

**STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
OFFICE OF THE DEAN**

DEAN OF THE COLLEGE OF NATURAL SCIENCES

The Office of the Dean of the College of Natural Sciences directs and coordinates the activities, 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 Chancellor, University of Hawai'i at Mānoa and functions with the authority delegated by the President and Vice Presidents.

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

The Biology Program serves as an interdisciplinary program (participated by the Departments of Botany, Microbiology and Zoology) for students preparing for professional degrees in the biological sciences. It offers three basic core courses for its students and additional enrichment or special courses of an interdisciplinary nature. Advising of students for both the BA and BS degrees in Biology is carried out through the program.

DIRECTOR

Directs activities, curricula, and personnel in the Biology Program.

Coordinates instructional activities, e.g., supervises and follows the progress of Graduate Teaching Assistants in the biology teaching labs.

Prepares Program's budget requests and produces program review and evaluation information.

Reviews and makes recommendations in regard to all personnel actions involving members of the Program. (Note: The Director approaches the Departments of Botany, Microbiology and Zoology for faculty to be released on a part-time basis for teaching in the Biology Program).

Coordinates the efforts of the Biology Program Curriculum Committee by acting as liaison with the Dean of the College of Arts & Sciences regarding curriculum and policy matters of the Program.

Serves as liaison with the Honors Program to coordinate teaching personnel for Honors courses or for "A" sections, and advising of Biology Honors students particularly for Honors theses and directed research.

INSTRUCTIONAL STAFF

Provides instruction in biology courses and laboratories.

Assist in developing direction and policy for courses.

Advise students and prepare graduation evaluations for graduating majors.

CIVIL SERVICE AND APT PERSONNEL

Provide secretarial support to the Director and instructional staff.

Provides administrative and secretarial support to the Director for personnel and fiscal functions.

Procure and maintain laboratory supplies and equipment.

Set up and prepare materials for student laboratories.

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

CHAIR

Directs activities, curricula and personnel in the Department of Botany, coordinates efforts with Chairs of the Graduate Field of Botanical Sciences (Botany) and the interdisciplinary Ecology, Evolution and Conservation Biology (EECB) program. The Department of Botany cooperates with other departments in the undergraduate Biology Program and various research projects and provides botanical services necessary to the welfare of the State of Hawai'i. The research programs of the Department concentrate on Hawaiian marine and terrestrial plants, their evolution and ethnobotany, as well as ecosystems of Hawai'i and the tropical Pacific and Asian regions. The Department provides regular Summer Session courses in Botany.

Directs the planning, utilization and maintenance of the Plant Science Facility, which provides instruction, research and plant culture facilities for faculty and students in the Departments of Botany, Horticulture, Plant Pathology and Plant Molecular Physiology.

Provides the administrative link between the Botany faculty and the Dean of Natural Sciences and the Botanical Sciences graduate faculty, the EECB and Marine Biology graduate faculty, and the Dean of the Graduate Division.

Prepares budget requests, appoints faculty, appoints graduate teaching assistants, handles promotion, tenure, contract renewal and related personnel matters.

Assigns teaching duties and class scheduling and other Departmental coordination.

INSTRUCTIONAL STAFF

Provides instruction, conducts research and undertakes service to the Department, the University and the State of Hawai'i.

In cooperation with the faculties of Microbiology and Zoology, conducts the Biology Program, the EECB and Marine Biology graduate programs, and the graduate field of Botanical Sciences (Botany).

Manages research grants from NSF, ONR, USDA, Sea Grant (NOAA), National Park Service, United States Geological Service, the State, and private foundations.

Directs interdepartmental research programs: National Park Service Cooperative Resource Studies Unit.

APT PERSONNEL

Provides administrative, business and fiscal services to departmental programs.

CIVIL SERVICE PERSONNEL

Plans, organizes, coordinates, and facilitates total operation of the department office; acts as trusted personal assistant to the chair; is involved in substantial administrative and management functions; provides operational continuity, especially during the absence of the chair or when a change in the chair occurs.

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

OFFICE OF THE CHAIR

Direct activities, curricula and personnel in the Department of Chemistry.

- Coordinate instructional activities; makes teaching assignments; schedule classes.
- Prepare unit's budget requests.
- Review and make recommendations in regard to all personnel actions involving members of the department.
- Make committee assignments; reside at faculty meetings.
- Assign duties to service staff of APT'S.
- Supervise secretarial staff of 3.
- Produce large numbers of memos and reports required to conduct routine operations.
- Teach.
- Conduct research in Chemistry.
- Provide information to other units of the University, State, Federal agencies, and the general public.
- Assign office, laboratory and shop space to all departmental personnel.

INSTRUCTIONAL ACTIVITIES

- Provide instruction at the undergraduate and graduate levels in both lecture and laboratory settings.
- Conduct research and seeks extramural funding for same.
- Supervise graduate student M.S. and Ph.D. laboratory research.
- Advise students with academic problems related to chemistry.
- Provide service to the University community.

PURCHASING

- Audit, prepare, and transmit purchase orders to vendors.
- Assign account codes, object symbols, and transaction codes.
- Maintain and monitors purchase order files.
- Audit invoices and packing slips.
- Process receiving reports.
- Prepare payment documents and journal vouchers.

SECRETARIAL SERVICES

- Assist and relieve Chairman in the performance of his work.
- Inform all department members of pertinent information from Deans, Payroll Office, etc.
- Devise ways of making department office run smoothly.
- Serve as liaison between Chairman and stenographers.
- Establish and maintain departmental files.
- Handle all personnel appointments: faculty, graduate assistants, postdoctoral fellows, etc.
- Handle summer research overload for staff and graduate students.
- Handle late registration.
- Supervise student help.
- Type exams, correspondence, memoranda, proposals, manuscripts and complex technical matter of faculty.
- Receive messages, personal callers, etc. for faculty and staff.
- Sort and distribute mail for entire building.

- Handle book orders for all chemistry courses.
- Maintain room schedules for departmental classrooms and instructional laboratories.

STOREROOM SERVICES

- Procure, stock and dispense standard chemical, supply and equipment items.
- Provide assistance in procurement efforts of departmental personnel.
- Screen request for present availability of stocks.
- Receive and distribute all departmental purchases.
- Monitor usage and maintain records for appropriate revisions of stocks.
- Administer required inventory procedures.
- Process departmental and University service and work requests.
- Operate Instructional and Research stockroom facilities.
- Supervise civil service staff of 2 clerks and student helpers as assigned.
- Assist in maintaining special equipment such as electric furnaces, optical equipment and electronic instruments.
- Prepare qualitative and quantitative chemical solutions.
- Assist faculty and staff in trouble-shooting instructional lab experiments.

ANALYTICAL SERVICES

- Supervise all facets of Nuclear Magnetic Resonance and Mass Spectroscopy.
- Maintain, calibrate, repair and install all NMR Spectrometers in the Chemistry Department.
- Perform system administration on the NMR Workstation Network, including managing accounts, updating software, and programming new utilities.
- Design and construct new accessories for the NMR and Mass spectrometers.
- Keep the NMR and Mass spectrometers current in state-of-the-art techniques as they become available.
- Operate the NMR spectrometer when highly specialized techniques are required to obtain useful data.
- Operate and maintain Mass spectrometer.
- Stock parts, accessories and special supplies and chemicals needed for particular applications.
- Consult with faculty and research personnel on the technical applications.
- Provide spectra and interpretive assistance as required.
- Keep expenditure, usage and maintenance records for cost determination.
- Determine needs, perform overhaul or modification of instruments as required.

INSTRUMENT SERVICES

- Design and supervise construction of analog and digital devices not available commercially.
- Plan and manage the development and evolution of department's computer systems and computer network.
- Design and implement changes to improve the reliability of high failure-rate systems.
- Design and supervise the implementation of program systems to convert departmental computing as new computer technology becomes available.
- Design and implement and chemistry department local area network (LAN) system.
- Train and approve users of departmental computer systems.
- Supervise and coordinate services of the instrument shop, the machine shop, and the electronics shop.
- Responsible for repair and maintenance of departmental instruments in the fields of Gas Chromatography, UV - visible, Infrared and Atomic Absorption Spectroscopy, X-ray diffractometry, etc., as assigned by the Electronics Engineer II.
- Arrange user schedules for department instruments.
- Consult with faculty and research personnel regarding instrument applications.
- Develop specifications and make recommendations on instrument purchases.
- Maintain operating and service literature on instruments and stock spare parts.
- Determine needs for components, accessories and operating supplies.
- Review and judge instrument modification requests.
- Initiate action for outside service if necessary.
- Supervise departmental instrument from facilities and determine appropriate policies.
- Responsible for precision machine shop facilities designed for the needs of the Chemistry Department.
- Provide design and engineering assistance to scientists in the development of precision instruments and tools.
- Fabricate and repair precision tools, components and instruments from sketches, drawings or blueprints.
- Performs all departmental machine shop work.
- Operate and maintain electronic test equipment.
- Construct amplifiers, temperature controls, measuring and recording devices, etc.
- Maintain and repair electronic computers.

GLASSBLOWING SERVICES

- Provide glassblowing services for the entire University system.
- Repair or fabricate apparatus of existing design.
- Assist in design and modification of glass apparatus not commercially available.

**STATE OF HAWAI'I
UNIVERSITY OF HAWAI'I AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
DEPARTMENT OF INFORMATION AND COMPUTER SCIENCES**

CHAIR

Directs activities, curricula and personnel in the Department of Information and Computer Sciences.

- Leads planning for curricula, research, equipment, and space.
- Coordinates faculty recruiting.
- Reviews and makes recommendations for all personnel actions of the department.
- Prepares budget requests and monitors expenditures.
- Prepares class schedules and teaching assignments.
- Serves as spokesperson for the department.
- Involved in fund raising for departmental programs.

INSTRUCTIONAL STAFF

Provide instruction, conduct research, and undertake community services related to computer and library sciences.

- Develop and teach undergraduate and graduate courses.
- Direct independent student projects, reading, and research.
- Conduct research and solicit funding for research.
- Advise and counsel students.
- Supervise graduate students' dissertation research.
- Serve on department, college, and university committees.

CIVIL SERVICE PERSONNEL

Provide secretarial and clerical services for the department.

- Maintain files and records.
- Hire, train, and supervise student clerks.
- Prepare and process personnel forms.
- Prepare and process purchasing forms and maintain an account of all expenditures.
- Process course schedules and assist students with administrative matters.
- Establish and maintain student records, assist in registration and advising routings, administer student evaluations.
- Take inventory of departmental equipment.
- Act as receptionist for the department.

APT PERSONNEL

COMPUTER

Support computer and communication equipment.

- Support operating system and application software.
- Plan and coordinate development and maintenance of hardware and software environments.
- Train student help and lower level staff to support the computer environment.

STUDENT SERVICES

Provides student and alumni services essential to a graduate program.

- Manages inter and intra departmental communications, and communications with alumni.
- Assists graduate chair in administering admissions operations.
- Provides applicant counseling, conducts interviews, and assists in the evaluation of applications.
- Manages scholarship/internship programs.
- Organizes placement workshops, serves as contact for employers and graduating students.
- Determines graduates' eligibility for certification.
- Monitors departmental expenses.
- Serves as a liaison between the department and the alumni and practitioner community to determine continuing education needs.
- Promotes departmental activities to the university and community.
- Gathers data for reports.
- Serves as liaison with other campus units in student services.
- Assists with other special activities related to student services and academic programs.

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

CHAIR

Generally directs, supervises and assists the teaching, research and service functions of the Department.

- Prepares budget requests, supervises and approves expenditures.
- Hires faculty, teaching assistants and lecturers.
- Reviews and makes recommendations in all personnel actions of the Department.
- Directs, supervises and assists in curricular and instructional matters.
- Counsels students and mediates complaints.
- Handles correspondence and (some) paper work of the Department.
- Initiates and enforces assignments and assists in their work.
- Serves as spokesman for the Department.
- Directs and supervises registration.
- Works out teaching schedules and assignments.

The Chairman is assisted by the Associate Chairman, who has responsibilities for all matters involving undergraduate instruction, and the Graduate Chairman, with corresponding responsibilities for graduate instruction.

INSTRUCTIONAL STAFF

Provide instruction, conduct research, advise students, serve on committees, undertake community service usually pertaining to mathematics and science education in schools.

CIVIL SERVICE PERSONNEL

Provide the clerical work supporting the teaching, research, and service functions of the Department.

- Administer expenditures and purchasing.
- Assist in registration.
- Perform scientific typing.
- Maintain files, and do most of the paperwork.
- Hire, train and supervise student helpers.

**STATE OF HAWAI'I
UNIVERSITY OF HAWAII AT MANOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
DEPARTMENT OF MICROBIOLOGY**

CHAIR

- Directs activities, curricula, and personnel in the Department of Microbiology.
- Coordinates instructional activities.
- Prepares unit's budget requests. Approves departmental expenditures.
- Reviews and makes recommendations in regard to all personnel actions involving members of the department.
- Acts as Chairman of the Graduate program.
- Participates in supervisory Biology Program committee.

INSTRUCTIONAL STAFF

- Provides instruction in graduate and undergraduate programs, conducts research in the field of microbiology and undertakes university and/or community service pertaining to either microbiology or higher education.

APT PERSONNEL

- Prepares reagents and media and maintains equipment and laboratories used for instructional services.
- Maintains stockroom.
- Determines ordering for purchase of instructional supplies.

CIVIL SERVICE PERSONNEL

- Provides secretarial, stenographic and clerical services for department, maintains records, correspondence, research proposals and reports to extramural agencies, prepares manuscripts for publication, supervises student help.
- Prepares purchase orders for supplies and equipment, check on delivery, check on receipts of same for department and research grants, prepares bid lists.
- Washes glassware, sterilizes used media, help maintain instructional laboratories.

**STATE OF HAWAII
UNIVERSITY OF HAWAII AT MĀNOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
DEPARTMENT OF PHYSICS AND ASTRONOMY**

CHAIR

Direct activities, curricula, and personnel in the Department of Physics and Astronomy in carrying out its mission of providing undergraduate and graduate education in physics and astronomy, and advancing the state of knowledge in these fields through scholarly research. Coordinates with the chair of graduate astronomy matters relevant to the mutual interaction of the physics and astronomy graduate programs.

- Coordinates instructional activities.
- Prepares unit's budget requests.
- Reviews and makes recommendations in regard to all personnel actions involving members of the department.
- Serves as intermediary between department and college dean.
- Supervises support personnel.

INSTRUCTIONAL STAFF

Provides instruction, conducts research and undertakes community services pertaining to science education.

- Conducts service courses in fundamental physics for majors in science, engineering, and education.
- Provides general education courses in physics and astronomy for non-science majors.
- Operates undergraduate major program in physics.
- Operates graduate programs leading to M.S. and Ph.D. degrees in physics and astronomy.
- Conducts basic research in areas of theoretical and experimental physics, astrophysics, and astronomy.

APT PERSONNEL

Provide technical support to instructional and research activities within the department.

- Maintains and repairs scientific apparatus used in teaching laboratories.
- Fabricates scientific apparatus for research programs.
- Procures supplies for department machine shop.
- Assists instructional staff with audiovisual equipment.

CIVIL SERVICE PERSONNEL

Coordinates, facilitates and provides a variety of administrative services needed to run the department efficiently.

- Maintains detailed and accurate accounting of department budget.
- Procures supplies for instructional staff.
- Handles late registration, section changes and schedule of courses.
- Acts as liaison for Chair with faculty and staff, other department chairs and faculty, Dean's Office, Graduate Division, Business Office, and numerous other offices.

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

CHAIR

As members of the faculty of a university, the individual faculty members of the Department of Zoology have responsibilities in teaching, research, and service in accordance with their own training and experience.

- To teach at both the graduate and undergraduate levels in such a way to give the students factual knowledge, but also to aid them in developing their horizons and their thinking ability. Galileo remarked that "you cannot teach a man anything, you can only help him to find it within himself." Hence, if we are to prepare our students for attempting to answer the problems of tomorrow, we must endeavor to stimulate them to use their minds in such a way that each student attempts to develop his/her critical thought processes in accordance with his/her own uniqueness.
- To conduct scholarly research in any area of interest to the faculty member and to convey the findings of that research to others by means of publication and other means of communication.
- To serve the University, the State, and the Nation in those ways made possible because of the faculty member's training, experience, and interests.

The Zoology Department administers a satellite unit (Hawai'i Cooperative Fishery Research Unit) in Edmondson Hall.

APT PERSONNEL

Provide general administrative and technical support to the department.

- Maintain budgetary and accounting control and perform purchasing functions in accordance with established University policies and procedures.
- Prepare and maintain property inventory records and arrange for the replacement or disposal of obsolete equipment.
- Arrange for the repair of equipment.
- Perform a variety of other duties including overseeing the copier machine operation, acquisition of student help, preparing correspondence, service as Safety and Health Officer.
- Prepare technical illustrations and art work for faculty publications and classroom instruction. Illustrations include graphs, charts, maps, detailed drawings of land and marine animals including microscopic work, etc.

CIVIL SERVICE PERSONNEL

Provides secretarial, clerical and typing services to the department chair and the instructional staff; keeps and maintains departmental personnel, graduate, and undergraduate student files; prepares and processes various personnel forms and documents; and performs a variety of related office duties.

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

The Marine Option Program, headed by its Director, who reports to the Dean of the College of Natural Sciences, offers undergraduates of all majors throughout the University system, the opportunity to discover and develop their marine and marine-related interests and talents. The Office 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. Academic and career guidance is provided to current and prospective students.

STATE OF HAWAII
UNIVERSITY OF HAWAII AT MANOA
COLLEGES OF ARTS AND SCIENCES
COLLEGE OF NATURAL SCIENCES
LYON ARBORETUM

The Lyon Arboretum is under the leadership of the Director who reports to the Dean of the College of Natural Sciences. The Arboretum serves to facilitate both research and instruction in the restoration of Hawaiian ecosystems, ethnobotany, conservation biology, and evolution. In pursuing these activities it provides a needed resource for faculty and students both from departments in the College of Natural Sciences and from the University as a whole. Through tours, workshops and special classes, the Arboretum provides service activities for groups of students and teachers in K-12, to tourists, and to the community at large.