Cell and Molecular Biology Program, the NASA Astrobiology Institute, and the W.M. Keck Astrochemistry Laboratory.
**OFFICE OF THE DEAN**

### DEPARTMENT OF INFORMATION AND COMPUTER SCIENCES

Org Code: MAICS

<table>
<thead>
<tr>
<th>Position</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair (Appointed from Faculty Positions)</td>
<td>1.00</td>
</tr>
<tr>
<td>Secretary II, SR-14, #18055</td>
<td>1.00</td>
</tr>
<tr>
<td>Network Specialist, PBA, #81194</td>
<td>1.00</td>
</tr>
<tr>
<td>Computer Specialist, PBB, #79024</td>
<td>1.00</td>
</tr>
<tr>
<td>System Programmer, PBB, #61447</td>
<td>1.00</td>
</tr>
<tr>
<td>Admin &amp; Fiscal Support Specialist, PBA, #61985</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Instructional Faculty:**

<table>
<thead>
<tr>
<th>Faculty</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>#82070, #82120, #82257, #82446, #82468, #82626, #82649, #82737, #82787, #82794, #82835, #83074, #83083, #83203, #83381, #83393, #83408, #83443, #83602, #83657, #83889, #83916, #83999, #84029, #84270, #84282, #84427, #87503, #87504, #88680, #89561T (0.50)</td>
<td>30.00</td>
</tr>
</tbody>
</table>

**Graduate Assistants:**

<table>
<thead>
<tr>
<th>Faculty</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>#85650, #86422, #86464, #86465, #86466, #86467, #87556, #87557, #87558, #89563</td>
<td>5.00</td>
</tr>
</tbody>
</table>

*Appropriated Temporary Position*
NO CHANGE

STATE OF HAWAIʻI
UNIVERSITY OF HAWAIʻI AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

DEPARTMENT OF INFORMATION AND COMPUTER SCIENCES – Org Code: MAICS

Information and Computer Sciences is the study of the description and representation of information and the theory, design, analysis, implementation, and application of algorithmic processes that transform information. The curriculum covers all major areas of computer science with special emphasis on software engineering, computer networks, artificial intelligence, human-computer interaction and bioinformatics. Information and Computer Sciences offers BA, BS, and minor degrees in information and computer science, MS in computer sciences, MLISc in library and information science, PhD in computer science, and PhD in communication and information sciences (interdisciplinary).

Information and Computer Sciences faculty members have research interests in algorithms; artificial intelligence and robotics; biomedical informatics and bioinformatics; collaborative systems; compilers; computer vision; databases; human computer interaction; library and information science; machine learning; mobile and ubiquitous computing; security and information assurance; software engineering; and systems, networking, and high-performance computing.
NO CHANGE

State of Hawai'i
University of Hawai'i
University of Hawai'i at Mānoa
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
DEPARTMENT OF MATHEMATICS
POSITION ORGANIZATION CHART

CHART II-E

General Fund FTE: 37.00
General Fund FTE: 1.00 (Auth Temp)

<table>
<thead>
<tr>
<th>DEPARTMENT OF MATHEMATICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Org Code: MAMATH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair (Appointed from Faculty Positions)</td>
<td>1.00</td>
</tr>
<tr>
<td>Secretary II, SR-14, #12467</td>
<td></td>
</tr>
<tr>
<td>Clerk Stenographer III, SR-11: #14365, #21976</td>
<td>2.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructional Faculty:</th>
<th>29.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>#82036, #82177, #82202, #82254, #62458, #82473, #8266, #82738, #82942, #82943, #82993, #83200, #83285, #83332, #83426, #83478, #83709, #83781, #85964, #84092, #84178, #84183, #84503, #84508, #84513, #84515, #84556, #84645, #84657</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Assistants:</th>
<th>5.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>#85024, #88013, #88073, #88111, #88142, #88148, #88253, #88426, #88611, #88672, #701961*, #838557*</td>
<td>1.00 (T)</td>
</tr>
</tbody>
</table>

*Appropriated Temporary Positions
NO CHANGE

STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

DEPARTMENT OF MATHEMATICS – Org Code: MAMATH

The Department of Mathematics offers preparation in the full spectrum of mathematical sciences, including algebra, geometry, differential equations, real and complex analysis, topology, logic, number theory, and probability and statistics, as well as various topics in applied mathematics. The math department offers BS, BA and minor degrees in mathematics, and MA and PhD degrees in mathematics.

Faculty of the Department of Mathematics has research interests in algebra & number theory; analysis; applied mathematics; geometry & topology; and logic, lattices & universal algebra.
**PROPOSED ORGANIZATIONAL CHART**

State of Hawai‘i  
University of Hawai‘i  
University of Hawai‘i at Mānoa  
COLLEGES OF ARTS AND SCIENCES  
COLLEGE OF NATURAL SCIENCES  
DEPARTMENT OF MICROBIOLOGY  
POSITION ORGANIZATION CHART  

**CHART II-F**

**OFFICE OF THE DEAN**

**DEPARTMENT OF MICROBIOLOGY**  
Org Code: MAMICR

Chair (Appointed from Faculty Positions)  
Secretary II, SR-14, #13979  
1.00  
Office Assistant III, SR-08, #51337  
1.00  
Educational Specialist, PBB, #80521  
1.00  
Educational Specialist, PBA: 
#80296, #78359  
2.00  
Admin & Fiscal Support Spec, PBA, #78993  
1.00  

Instructional Faculty:  
#82007, #82157, #82208, #82837,  
#82855, #82921, #83438, #84037  
8.00  

Graduate Assistants:  
#85040, #88034, #88097, #88159,  
#88226, #88256, #88271, #88273,  
#88278, #88311  
5.00

General Fund FTE: 19.00

**APPROVED:**  
[Signature]  
Virginia Hinshaw, Chancellor  
[Date]
NO CHANGE

STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

DEPARTMENT OF MICROBIOLOGY – Org Code: MAMICR

Microbiology, one of three basic fields in the biological sciences, is an extremely diverse and complex field. It is essential to the fabric of medicine, the allied health sciences, agriculture, ocean sciences, and the vital growing biotechnology industry (genetics, cell and molecular biology, etc.) of the present era. The Department of Microbiology has concentrated on highly essential areas vital to the State of Hawai'i such as general and applied microbiology (including biotechnology), microbial genetics, microbial physiology (molecular biology), medical microbiology, microbial ecology, and bioremediation, food microbiology, immunology, animal virology (includes marine animal virology) and cell biology. The Department of Microbiology offers BS, BA, and minor degrees in microbiology, and MS and PhD degrees in microbiology.

Faculty of the Department of Microbiology have research interests in microbial signal transduction; prokaryotic biology; marine microbiology; medical microbiology; biochemistry, physiology, and genetics of bacterial systems; molecular virology; and invasive bacterial pathogens.
## Department of Physics and Astronomy

Org Code: MAPA

### Chair (Appointed from Faculty Positions)
- Secretary II, SR-14, #12918: 1.00 FTE
- Office Assistant III, SR-08, #14355: 1.00 FTE
- Scientific Instrument Technician, PBB, #80706: 1.00 FTE
- Scientific Instrument Technician, PBB, #80703: 1.00 FTE

### Instructional Faculty:
- #82206, #82314, #82633, #82770, #82875, #83534, #83547, #83790, #63813, #83861, #83910, #83915, #83926, #84235, #84240, #84398, #84494, #84587, #84675, #86615, #84773: 21.00 FTE

### Graduate Assistants:
- #65506, #88055, #88057, #88176, #88198, #88270, #88309, #88385, #88389, #88441, #88478, #88524, #88593, #88650, #70197T*, #83844T*, #83849T*, #84184T*: 7.00 FTE
- #68200, #68209, #68219: 2.00 FTE (T)

*Appropriated Temporary Positions*
NO CHANGE

STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES

FUNCTIONAL STATEMENT

DEPARTMENT OF PHYSICS AND ASTRONOMY – Org Code: MAPA

Physics is the study of matter and energy and how they interact at the most basic levels. Areas include mechanics, optics and lasers, thermodynamics, phenomena, condensed matter, and elementary particles. Physics is widely regarded as the most basic of all the sciences. Astronomy is the branch of science that studies the structure and development of the physical world beyond earth. It includes the study of planets and other objects of the solar system; the sun and stars and their evolution; the interstellar medium; the nature and dynamics of star clusters, galaxies, and clusters of galaxies; and the study of the nature and history of the universe itself - of the physical world taken in its largest extent in space and time. Faculty members in Physics are joined by visiting faculty members from the Institute for Astronomy to present a balanced program of teaching and research. The Department of Physics and Astronomy offers BS, BA, and minor degrees in physics, and MS and PhD degrees in physics as well as MS and PhD degrees in astronomy.

Faculty of the Department of Physics and Astronomy has research interests in elementary particle physics, free-electron laser physics (including application in medical physics), condensed matter physics, particle astrophysics and high energy physics.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Chart No.(s)</th>
<th>Affected Position No.(s)</th>
<th>Classification/Organizational/Functional Change</th>
<th>Basis for Change/Impact on Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I-A &amp; II-H</td>
<td>Department of Zoology (Chart II-H), Secretary II, Office Assistant III, Administrative Officer, Scientific Illustrator Instructional Faculty Graduate Assistants 82015(F), 82167(F), 82243(F), 82290(F), 82424(F), 82434(V), 83079(F), 83141(F), 83232(V), 83348(F), 84144(F), 84162(F), 84248(F), 84378(F), 84473(F), 88135(V), 88993(V), 85031(F), 80006(V), 80081(F), 80109(F), 80275(F), 85321(V), 85337(F), 88387(F), 88442(F), 88447(F), 842497(F)</td>
<td>Department of Biology (Chart II-A), Secretary II, Office Assistant III, Administrative Officer, Admin &amp; Fiscal Support Spec Instructional Faculty Graduate Assistants</td>
<td>Consolidate unit and function with Department of Biology. No change in reporting structure.</td>
</tr>
<tr>
<td>2</td>
<td>II-F &amp; II-H</td>
<td>51337(F)</td>
<td>Department of Zoology, Hawaii Cooperative Fisheries Research Unit (Chart II-H), Graduate Assistants</td>
<td>Department of Microbiology (Chart II-F) Graduate Assistants</td>
</tr>
<tr>
<td>3</td>
<td>II-H</td>
<td></td>
<td>Move unit and function of Marine Option Program to be a direct report to the Chair of the Department of Biology.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I &amp; II-I</td>
<td>53576(F)</td>
<td>Marine Option Program (Chart II-H)</td>
<td>Academic Affairs (Chart I)</td>
</tr>
</tbody>
</table>
COPIES OF
LETTERS AND RESPONSES
FROM SEC AND UNIONS
Thanks Ann. Have forwarded and will let you know if CAB believes they need more time.

Susan K. Hippensteele, Ph.D., J.D.
Chair, Manoa Faculty Senate
University of Hawai‘i at Manoa
2500 Campus Road, Hawaii Hall 208
Honolulu, HI 96822
808.956.7725 ph.
808.956.9813 fax
http://www.hawaii.edu/uhmfs/index.htm

Women's Studies Program
University of Hawai‘i at Manoa
2424 Maile Way, Saunders 722B
Honolulu Hi 96822
808.956.6928 ph.
808.956.9616 fax
http://www.womenstudies.hawaii.edu

----- Original Message ----- 
From: "Ann N A. Sakuma" <annyang@hawaii.edu>
Date: Wednesday, March 9, 2011 16:34
Subject: Reorganization: College of Natural Sciences
To: "Susan Hippensteele (hippenst@hawaii.edu)" <hippenst@hawaii.edu>
Cc: "teramura@hawaii.edu" <teramura@hawaii.edu>, "sunadaha@hawaii.edu" <sunadaha@hawaii.edu>, Tammy Kuniyoshi <tammyk@hawaii.edu>, Sandy French <sfrench@hawaii.edu>, "Bob Nagao (rnagao@hawaii.edu)" <rnagao@hawaii.edu>, Kathleen Cutshaw <cutshaw@hawaii.edu>, "Reed W. Dasenbrock" <rdasenbr@hawaii.edu>, "Francisco J. Hernandez Contact" <fjh@hawaii.edu>, "Gary K. Ostrander" <gko@hawaii.edu>, Debra Ishii <debrai@hawaii.edu>

> Hi Susan – The internal review on the reorganization proposal for the College of Natural Sciences has been completed and is now posted on the Organizational Charts website for SEC review:
> http://www.manoa.hawaii.edu/ovcafo/neworg_charts/index.html
> Please provide comments to Kelli Sunada at sunadaha@hawaii.edu by April 23, 2011. If additional time is needed, please work with Kelli on a mutually agreeable extension.
> Thank you,
> Ann NA Sakuma
> OVCAFO
> Hawai‘i Hall 307
> Tel: 956-5658
March 14, 2011

J.N. Musto, PhD.
Executive Director
University of Hawai‘i Professional Assembly
1017 Palm Drive
Honolulu, Hawai‘i 96814

Dear Mr. Musto:

The University of Hawai‘i is proposing a reorganization of the College of Natural Sciences at the University of Hawai‘i at Mānoa (UHM) and is requesting your input and comments relative to the proposal as part of the formal consultation process.

As part of the University’s sustainability efforts, we have loaded the proposal and documents onto the UHM website at: http://www.manoa.hawaii.edu/ovcafo/neworg_charts/index.html

Your comments on the proposal would be appreciated no later than April 23, 2011. If we do not hear from you by this date, we will assume there are no comments on the reorganization proposal.

Should you have any questions, please contact me at 956-6027 or sunadaha@hawaii.edu.

Sincerely,

Kelli K. Sunada
Administrative Officer

c: Alan Teramura, Interim Dean, College of Natural Sciences
   Mike Peters, Interim Associate Dean, College of Natural Sciences
   Henry Miyoshi, Director, Manoa Human Resources
   Chris Womersley, Department Chair, Department of Zoology

No response received.
March 14, 2011

Randy Perreira
Executive Director
Hawaii Government Employees Association
888 Millili Street, Suite 601
Honolulu, Hawaii 96813-2991

Dear Mr. Perreira:

The University of Hawaii is proposing a reorganization of the College of Natural Sciences at the University of Hawaii at Manoa (UHM) and is requesting your input and comments relative to the proposal as part of the formal consultation process.

As part of the University's sustainability efforts, we have loaded the proposal and documents onto the UHM website at:
http://www.manoa.hawaii.edu/ovcafo/neworgCharts/index.html

Your comments on the proposal would be appreciated no later than April 23, 2011. If we do not hear from you by this date, we will assume there are no comments on the reorganization proposal.

Should you have any questions, please contact me at 956-6027 or sunadaha@hawaii.edu.

Sincerely,

Kelli K. Sunada
Administrative Officer

c: Alan Teramura, Interim Dean, College of Natural Sciences
   Mike Peters, Interim Associate Dean, College of Natural Sciences
   Mammy Kuniyoshi, Director, Manoa Human Resources
   Chris Womersley, Department Chair, Department of Zoology

No response received.