

Department of Oceanography

**GRADUATE STUDENT
HANDBOOK**

2017 – 2018

University of Hawaii
School of Ocean and Earth Science and Technology

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INTRODUCTION

This handbook sets forth the basic policies, requirements and procedures for graduate students pursuing degrees in oceanography. You should read this very carefully so that you are clear about your responsibilities as a student and the responsibilities of the program to you. If you have any questions about any of the information presented herein, please ask the Department Chair or the Student Services Specialist. The earlier you clarify any matter of concern to you, the less likely it will create any problems for you later. We wish you great success in pursuing your educational goals and hope that this handbook provides you with a useful tool in meeting those goals.

PROGRAM OVERVIEW

The Department of Oceanography is located on the University's largest campus (about 20,000 students), overlooking Waikiki and downtown Honolulu, the State Capitol and business and cultural center of Hawaii. As a designated "area of excellence", the marine and earth sciences enjoy strong support at the State and University levels. This has led to rapid expansion of faculty, facilities, and programs over the past several years, and the establishment of the School of Ocean and Earth Science and Technology (SOEST) in 1988. SOEST integrates the Departments of Oceanography, Geology and Geophysics, Atmospheric Sciences, and Ocean and Resource Engineering, the Hawaii Institute of Geophysics and Planetology, the Hawaii Institute of Marine Biology, the Hawaii Natural Energy Institute, the Sea Grant and Space Grant College Programs, the Hawaii Undersea Research Laboratory, and the Joint Institute of Marine and Atmospheric Research. With a combined faculty and staff of almost 700, SOEST is a leading institution of multidisciplinary research and education on the ocean, earth, and atmosphere.

Including Cooperating and Affiliate members, approximately 50 Graduate Faculty teach and/or advise graduate students in the Oceanography field of study. The collective research expertise and programs of the faculty provide a diversity of potential projects and employment opportunities for students. Departmental Faculty are organized into three Divisions which coordinate educational and research programs for sub-disciplines, maintain shared equipment, and provide secretarial and other services (e.g., student access to computers and workstations) through division offices. Na Kama Kai is the Oceanography Department graduate student organization that serves both an academic and social function and formally represents the interests of students to the faculty.

FACILITIES

SOEST operates three ocean-going research vessels, the R/Vs Kilo Moana, the Ka'imikai-o-Kanaloa and Klaus Wyrski from its marine operations center in Honolulu Harbor. Smaller nearshore vessels are operated by the Hawaii Institute of Geophysics and Planetology and the Hawaii Institute of Marine Biology. Two three-person research submersibles, the Pisces IV and V (2,000 m), and a remotely operated vehicle (ROV) (6,000 m) are operated under the aegis of HURL (Hawaii Undersea Research Laboratory). The School maintains machine, electronics, and engineering shops, a library, and graphics, publication, photography, and other support facilities.

SOEST has its own 10/100/1000 Mbps network with a gigabit connection to the University of Hawaii campus network. Solaris, Linux, Windows and Mac operating systems are supported on this network. The three buildings of SOEST, Hawaii Institute of Geophysics (HIG), Marine Science Building (MSB), Pacific Ocean Science and Technology (POST), are interconnected with gigabit fibers. Departments maintain classroom/lab facilities for student access. Graphic peripherals include BW & color laser printers and high quality color printers and plotters. MHPCC, Maui High Performance Computing Center, is managed by the University of Hawaii.

Precision instruments include stable isotope and isotope-ratio-monitoring mass spectrometers; a dual-laser analytical flow cytometer; CHN analyzers; gas and high-pressure liquid chromatographs; SEM and STEM electron microscopes with an energy dispersive X-ray fluorescence micro-elemental analyzer; an electron microprobe; a plasma/atomic emission spectrometer; atomic absorption system with graphite atomizer; liquid scintillation counters, spectrometers, and nutrient autoanalyzers. In addition to instruments in individual faculty labs, the SOEST Laboratory for Analytical Biogeochemistry (S-LAB, <http://www.soest.hawaii.edu/S-LAB/index.htm>), housed within the Marine Science Building, has state-of-the-art equipment for analyzing an array of biogeochemically important analytes from environmental samples.

RESEARCH DIVISIONS

Biological Oceanography

The Division of Biological Oceanography offers a broad range of exciting research opportunities in diverse marine habitats and ecosystems around the globe, from tropical to polar oceans and from the air-sea interface to the deep-ocean floor. Upper water-column programs include studies of primary productivity and bio-optics, color satellite imagery, plant pigments as tracers of biogeochemical processes, microbial food-web interactions, phytoplankton and zooplankton community structure, and the roles of biota in vertical transport and remineralization of particulate and dissolved organic matter. Mid-water column studies focus on the community ecology and dynamics of meso-pelagic shrimp, squid and small fishes unique to oceanic island systems. Benthic research programs involve coral reef ecology and evolution, effects of environmental disturbances on deep-sea community dynamics and recruitment, chemical cycling, burial, and bioturbation in the sediments, and the microbial ecology of tube-building animals and hydrothermal vent systems. Both water-column and benthic investigators are actively involved in high-profile Global Change programs in the Pacific - including coastal margin, open ocean, and equatorial upwelling studies.

Divisional programs emphasize basic research, but many are relevant to applied problems and societal concerns such as the fate of "green-house" gases, ecological impacts of ozone depletion and deep-sea mining, mechanisms of pollutant transport and cycling, and fisheries recruitment. The interdisciplinary nature of these and other problems fosters strong collaborative interactions between Division biologists and geochemists and physicists in the Department and at other institutions.

Marine Geology and Geochemistry

The members of the Marine Geology and Geochemistry Division have research programs ranging from field studies of deep-sea processes to theoretical analyses of elemental distributions in the universe. A major theme underlying much of the research concerns past and postulated

future changes in the global environment, and the effects of these changes on the planet Earth as an integrated geophysical system. Much of the research addresses processes at the boundaries of the major plates that comprise the Earth's crust; these studies include analysis of trace metal distributions, mineral formation and diagenesis, circulation and reaction of hydrothermal fluids, and geomicrobiology. Open ocean studies include research on the use of geochemical tracers of oceanic circulation and chemical reactions in the sea, the formation of ferromanganese deposits on the sea floor, and isotopic and organic geochemistry. Nearshore research programs involve biogeochemical cycling, especially in coral reefs and estuaries, and human effects on this cycling. Atmospheric studies include the analysis of gas and aerosol distributions, and the effect of these materials on the Earth's radiation budget. All of these studies combine field measurements with laboratory experimentation and conceptual modeling.

Physical Oceanography

The faculty and staff of the Physical Oceanography Division are dedicated to providing quality graduate education and are involved in leading edge research in physical oceanography and on the physical impact of the oceans on the atmosphere. The Division's graduates have gone on to successful careers in academia, government and industry.

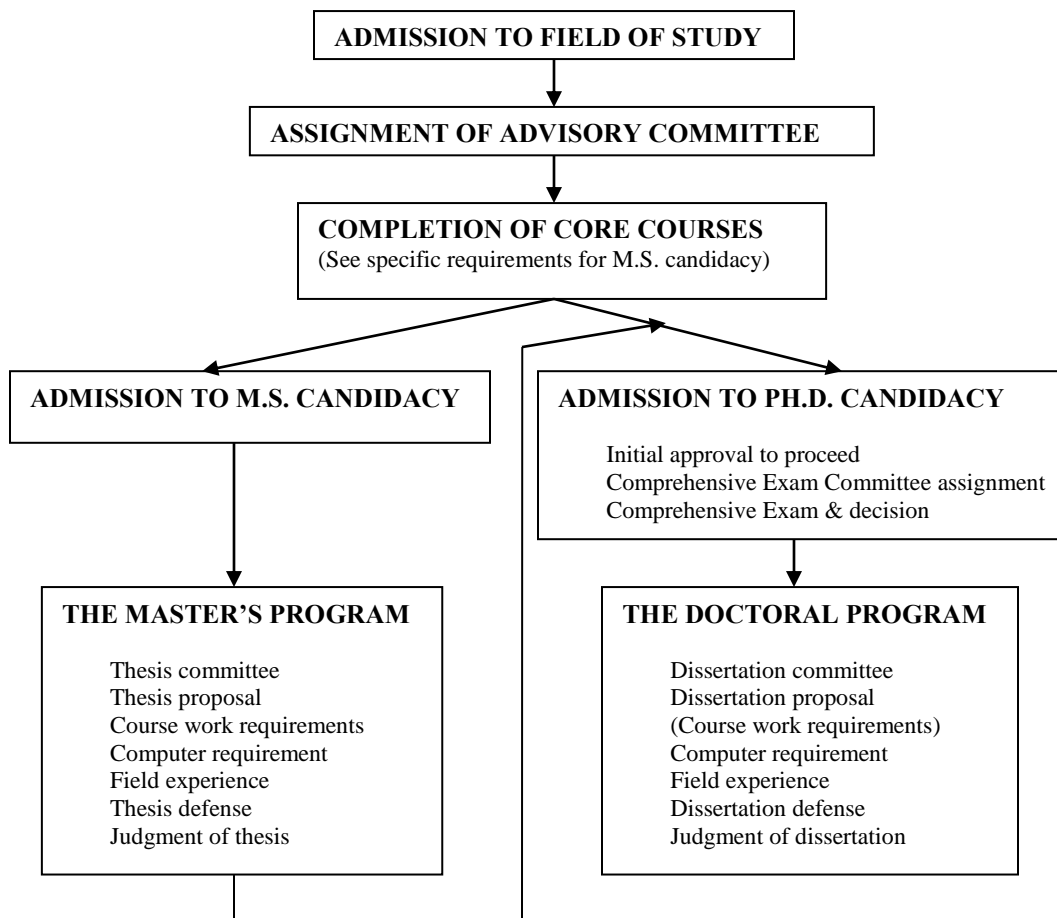
The Division's members include internationally recognized leaders in physical oceanographic research. Specific research interests of the faculty and their students include: oceanic turbulence, mixing processes, waves in the ocean, coastal ocean dynamics, oceanography of Hawaiian waters, biological-physical interactions in the oceans, mesoscale structures, water-type formation, dynamics of the ocean's surface layer, satellite remote sensing, ocean-atmosphere interaction, paleoceanography, ocean predictability, ecosystem modeling, equatorial circulation, general ocean circulation variability and dynamics, climate dynamics, as well as the technological development of instruments and sensors.

We invite you to learn more about the Physical Oceanography Division and its related projects on our web page: <http://www.soest.hawaii.edu/oceanography/divphy.html>

DEGREE REQUIREMENTS AND PROCEDURES IN OCEANOGRAPHY

Revised Fall 2013

The University of Hawai'i at Manoa's website <<http://manoa.hawaii.edu/graduate/sitemap>> should be consulted for general university regulations and advanced degree requirements. The present document focuses on additional requirements and procedures for the "field of study" of oceanography. Major milestones in the process are outlined in the flow diagram below; details are provided in the sections of the text corresponding to the Roman numerals and letters in this outline. Timelines for expected progress to degree are given in Table 1. **Students are responsible for meeting all fields of study and University requirements and deadlines.**



As long as they are not general university rules, students have the right to request that exceptions be made to field of study rules in unusual situations or under extenuating circumstances. The procedure for such requests is a formal petition to the Oceanography Graduate Faculty. Petitions should be approved by the student's Interim Advisory Committee and submitted to the Department Chair for consideration by the Graduate Faculty. **All exceptions should be documented and a copy placed in the student's file.**

The Oceanography field of study offers master's and doctoral programs in three sub-disciplines – physical oceanography, marine geology and geochemistry, and biological oceanography. The programs are designed to prepare students for challenging careers in academia, industry, and government. Consequently, they are academically demanding, with high standards and expectations.

PROGRAM PREREQUISITES

Applicants to the department must have intensive, rigorous training in one of the basic sciences or engineering. Regardless of major, an applicant must have completed mathematical training including calculus through ordinary differential equations and vector calculus. Students lacking such training are considered to have a deficiency in mathematics and are required to take OCN/GG 312. Entering students who have had such formal training must demonstrate a working knowledge of calculus by taking a mathematics proficiency examination. Students who are judged to have a mathematical deficiency based on their performance on this examination must take OCN/GG 312. An applicant must also have a year each of physics and chemistry. The well-prepared student will have covered classical thermodynamics and will have had a semester each of biology and geology. Graduate students who are required to take UH undergraduate courses to make up for deficiencies in their undergraduate training or math proficiency must earn at least a grade of B- (2.7) in those courses.

INTERIM ADVISORY COMMITTEE

All degrees require independent research as well as basic and specialized courses. Students admitted to the Oceanography field of study will be assigned an Interim Advisory Committee by the Department Chair. The Interim Advisory Committee will initially consist of three oceanography graduate faculty members from at least two of the sub-disciplines of oceanography. When the student is being supported by a research assistantship, the faculty member supporting the student will usually be a member of the initial Interim Advisory Committee, and generally be its chair and the student's interim advisor. Otherwise, the committee will select a chairperson from among its members.

The committee must formally meet with the student as soon as possible after the student arrives, at the end of the student's first semester of residency, and subsequently at least once per semester. It is the student's responsibility to convene these important meetings. The committee will submit a written report following each meeting. These reports will be read and signed by the committee members and the student, circulated among the faculty of the student's sub-discipline, and included in the student's file.

It is a requirement that the students inform their Committee of the courses they intend to take, prior to registering for them. The size of the Interim Advisory Committee may be increased and

its composition changed with the approval of the Department Chair prior to the official formation of the student's M.S. Thesis or Ph.D. Dissertation Committees. When formed, the student's M.S. or Ph.D. Committee will assume all of the responsibilities of the former Interim Advisory Committee.

Admission of Student with Interim Advisor in Another Division

When a student applies to the graduate program in the Department, the decision may be made for the student to be in a division with an advisor outside of the division. The following steps need to be completed during the admission process for this to occur:

1. Approval by the proposed advisor
2. Approval of the student by the division (for admission into division)
3. Approval of the advisor by the division. (The appointment of a co-chair, residing in the division into which the student is applying, is encouraged.)
4. Notification of the department chair

All steps must be in writing, with a copy to the Graduate Student Services Specialist, and undertaken in the order listed above. After the approvals are received, the subsequent notification must occur within one week.

MASTER'S DEGREE PROGRAM

A minimum of 36 semester credit hours, including 24 credits of course work and 6 credits of OCN 699 (Directed Research) and 6 credits of OCN 700 (Thesis Research), demonstrated competence in computer programming, and 30 days of field experience. All requirements for the M.S. degree should usually be completed within three years of admission (Table 1).

Admission to M.S. Candidacy

Depending on the career goals of individual students, attaining the M.S. degree may either be the ultimate objective of their enrollment in the Oceanography Degree Program or part of the normal progression from undergraduate education to the Ph.D. Students who do not enter the Program with an M.S. degree in Oceanography generally earn an M.S. en route to the Ph.D., although this does not preclude pursuing the Ph.D. directly. The prerequisite for admission to M.S. candidacy is successful completion of the core course in the student's specialization and one other core course. Formal admission to M.S. candidacy occurs with the filing of **Form I**. Admission to Ph.D. candidacy is described separately, below.

Selection of Thesis Committee

Assisted by his/her Interim Advisory Committee, the student will select a thesis topic and an appropriate Thesis Committee to replace the Interim Advisory Committee. The Thesis Committee must consist of at least three members of the Graduate Faculty, one of whom may be from outside the field of study in oceanography. **At least 50% of the committee members must be Oceanography Graduate Faculty, exclusive of affiliate and cooperating faculty.** The chairperson of the Thesis Committee will be the student's official advisor. Selection of the Thesis Committee is officially recognized when **Form II** is filed.

Under special circumstances, the Department Chair has the authority to waive the above requirements. Requests for these exceptions need to be submitted at least one semester prior to forming the committee and the filing of Form II.

Approval of Thesis Proposal

The M.S. thesis topic should be a narrowly defined project that demonstrates the student's potential to bring a research idea from concept to completion. The appropriate scope of an M.S. project is approximately that of a refereed journal publication, but the end result does not have to be published to earn the M.S. degree. As part of the mentoring process and to facilitate progress toward the degree, faculty advisors are encouraged to take an early and active role in defining suitable project opportunities.

The M.S. thesis does not require a fully developed research proposal. However, the student must submit an acceptable thesis prospectus to his/her Thesis Committee within one year of admission to the Oceanography Field of Study. The prospectus is to be about three pages of text and should follow the format outlined below. Approval of the thesis topic is official when **Form II** is filed.

Outline of Research Prospectus

- A. TITLE
- B. INTRODUCTION (Problem statement, rationale)
- C. OBJECTIVES/HYPOTHESES (Concisely written list)
- D. APPROACH (Brief overview with references to established methods)
- E. EXPECTED RESULTS (What the research should achieve and its significance)
- F. RESEARCH SCHEDULE (Dates for reaching project and degree milestones)

Course Work Requirements (Credit Hours, Distribution and Grades)

Students must complete all three of the non-biological core courses (OCN 620, OCN 622, and OCN 623). For students in non-biological disciplines, the core sequence is completed by taking OCN 621. Students specializing in Biological Oceanography complete the core sequence by taking OCN 626, OCN 627 and OCN 628 instead of OCN 621.

A student's grades in the core courses must average at least 3.0, using only the higher grade for any repeated course. **All students must receive a grade of C (2.0) or better to receive credit for a core course, but can receive a grade less than B- (2.7) for only one core course.** With the consent of the Advisory Committee, a student may repeat, at most, one core course in which his/her grade was less than B (3.0). A student with an unsatisfactory record in the core courses will be automatically dismissed from the program. Students who have made satisfactory grades in equivalent courses at other accredited institutions may use those credits to fulfill all or part of this core course requirement. See Division Requirements, below, for summaries of each Division's Requirements.

Prior to completion of their graduate degree, students specializing in Biological Oceanography must have satisfactorily completed either an undergraduate or graduate course in statistics. Students specializing in Marine Geology and Geochemistry must take CHEM 351 (if they have not already successfully completed a college-level course in physical chemistry) and receive a

grade of B- (2.7) or better. Students specializing in Marine Geology and Geochemistry must also take at least one, and preferably more, advanced biogeochemistry course.

The M.S. program requires a minimum of 36 credit hours, including 24 credits of course work as defined below, 6 credits of **OCN 699** (Directed Research) and 6 credits of **OCN 700** (Thesis Research). Directed Research (OCN 699) may only be taken on a credit/no credit basis. **Students can register for OCN 700 only after a thesis proposal is approved and Form II is filed.** The 24 semester hours of course work must be in courses numbered 600 or greater, but excluding Ocean 699, Ocean 700, and seminar courses. At least 12 of those semester hours must consist of courses taken from at least three of the groups listed in Table 3. Courses may be added or deleted from these lists upon the recommendation of the Oceanography Curriculum Committee and with the approval of the Oceanography Faculty. Equivalent courses taken at other accredited institutions may be used for Group I-VI courses. The actual transfer of credits requires the approval of the Office of Graduate Education. In most cases, a waiver of the requirements is preferred, as long as some other course is used to meet the minimum credit requirements. Students may request these waivers/substitutions of course requirements using the Request to Substitute/Waive Course(s) form (Table 4).

The Oceanography Department requires that a student's cumulative grade point average (GPA) in the core courses and in Group I - VI courses (including equivalent courses from other accredited institutions) must be at least 3.0 in order to graduate. This requirement is exclusive of those courses taken outside these areas, such as research credits (OCN 699). If the cumulative GPA in the core courses and in Group I-VI courses remains below 3.0 for two consecutive semesters, the student will be dismissed from the program. The Office of Graduate Education requires that a cumulative GPA of 3.0 be maintained for *all* graded courses. Students with a cumulative GPA below 3.0 risk losing their tuition waiver, or may be dismissed from the University.

According to Grad Division rules for incomplete ("I") grades: "I" grade remains on the student's record. May be converted to a letter grade on a case by case basis, **within one full academic year following the end of semester in which the "I" grade was issued.**"

Annual Student Presentations

Graduate students, second-year and beyond, will annually present a public presentation of at least ten minutes covering their thesis/dissertation topic. The purpose of these presentations is to i) facilitate communication and collaboration within each division, ii) allow faculty beyond the advisor to evaluate and provide feedback on each student's progress, and iii) provide an opportunity for the students to define and communicate their research, and to practice speaking to an audience. Presentations will be organized as an annual symposium by each division, and the date(s) will be announced beforehand to allow the greatest number of students and faculty to attend. Faculty will provide feedback to the students following the presentations; the details of this feedback are to be determined by each division.

Students will be exempt from this requirement if they will be defending their thesis/dissertation within a prescribed time frame before/after their division's symposium; this time frame will be set by each division. An exemption will be communicated to the Division Head via a memo from the student's advisor. At the discretion of their advisory committee, a student unable to present at their division's symposium due to extraordinary circumstances may have the

requirement waived for that year, or may be required to give a presentation at an alternative on-campus forum acceptable to the Division Head.

Seminar Requirement

All students must successfully complete a seminar course in oceanography during their residence at the University of Hawai'i. Students may meet the requirement in either of two ways:

Attend a total of fifteen individual seminars. These may be seminars sponsored by oceanography, HIG, HIMB, or any other department, as long as the material is appropriate to the student's oceanographic studies. The student will obtain a log sheet on which to note dates, speakers, and topics of seminars attended. **When the student has attended fifteen seminars, he/she will present the log to his/her advisor for inclusion in his/her file and shall register for 1 credit of Ocean 780 on a CR/NC (credit/no credit) basis.**

Enroll in one of the occasionally offered seminar courses such as Ocean 750, Topics in Biological Oceanography, provided that the main function of the course is to expose the student to current research. Since this type of course is offered irregularly, a student must not count on taking this option unless he/she has determined that an appropriate course will be available during his/her period of residence. Such courses can be taken on a CR/NC basis or for a letter grade. Successful completion of graded courses requires a grade of C (2.0) or better.

Computer Requirement

Students are required to demonstrate, to the satisfaction of the thesis/dissertation committee, competence in the technical use and management of computers. The specific knowledge and skills required are: 1) the ability to manage a personal computer or workstation, 2) a working knowledge of an algorithmic computer language, and 3) the ability to manage datasets.

Field and Ship-Time Requirement

At least 30 days of field experience, **including work aboard a research vessel**, is required. To meet this requirement, the student should document the dates and nature of field work on the form found on the Oceanography website. After completion, this log sheet must be approved and signed by the student's advisor and the department chair, and will be inserted in the student's file.

Final Exam (Thesis Defense)

The Master's degree in Oceanography requires a written thesis (Plan A). Upon completion of the proposed research, each student will submit a thesis draft to his/her Master's Committee. **Students should note that two to three months are often required for review and revision of the thesis. A final oral examination will be scheduled after the draft thesis is accepted by the Committee.** The examination will cover the thesis and related areas. After a period of presentation and questioning open to all students and faculty, the Committee will examine the candidate in private. The acceptability of the thesis defense will then be determined by majority vote of the Committee and officially recognized with the filing of **Form III**.

Judgment of Thesis

The acceptability of the final version of the thesis will be decided by majority vote of the Committee and officially recognized with the signing of the signature page.

Submission of Thesis

Theses are due at the Graduate Records Office by the deadline specified in the Academic Calendar (<http://www.catalog.hawaii.edu/about-uh/calendar.htm>). M.S. students must submit a pdf file of the thesis on a CD with printed copies of the title. The Oceanography Department requires a pdf file of the thesis on a CD, **Form IV** and the original signature page.

Exit Interview

All graduate students will be required to participate in an exit interview with the Student Services Specialist prior to graduation. The Office of Graduate Education's Student Progress **Form III** will be signed by the graduate chair only upon completion of the exit interview. These required interviews are being conducted as part of the University of Hawaii's accreditation with the Western Association of Schools and Colleges (WASC).

DOCTORAL DEGREE PROGRAM

PhD direct vs MS enroute

It is the faculty's experience that research and thesis authorship leading to the M.S. significantly increases a student's scientific maturity and form an important foundation for more advanced independent work. In addition, since work done to satisfy M.S. requirements will also satisfy certain Ph.D. requirements, the average total time to the Ph.D. is not significantly different for students who gain an M.S. *en route* compared to those who do not. Students entering this department without a Master's degree will therefore normally be encouraged by their Interim Advisory Committee (IAC) to work toward the M.S. even when the student's ultimate goal is the Ph.D.

Initial Approval to Proceed

Students working toward a Master's degree in this department who desire to be advanced to Ph.D. candidacy should take no official action until nearing the end of the M.S. program. At that time they must obtain the unanimous written approval of their M.S. Committee on the "Approval to Proceed Toward Ph.D. Candidacy" form before notifying the Graduate Chair¹. Whether or not unanimous approval is given, this form must be signed by the M.S. Committee members and the student no later than at the signing of Form IV, which accompanies submission of the M.S. thesis.

Students who:

- 1) would prefer to work directly toward the Ph.D. without first obtaining a Master's degree,
- 2) have a Master's degree in oceanography from outside the department, or
- 3) are returning for a Ph.D. after reapplying for admission,

¹The department chair currently serves in the role of graduate chair. This person is responsible for all matters pertaining to the graduate program.

must obtain the unanimous written approval of their IAC to enter the Ph.D. track, using the “Approval to Proceed Toward Ph.D. Candidacy” form, before notifying the Graduate Chair. In these cases, the student must first complete all of the core courses (or obtain waivers based on equivalent courses) required by their sub-discipline, and remedy any undergraduate deficiencies by actions agreeable to their IAC.

Pre-Candidacy Progress

Once the student has obtained approval to proceed towards the Ph.D., **Form I (Pre-Candidacy Progress)** needs to be filed with the Office of Graduate Education. This form states that the student has met with their IAC and that any undergraduate deficiencies have been discussed and remedied.

Comprehensive Examination

- A) The purpose of this exam is to: 1) assess the student’s knowledge relating to their research topic, as well as broader knowledge within their sub-discipline and the field of oceanography in general; and 2) test the student’s ability to think independently, critically, and creatively (guided by evaluation of the DRAFT research proposal).
- B) At least 3 months prior to the anticipated exam date, the student, in consultation with their advisor, will request that the Graduate Chair form their Comprehensive Exam Committee (CEC). The Graduate Chair will appoint a five-member CEC, normally chaired by the student’s advisor. In selecting the other CEC members, the Graduate Chair must seek the advice and consent of the CEC chair, who should be aware of (but is not bound by) the student’s preferences. All CEC members must be members of the Oceanography Graduate Faculty, at least four being Regular Graduate Faculty. Three of the five CEC members will be from the student’s sub-discipline, with one each from the other two sub-disciplines.

Students should be aware that they must meet with their Dissertation Committee (see **Dissertation Committee** below) within two months of successful completion of the Comprehensive Exam. It is recommended that there be significant overlap between the Comprehensive Exam and Dissertation Committees.

- C) Scheduling of the Comprehensive Exam.
The timing of the exam will vary depending on the prior history of the student:
- 30 months for students requiring department-mandated coursework.
 - 12 months for students not requiring department-mandated coursework.
- It is the student’s responsibility to schedule the exam and to notify the Graduate Chair of the date. If they have not scheduled it by three months prior to the deadline, the Graduate Chair will appoint the CEC and schedule the exam on behalf of the student. Unless a specific exception is granted by the Graduate Chair, failure to complete the exam by the deadline will result in dismissal of the student from the program.
- D) The student will provide the CEC with a draft dissertation proposal at least one month prior to the exam. This document should be styled as a research proposal, with a clear

statement of hypotheses and objectives, as well as sections that clearly convey 1) the motivation for the study, 2) relevant scientific background, 3) the methods being proposed to conduct the research and analyze the results, 4) any results already obtained, and 5) a timeline for completion of the remainder of the work. The suggested length is 8-10 pages. Proposals may not be longer than 15 pages (including figures and tables, but excluding references). The student should seek guidance from members of the CEC during proposal preparation.

- E) The Comprehensive Exam is verbal, with the option of an additional written component. If the Exam includes a written component, that component must precede the verbal component. Verbal exams are by their nature somewhat flexible in scope and format in order that perceived areas of weakness can be probed, so only general guidelines can be given. The first part of the exam period is usually devoted to the student's presentation of the proposed research (maximum of 30 minutes), and the rest of the time is used for questions from CEC members. Questions should focus on the student's research area, but the focus should be broad rather than narrow, and questions should also probe the student's knowledge of scientific connections between the proposed research and other oceanographic sub-disciplines. Prior to the exam, the student should discuss with members of the CEC their individual opinions about the topics that could arise during the exam. The student must schedule a pre-exam meeting of the CEC to establish the scope, format and scheduling of the exam. The CEC chairperson will summarize this preliminary discussion in a written report to be signed by all members of the committee, and copies will be given to the student and entered in the student's file.
- F) Upon completion of the oral exam, the student will be excused from the room. Prior to any discussion among the committee members about the student's performance, the CEC will conduct an anonymous, non-binding pass/fail vote to assess the initial impressions of each committee member. After discussion, the CEC will take a final vote. Passing the Comprehensive Exam requires the approval of at least four of the five CEC members.
- G) The CEC evaluation will be based upon: 1) the student's performance in the Comprehensive Exam, 2) the draft dissertation proposal, 3) the student's academic record in formal coursework, and 4) the student's record of previous successfully conducted research (e.g., the M.S. thesis, scientific publications, and OCN 699).
- H) There are three possible outcomes for the Comprehensive Exam:
- 1) Pass. This meets one of the criteria for the student to advance to Ph.D. candidacy.
 - 2) Fail, but with the committee's permission to retake the exam. The Comprehensive Exam can be retaken only once. The second attempt to pass the exam must occur within two months of the first exam. The CEC and student may consider adding a written component to the exam for the second attempt, particularly if the oral exam format was considered to play a significant role in the student's poor performance.

Note: The Office of Graduate Education rules allow a student only two attempts to gain admission to Ph.D. candidacy. A second denial results in loss of status as a classified graduate student and dismissal from the program.

- 3) Fail. Students without a prior Master's degree in Oceanography may, at the discretion of the exam committee, transfer to the M.S. program. A student with a prior Master's degree in Oceanography, or one without such a degree, but who is not granted permission to transfer to the M.S. program, will lose their status as a classified graduate student and will be dismissed from the program.
- I) Within one week of the exam, the CEC will prepare a written report, to be signed by all committee members, relating the outcome of the exam and summarizing reasons for the committee's evaluation. This report should be modeled on an NSF panel summary, with the aim of providing the student with valuable, substantive feedback on both the strengths and weaknesses of their performance. Copies will be given to the student and entered into the student's file.
- J) As discussed below, within two months of the successful completion of the Comprehensive Exam, the student must meet with their Dissertation Committee (see **Selection of Dissertation Committee** and **Approval of Dissertation Proposal**, below). The purpose of this meeting is to discuss and refine the student's proposal.

Upon successfully passing the comprehensive exam, **Form IIA (Comprehensive Exam)** should be filed.

Selection of Dissertation Committee

Immediately after successfully passing the comprehensive exam the student must form the dissertation committee. The Ph.D. Dissertation Committee consists of at least five members, one of whom, the "University Representative", must be a member of the Regular Graduate Faculty in a field of study other than Oceanography. **In addition, at least 50% of the committee members must be Oceanography Graduate Faculty, exclusive of affiliate and cooperating faculty.** The chairperson of the Dissertation Committee will be the student's official advisor. Under special circumstances, the Graduate Chair has the authority to waive the above requirements, except the minimum number of members and the requirement for a "University Representative. **Requests for these exceptions need to be submitted immediately after the completion of the comprehensive exam (see paragraph 1 under "Degree Requirements and Procedures in Oceanography" earlier in this document).** Selection of the Dissertation Committee is officially recognized when **Form II** is filed with the Office of Graduate Education. More information regarding the composition of your committee can be found at: <http://manoa.hawaii.edu/graduate/content/committee-composition-potential-members>

Approval of Dissertation Proposal

As part of the Comprehensive Exam, the student will have written a draft dissertation proposal (see **Comprehensive Exam**, above). Within two months of the successful completion of the Comprehensive Exam, the student must meet with their Ph.D. Dissertation Committee to discuss and refine their dissertation proposal, in advance of formal approval of the proposal by the Dissertation Committee. This approval must occur within 4 months after passing the Comprehensive Exam. The student and Dissertation Committee should be aware that the final dissertation may be different in scope from that of the proposal. Advancement to Ph.D. candidacy is complete when **Form II**, which signifies Dissertation Committee approval of the

Dissertation Proposal, is signed by the Graduate Chair and forwarded to the Office of Graduate Education.

Course Work Requirements (Credit Hours, Distribution and Grades)

Same as Master's Degree, except candidates need to be registered in OCN 800 (Dissertation Research) during the semester in which the degree is awarded. They are not subject to the minimum 6 credits of OCN 699 and 6 credits of OCN 700. Directed Research (OCN 699) courses may only be taken on a credit/no-credit basis.

Annual Student Presentations—Same as Master's Degree.

Seminar Requirement—Same as Master's Degree.

Computer Requirement—Same as Master's Degree.

Field and Ship-Time Requirement—Same as Master's Degree.

Final Examination (Dissertation Defense)

Upon completion of the proposed research, a dissertation will be submitted to the Dissertation Committee. **Experience has shown that at least two to three months are usually required for review and revision.** When the Committee is satisfied that acceptable research has been completed and is described well in the dissertation, an oral Final Examination will be scheduled. The examination will be conducted and evaluated in the same manner as the M.S. thesis defense [see **Final Exam (Thesis Defense)**] and officially recognized with the filing of **Forms III**.

Judgment of Dissertation

Once the final version of the dissertation has been submitted, its acceptability will be decided by a majority vote of the Dissertation Committee, and officially recognized with the signing of **Form IV** and the signature page.

Submission of Dissertation

Dissertations are due at the Office of Graduate Education by the deadline specified in the Academic Calendar (<http://www.catalog.hawaii.edu/about-uh/calendar.htm>). Ph.D. students must turn in two copies of a pdf file of the dissertation (on separate CDs) with two printed copies of the title page and **Form IV**. The Oceanography Department requires a pdf file of the dissertation on a CD and the original signature page.

Graduating doctoral students must also pick up a checklist from the Office of Graduate Education, which must be completed before graduation.

Exit Interview

All graduate students will be required to participate in an exit interview with the Student Services Specialist prior to graduation. The Office of Graduate Education's Student Progress **Form III** will be signed by the Graduate Chair only upon completion of the exit interview. These required interviews are being conducted as part of the University of Hawaii's accreditation with the Western Association of Schools and Colleges (WASC).

CHANGING ADVISORS AND/OR DIVISIONS

At some point during a student's academic career, the decision may be made for a student to change advisors and/or departmental divisions.

If the student is changing divisions and changing advisors, then the following steps need to be completed:

1. The student must receive approval from their new advisor.
2. The new advisor must receive approval from a majority of the new division.
3. The student must receive approval from the department chair.
4. The student must notify their old advisor.
5. The student must notify their old division chair.

If the student is changing divisions and keeping their advisor, then the following steps need to be completed:

1. The student must receive approval from their advisor.
2. The student must receive approval from a majority of the new division.
3. The student must receive approval from the department chair.
4. The student must notify their old division chair.

If the student is staying in their division, and changing advisors within the division, then the following steps need to be completed:

1. The student must receive approval from their new advisor.
2. The student must receive approval from the department chair.
3. The student must notify their old advisor.
4. The student must notify the division chair.

If the student is staying in their division, and changing to an advisor outside the division, then the following steps need to be completed:

1. The student must receive approval from their new advisor.
2. The new advisor must receive approval to advise a student in the division, by majority of division.
3. The student must receive approval from the department chair.
4. The student must notify their old advisor.

All approvals and notifications in the above scenarios must be in writing, with copies sent to the departmental Graduate Student Services Specialist, and must be undertaken in the order listed. In addition, subsequent notifications must occur within one week after each approval is received.

TABLE 1. Timelines of acceptable student progress to degree; motivated students can progress more rapidly. ⁺Students failing to schedule their CE by this deadline will have the exam scheduled by the Graduate Chair. [#]Students failing to meet these deadlines will be dismissed from the program. Note that students may petition the Graduate Chair to extend deadlines for extenuating circumstances.

| Month | M.S. | Ph.D. w/o MS en route | Ph.D. w/ previous MS in Oceanography from UH |
|--------------|---|---|--|
| 9 | Advancement to Candidacy (Form I) Select Thesis committee (Form II) | Pre-candidacy progress (Form I) | Pre-candidacy progress (Form I) ⁺ Form CEC and schedule Comprehensive Exam |
| 11 | ---- | ---- | Draft dissertation proposal to CEC |
| 12 | 1 st Annual Student Presentation Approval of Research Prospectus (Form II) | 1 st Annual Student Presentation | [#] Comprehensive Exam 1 st Annual Student Presentation |
| 14 | ---- | ---- | Form and meet with Dissertation Committee |
| 18 | ---- | ---- | [#] Approval of Dissertation proposal (Form II) Advance to Ph.D. candidacy |
| 24 | Complete 2 nd Annual Student Presentation, Field, Seminar & Computer Requirements; complete coursework | Complete 2 nd Annual Student Presentation, Field, Seminar & Computer Requirements; complete coursework | Complete 2 nd Annual Student Presentation |
| 27 | ---- | ⁺ Form CEC and schedule Comprehensive Exam | ---- |
| 29 | ---- | Draft dissertation proposal to CEC | ---- |
| 30 | Final Examination and Approval of Thesis (Form III) | [#] Comprehensive Exam | ---- |
| 32 | | Form and meet with Dissertation Committee | ---- |
| 36 | | 3 rd Annual Student Presentation [#] Approval of Dissertation proposal (Form II) Advance to Ph.D. candidacy | 3 rd Annual Student Presentation |
| 42 | | ---- | Submit First Dissertation Draft |
| 45 | | ---- | Final Examination (Form IIIA) |
| 48 | | 4 th Annual Student Presentation | Complete Dissertation |
| 66 | | Submit First Dissertation Draft | |
| 69 | | Final Examination (Form III) | |
| 72 | | Complete Dissertation | |

Please note: Ph.D. w/o MS en route is also Ph.D. with required coursework. Ph.D. w/ previous MS in Oceanography from UH is also Ph.D. without required coursework.

TABLE 2. Division Requirements

Biological Oceanography

M.S. Requirements

I. Courses

A. Core Courses

| | |
|---------|-----------------------------------|
| OCN 620 | Physical Oceanography |
| OCN 622 | Geological Oceanography |
| OCN 623 | Chemical Oceanography |
| OCN 626 | Marine Microplankton Ecology |
| OCN 627 | Ecology of Pelagic Marine Animals |
| OCN 628 | Benthic Biological Oceanography |

B. Distribution Courses (at least two courses from two different groups other than Group I) – see list of courses in Table 3.

C. Six credits of OCN 699 (Directed Research) and six credits of OCN 700 (Thesis Research).

D. Undergraduate or graduate course in statistics (Statistics Requirement Form).

II. Annual Student Presentations, Seminar, Computer and Field requirement

III. Defense of Thesis

IV. Submission of Thesis

Ph.D Requirements

I. Courses – same as above (except for “C”). No minimum number of OCN 699 credits, however, at least one credit of OCN 800 (Dissertation Research) during the semester in which the degree is awarded.

II. Comprehensive Exam

III. Defense of Dissertation

IV. Submission of Dissertation

Marine Geology and Geochemistry

M.S. Requirements

I. Courses

A. Core Courses

| | |
|---------|-------------------------|
| OCN 620 | Physical Oceanography |
| OCN 621 | Biological Oceanography |
| OCN 622 | Geological Oceanography |
| OCN 623 | Chemical Oceanography |

B. Distribution Courses (at least 12 credit hours of courses taken from at least 3 of the groups – see list of courses in Table 3.

C. Six credits of OCN 699 (Directed Research) and six credits of OCN 700 (Thesis Research).

D. CHEM 351 (unless student has successfully completed a college-level course in physical chemistry) and receive a grade of B- (2.7) or better.

E. At least one, and preferably more, advanced biogeochemistry course.

II. Annual Student Presentations, Seminar, Computer and Field requirement

III. Defense of Thesis

IV. Submission of Thesis

Ph.D Requirements

I. Courses – same as above. (except for “C”). No minimum number of OCN 699 credits, however, at least one credit of OCN 800 (Dissertation Research) during the semester in which the degree is awarded.

II. Comprehensive Exam

III. Defense of Dissertation

IV. Submission of Dissertation

Physical Oceanography

M.S. Requirements

I. Courses

A. Core Courses

- OCN 620 Physical Oceanography
- OCN 621 Biological Oceanography
- OCN 622 Geological Oceanography
- OCN 623 Chemical Oceanography

B. Distribution Courses - at least 12 credit hours of courses taken from at least 3 of the groups in Table 3.

C. Six credits of OCN 699 (Directed Research) and six credits of OCN 700 (Thesis Research).

D. Divisional required courses (can be used to partially satisfy Distribution Course requirements in 'B' above):

- OCN 660 Ocean Waves I
- OCN 662 Marine Hydrodynamics
- GG 600 Equations of Geophysics
- OCN 760 Introduction to Geophysical Fluid Dynamics

II. Annual Student Presentations, Seminar, Computer and Field requirement

III. Defense of Thesis

IV. Submission of Thesis

Ph.D. Requirements

I. Courses – same as for the M. S. degree, except for the following:

A. There is no minimum number of OCN 699 credits, but it is strongly recommended that students register each semester for as many units of OCN 699 as are necessary to achieve the normal graduate student credit load of 9 credit hours per semester, after other courses are taken into account.

B. At least one credit of OCN 800 (Dissertation Research) is required during the semester in which the degree is awarded.

C. It is recommended, but not required, that the student take two electives from any one of the Physical Oceanography Focus Groups listed in Table 2-1 on the following pages.

III. Comprehensive Exam

IV. Defense of Dissertation

V. Submission of Dissertation

**TABLE 2-1. Physical Oceanography Focus Groups
Example Course Lists for Different Paths to the Ph.D.**

(The foci are not exclusive and the course lists are not exhaustive.
Consult with your Advisory Committee.)

Focus 1: Dynamical oceanography (Theoretical/Numerical)

- Focus leaders: Profs. Qiu and Richards
- Electives
 - Advanced Geophysical Fluid Dynamics (OCN 667/668)
 - Numerical Modeling (OCN 760; Timmermann)
 - Ocean Waves II (OCN 661)
 - Atmospheric Dynamics I (ATMO 600)
 - Seminar in current topics (OCN 760; Schneider)
 - Turbulence (OCN 665)
 - Ocean's Role in Climate (OCN666)
 - Data Analysis, Probability & Statistics (OCN 760/ORE 608; Merrifield)
 - Ocean Data Assimilation (OCN 760; Powell)
 - Asymptotic Mathematics (GG 711)

Focus 2: Ocean/Climate Dynamics

- Focus leader: Prof. Timmermann
- Electives
 - Ocean's Role in Climate (OCN666)
 - Data Analysis, Probability & Statistics (OCN 760/ORE 608; Merrifield)
 - Advanced Geophysical Fluid Dynamics (OCN 667/668)
 - Tropical Climate Dynamics and Modeling (ATMO 706)
 - Numerical Modeling (OCN 760; Timmermann)
 - Special Topics in Meteorology: Dynamics for El Nino & Southern Oscillation Phenomenon (ATMO 752)
 - Paleoceanography (OCN 760, Timmermann; or OCN674/GG674)
 - Seminar in current topics (OCN 760; Schneider)
 - Physical Meteorology (ATMO 620)

Focus 3: Observational and Coastal Oceanography

- Focus leaders: Profs. Firing and Merrifield
- Electives
 - Data Analysis, Probability & Statistics (OCN 760/ORE 608; Merrifield)
 - Ocean Data Assimilation (OCN 760; Powell)
 - Water Wave Mechanics (ORE 607)
 - Near-shore Processes and Sediment Transport (ORE 664)
 - Environmental Fluid Dynamics (ORE 641)
 - Numerical Modeling (OCN 760; Timmermann)
 - Geological Data Analysis II (GG 691)
 - Turbulence (OCN 665)
 - Tracers (OCN 760; Richards)
 - Seminar in current topics (OCN 760; Schneider)

- Ocean's Role in Climate (OCN 666)

Focus 4: Physical-biological and physical-biogeochemical interactions

- Focus leaders: Profs. McManus and Powell
- Electives
 - Dynamics of Marine Ecosystems (OCN 680)
 - Introduction to Ecosystem Modeling (OCN 681)
 - Data Analysis, Probability & Statistics (OCN 760/ORE 608; Merrifield)
 - Mathematical Techniques for Oceanographers (OCN 650)
 - Seminar in current topics (OCN 760; Schneider)
 - Turbulence (OCN 665)
 - Environmental Fluid Dynamics (ORE 641)
 - Advanced Statistical Methods in the Geosciences (ATMO 632)
 - Tracers (OCN 760; Richards)

TABLE 3. Course Distribution Groups

Group I Biological Oceanography

| | |
|----------|---|
| OCN 625 | Aquatic Photosynthesis |
| OCN 626 | Marine Microplankton Ecology |
| OCN 627 | Ecology of Pelagic Marine Animals |
| OCN 628 | Benthic Biological Oceanography |
| OCN 630 | Deep-Sea Biology |
| OCN 680 | Dynamics of Marine Ecosystems: Biological-Physical Interactions in the Oceans |
| OCN 681 | Introduction to BioPhysical Ocean Modeling |
| OCN 750 | Topics in Biological Oceanography |
| ZOOL 620 | Marine Ecology |

Group II Geological Oceanography

| | |
|----------------|---|
| GG 600 | Equations of Geophysics |
| GG 602 | Theoretical Petrology |
| GG 650 | Seismology |
| GG 674 | Paleoceanography |
| GG 681 | Continuum Mechanics |
| GG 711 | Geological Evidence for Climate Change (“Special Topics”) |
| OCN 631 | Ocean Minerals |
| OCN 638/GG 638 | Earth System Science and Global Change |
| OCN 641 | Origin of Sedimentary Rocks |
| ORE 664 | Nearshore Processes and Sediment Transport |

Group III Chemical Oceanography

| | |
|----------------|--|
| GG 639 | Stable Isotope Biogeochemistry |
| GG 640 | Coastal Geochemistry |
| OCN 633 | Biogeochemical Methods in Oceanography |
| OCN 635 | Isotopic Marine Geochemistry |
| OCN 638/GG 638 | Earth System Science and Global Change |
| OCN 642 | Elemental Composition Changes |
| OCN 643 | Topics in Marine Geochemistry |
| OCN 644 | Sedimentary Geochemistry |

Group IV Physical Oceanography

| | |
|--------------|---|
| OCN 640 | Observational Physical Oceanography |
| OCN 660 | Ocean Waves I |
| OCN 661 | Ocean Waves II |
| OCN 662 | Marine Hydrodynamics |
| OCN/ATMO 665 | Small-Scale Air-Sea Interaction |
| OCN/ATMO 666 | Large-Scale Ocean-Atmosphere Interactions |
| OCN 667 | Advanced Geophysical Fluid Dynamics I |
| OCN 668 | Advanced Geophysical Fluid Dynamics II |
| OCN 680 | Dynamics of Marine Ecosystems: Biological-Physical Interactions in the Oceans |
| OCN 681 | Introduction to BioPhysical Ocean Modeling |
| OCN 760 | Topics in Physical Oceanography |
| ORE 607 | Water Wave Mechanics |

Group V Mathematical Methods and Statistics

| | |
|-------------|--|
| GG 695 | Bayesian Data Analysis |
| GG 710, 711 | Statistical Analysis of Geological Data |
| ATMO 631 | Statistical Meteorology |
| OCN 650 | Mathematical Techniques for Oceanographers |
| OCN 681 | Introduction to BioPhysical Ocean Modeling |
| OCN 682 | Introduction to Programming and Statistics in R |
| OCN 683 | Advanced Statistics in R |
| ORE 608 | Probability and Statistics for Ocean Engineers (cross-listed as OCN 760) |
| ORE 766 | Numerical Analysis of Hydrodynamic Problems |
| PHYS 600 | Methods of Theoretical Physics |
| ZOOL 631 | Biometry |
| ZOOL 632 | Advanced Biometry |

Group VI Atmospheric Sciences

| | |
|--------------|---|
| ATMO 600 | Atmospheric Dynamics I |
| ATMO 601 | Atmospheric Dynamics II |
| ATMO 607 | Mesoscale Meteorology |
| ATMO 610 | Tropical Climate & Weather |
| ATMO 616 | Monsoon Meteorology |
| ATMO 620 | Physical Meteorology |
| ATMO/OCN 665 | Small-Scale Air-Sea Interaction |
| ATMO/OCN 666 | Large-Scale Ocean-Atmosphere Interactions |

TABLE 4. Forms and Links

OFFICE OF GRADUATE EDUCATION FORMS

<http://manoa.hawaii.edu/graduate/content/forms>

Master's Forms

Student Progress Forms I, II, III, IV
Petition to Enroll in GRAD 700F

Doctoral Forms

Petition for Admission to a Doctorate in Same Discipline
Student Progress Forms I, II, III, IV

DEPARTMENTAL FORMS

<http://www.soest.hawaii.edu/oceanography/contgrads.html>

Computer Requirement
Ship Time Requirement
Seminar Requirement
Annual Student Presentation
Statistics Requirement for Biological Oceanography Students
Biogeochemistry Requirement for Geochemistry Students
Request to Substitute/Waive Course(s)

Master's Forms

Signature Page (optional)

Doctoral Forms

Approval to Proceed toward PhD Candidacy
Student Progress Forms IIA
Signature Page (optional)

NA KAMA KAI WEBSITE

<http://www.soest.hawaii.edu/oceanography/nakamakai/index.html>

GRADUATE ASSISTANTS INFORMATION

| | |
|---------------------------|---|
| Note to New GAs: | http://manoa.hawaii.edu/graduate/content/notice-new-gas |
| Types and Duties: | http://manoa.hawaii.edu/graduate/content/types-duties |
| Eligibility and Criteria: | http://manoa.hawaii.edu/graduate/content/eligibility-criteria |
| Compensation: | http://manoa.hawaii.edu/graduate/content/compensation-tax-withholding |

Benefits: <http://manoa.hawaii.edu/graduate/content/benefits>
 Recruitment and Appointment: <http://manoa.hawaii.edu/graduate/content/recruitment-appointment>
 Rules and Regulations: <http://manoa.hawaii.edu/graduate/content/rules-regulations>
 Grievance Procedure: <http://manoa.hawaii.edu/graduate/content/ga-grievance>

**Recommended Guidelines For Minimum Grad Students Salaries
 (Effective August 1, 2017)**

- R-14 Incoming students with Bachelors degree
 - R-15 Incoming students with Masters degree,
 Students who have passed qualifying exam, and
 Students who are still working on a MS thesis and have defended their thesis proposal
 - R-16 Students who have passed their comps
 - R-17 Students who have defended their Ph.D. thesis proposal and are working on their thesis
- Exceptions for GA pay below the minimum step will require approval of the Dean’s Office.

| New GA Pay Scale | | | | | |
|--|--------------------|----------------------|--|--|--|
| <u>Step</u> | <u>TA(9-month)</u> | <u>RA(11-month)*</u> | | | |
| 14 | 23,952 | 28,026 | | | |
| 15 | 24,912 | 29,148 | | | |
| 16 | 25,908 | 30,312 | | | |
| 17 | 26,946 | 31,524 | | | |
| TA - SOEST standard classification | | | | | |
| RA - Recommended classification, dependent on funding availability | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

APPENDIX 1: Student Conduct and Ethics

The following text is from the University of Hawai'i's Office of Graduate Education webpage:
<http://manoa.hawaii.edu/graduate/content/conduct-code>

The University of Hawai'i at Mānoa exists for the pursuit of knowledge through teaching, learning, and research conducted in an atmosphere of physical and intellectual freedom. Members of the UHM academic community are committed to engage in teaching, learning, research, and community service and to assist one another in the creation and maintenance of an environment that supports these activities.

Members of the academic community may not violate the rights of one another nor disrupt the basic activities of the institution. Students who are disruptive are subject to a variety of disciplinary actions that may include reprimand, probation, restitution, suspension or expulsion. Continued enrollment at UHM is contingent on appropriate academic conduct. Some graduate students are professionals or professionals-in-training in their respective fields, and as such, are subject to the ethical and conduct standards of their profession. Students may be dismissed by such fields for behavior which is determined to violate the codes of conduct set by that profession. These codes may be guided by the profession's accrediting or licensing bodies. Appeals of the dismissal will be heard by the dean of that school (or the dean of the college in which the department is housed).

It must be recognized that members of the academic community have the same privileges and responsibilities with respect to the law as do members of the larger society. As a result, members of the UHM campus community must acknowledge that when the interests of the university are violated by a student, the student is accountable to the institution and may also be held responsible to civil authorities.

These interests of the university are described in the University of Hawai'i at Manoa Student Conduct Code: <http://www.manoa.hawaii.edu/students/conduct/>.

Any questions regarding the Student Conduct Code should be addressed to the Dean of Students.

APPENDIX 2: Safety in Research and Creative Activities

To ensure a safe and healthy working environment for faculty, students and staff, the University of Hawai'i at Manoa sets and enforces rigorous safety standards that meet and exceed local, state and federal law. The Environmental Health and Safety Office (EHSO) at the university sets a multitude of rules and regulations pertaining to common laboratory materials and other research related activities in Hawai'i, and they may be quite different from those at other institutions. The university has specific programs and requirements for:

- a. **Radioactive material**
- b. **Biological "commodities"** - including micro-organisms, plants, animals, biological toxins, cell or tissue samples, recombinant DNA, etc.
- c. **Compressed gas (SCUBA) diving**
- d. **Certain chemicals and hazardous materials**
- e. **Disposal of hazardous waste**

In addition, there are regulations governing the importation and shipment of these materials or types of equipment into the State and/or university. For more information, please visit the EHSO website at <http://www.hawaii.edu/ehso/>.

Students who work in a laboratory setting are required to attend and maintain health and safety training in skill areas that are relevant to their work. The EHSO offers a variety of training programs in laboratory safety, radiation safety, hazardous waste, scientific diving, fire extinguisher use, and shipping of biological commodities. Please contact EHSO to check on class schedules or to arrange for training. Labs and lab members must be certified in compliance with EHSO guidelines at all times.

EHSO Director's office: (808) 956-8660

| | |
|--|----------------|
| Radiation Safety Program | (808) 956-8591 |
| Diving Safety Program | (808) 956-9643 |
| Fire Safety Program | (808) 956-4953 |
| Hazardous Materials Management Program | (808) 956-3198 |
| Laboratory Safety Program | (808) 956-5180 |
| Environmental Compliance Program | (808) 956-9173 |
| Occupational Safety and Health | (808) 956-3201 |

APPENDIX 3:

School of Ocean and Earth Science and Technology (SOEST)

Sexual Harassment and Bullying

Fall semester, 2013

SOEST Policy

Sexual harassment and bullying are two different, but related, forms of intimidation that are prohibited² at the University of Hawai'i at Mānoa (UHM) and in the School of Ocean and Earth Science and Technology (SOEST).

- Relevant Federal laws include Title VII (civil rights in employment) and Title IX (education/students). State of Hawaii Constitution, Article 1, section 5 and Fair Employment Practices Act HRS 378-2-1-A (2010). UH policies include sexual harassment (E1.203), sexual assault (E1.204) and workplace non-violence (E9.210). UHM and UH system sexual harassment policies are not fully consistent – and, as a result, are undergoing some revision.
- State Law prohibits employment discrimination against victims of sexual violence.
- SOEST units may elect to identify a faculty or staff member, who does not have an automatic reporting requirement, as a point of contact to field questions and help advise on sexual harassment, intimidation, and gender equity situations.
- SOEST units are required to ensure that the existing UH/UHM policies are known, understood and embraced by all students/staff/faculty.

Procedure

Any student, staff, faculty, or other member of the SOEST community should report any instances of bullying, sexual harassment, sexual violence, or intimidation to the University of Hawaii at Mānoa Office of the Gender Equity Specialist (956-9499) <http://manoa.hawaii.edu/genderequity>

Members of SOEST community may also report instances of bullying, sexual harassment, sexual violence, or intimidation to any faculty, department chair, or member of the Deans office under the following conditions:

- A complaint received by a faculty member from a direct reporting staff/student member must be passed along to the Dean's office as a formal complaint.
- A complaint received by a faculty member from a student or staff member that does not report to them may or may not require a formal report to the Dean.
- Any SOEST executive (Dean, Associate Dean or Director) who receives or hears of a complaint must pass it along to the Chancellor's Office and an investigation will be opened.
- Any SOEST executive can engage in hypothetical discussions without triggering a formal investigation.
- Jen Rose is a campus resource who can be consulted without triggering mandatory reporting – e.g., to respect individuals request for confidentiality.

² The University's Executive Policy E1.203 on sexual harassment prohibits sexual harassment as a form of sex discrimination, in compliance with Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964, and the Hawai'i State Fair Employment Practices Act, Chapter 378 HRS. Executive Policy E9.210 on workplace non-violence prohibits any work-related or workplace violence against its students, faculty, staff and visitors.

What is Sexual Harassment?

Sexual harassment comes in many forms, each of which is prohibited by law. Sexual harassment is a form of sex discrimination that violates [Title VII of the Civil Rights Act of 1964](#). Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitutes sexual harassment when submission to or rejection of this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work performance, or creates an intimidating, hostile or offensive work environment. Sexual harassment is illegal whether it occurs in the workplace or within an educational setting.

Sexual harassment can occur in a variety of circumstances, including but not limited to the following:

- The victim or the harasser may be a woman or a man. The victim does not have to be of the opposite sex.
- The harasser can be the victim's supervisor, an agent of the employer, a supervisor in another area, a co-worker, a subordinate, or a non-employee.
- The victim does not have to be the person harassed but could be anyone affected by offensive conduct.
- Unlawful sexual harassment may occur without economic injury to or discharge of the victim.
- The harasser's conduct must be unwelcome.

For more detailed information on what defines sexual harassment, please visit:

<http://manoa.hawaii.edu/genderequity/titleix>

What is Bullying?

Bullying is a type of workplace violence that violates UH Executive Policy E9.210. Prohibited violent acts involve physical attack, property damage, as well as verbal statements and tones that express or suggest the intent to cause physical or mental harm to another person.

More specifically, violent behaviors include but are not limited to:

- Hitting, pushing and shoving; Throwing or breaking objects;
- Theft;
- Shouting or yelling, abusive or belligerent language;
- Threatening gestures or remarks;
- Disruptive or hostile actions, sabotage of equipment;
- Repetitive unwanted phone calls, notes or emails and other unwelcome aggressive behavior.

For more detailed information on what defines workplace violence, please read the university policy on workplace non-violence: <http://manoa.hawaii.edu/titleix/policies.html>

What to do if you feel you are being harassed:

- If possible, ask the individual who is doing the harassing to stop either verbally or in writing. It is important to let the person know that you don't like what he/she is doing.

- Keep detailed written, dated records of your experiences: time, places, names
- Don't accept sexual harassment or bullying as the "way things are." Don't blame yourself or ignore the problem. There are laws that were written to protect you.

If you feel that you have been the victim of sexual harassment or bullying you have two fundamental options:

- 1) File an informal complaint, or
- 2) File a formal complaint.

An informal or formal complaint may be taken by simply contacting the UHM Office of the Gender Equity Specialist (956-9499) <http://manoa.hawaii.edu/genderequity>. You may determine what type of complaint you want to file while in discussion with the Office of the Gender Equity Specialist.

The University of Hawai'i has a non-retaliation policy to protect anyone filing an informal or formal complaint, serving as a witness, or participating in any manner in a complaint resolution process or investigation.

You may contact any SOEST faculty member to lodge an informal complaint. Do not contact a faculty member to whom you report if you wish to make an informal complaint. If you lodge a complaint with your supervisor or advisor they are compelled to report it to the Deans office and a formal investigation will be initiated.

Do not contact a SOEST executive (the Deans or Directors of HIGP, HIMB, HNEI) if you wish to make an informal complaint. Executives are obligated to initiate formal investigations upon notice of a complaint. They may, however, engage in hypothetical discussions of situations. See below for more information.

1. **Informal Complaint** – Often a victim of harassment wishes to remain anonymous and not instigate a formal investigation. An informal complaint allows a victim to maintain anonymity; however it limits the steps that may be taken on your behalf. An informal complaint may be filed with the following: any faculty member who is not your advisor or supervisor, chairs of the four SOEST academic departments (Atmospheric Sciences, Geology and Geophysics, Oceanography, or Ocean Resources Engineering), the UHM Gender Equity Specialist, or the UH Equal Employment/Affirmative Action Office (EEO/AA; see "Contacts" page).

Examples of actions that may be taken as a result of an informal complaint include: counseling the offender, mediating between the two parties, holding workshops for the department, distributing written information, and other preventive measures. In many cases, informal procedures are effective in stopping harassment.

2. **Formal Complaint** - This option requires a full investigation of all formal charges. Anyone who is considering filing this type of complaint is urged to do so as soon as possible. Complaints should be filed within 180 calendar days of the last incident of harassment. If the individual can show good cause for later filing, the deadline may be extended to 300 days from the last incident.

Formal complaints by employees must be filed with the EEO/AA Office; formal complaints by students must be filed with the UHM Office of the Dean of Students. In SOEST, these complaints can also be filed with the Dean's office or with the Directors of the various institutes. Individuals can receive assistance from the Gender Equity Specialist during this process.

For complete details on the sexual harassment complaint procedure please visit:

http://hawaii.edu/offices/eo/policies.php?policy=sexual_harassment

Contacts

Filing a Formal Complaint

- SOEST Students may contact
 - Dr. Chip Fletcher, Associate Dean
SOEST Deans Office, POST 802
1680 East-West Rd., Honolulu HI
(808) 956-2582 or 956-9513 (cell: 808-294-0386, 24hrs)
fletcher@soest.hawaii.edu
 - [Leona Anthony](#), Director of Student Services
2525 Correa Rd, HIG 135, Honolulu, HI 96822
(808) 956-8763 • Fax: (808) 956-9987
leonaa@hawaii.edu

Filing a formal or informal complaint

- Any SOEST faculty member or the Chairs of the four SOEST academic departments (Geology and Geophysics, Oceanography, Ocean Engineering, Atmospheric Sciences)
- UHM Gender Equity Specialist:
Queen Lili`uokalani Center for Student Services, Rm. 210
Phone: 956-9499
Email: jenna.h.friedman@hawaii.edu
- UHM Dean of Students Office:
Queen Lili`uokalani Center for Student Services 409
2600 Campus Road
Honolulu, HI 96822
Tel: (808) 956-3290 (Voice/Text)
Fax: (808) 956-9682
- UH EEO/AA Office:
Mie Watanabe
2442 Campus Road
Administrative Services Building 1-102
Honolulu, HI 96822
tel 808-956-7077 (voice/text)
email eeo@hawaii.edu

University of Hawaii Policies and Procedures and Resources

Office of the Gender Equity Specialist (956-9499)

<http://manoa.hawaii.edu/genderequity>

Gender Equity: Sexual Harassment Defined

http://hawaii.edu/offices/eeo/policies.php?policy=sexual_harassment

Campus Security (956-6911) emergency and crime prevention services. Blue light security posts.

Escort Service (956-8211) Campus Security provides transportation or a walking escort from dusk to dawn. College or School Dean, Administrator, or Human Resources Specialist.

Counseling and Student Development Center (956-7927) counseling and testing services for students, using a holistic approach to promote wellness and personal success.

Women's Center (956-8059) a safe space for students to meet; crisis and referral services for sexual assault, partner violence.

LGBTI Student Services (956-9250) crisis response and referral services for harassment cases; Safe Zone training to assist with harassment prevention.

Office of the Vice Chancellor for Students (956-3290) assists students with special problems or concerns such as discrimination, academic grievances, and student conduct code issues

Center for Career Development and Student Employment (956-7007) assists students with concerns and grievances related to student employment.

Student Judicial Affairs (956-4416) administers Student Conduct Code; committed to upholding student rights and responsibilities to create a safe campus.

UHM Human Resources (956-0712) administers staff labor relations and human resources management.

UHM Academic Affairs, Academic Personnel (956-8447) administers faculty labor relations and academic personnel matters

Matsunaga Institute for Peace and Conflict Resolution (956-6433) confidential conflict resolution and mediation services referrals.