

Journalism

College of Social Sciences

Crawford 208

2550 Campus Road

Honolulu, HI 96822

Tel: (808) 956-8881

Fax: (808) 956-5396

E-mail: jour@hawaii.edu

Web: www.hawaii.edu/~jour/

Faculty

T. J. Brislin, PhD (Chair)—mass communication, history/trends, ethics

A. Auman, MA—news editing, publication layout and design

L. Frazier, EdD—public relations, publication layout and design

G. Y. Kato, MA—broadcast news, law, reporting

B. D. Keever, MS—public affairs reporting

Degree Offered: BA in journalism

The Academic Program

Journalism (JOUR) education helps students develop their ability to gather, analyze, and organize information and to communicate it to others clearly, effectively, and responsibly—skills that are particularly important in this Age of Information. Assignments in journalism courses also lead students to increase their knowledge of public institutions and major public issues and to become more at ease in meeting and talking with other people at many different levels. Many students major in journalism to prepare for careers with the print or broadcast news media or in public relations work. However, a journalism education also serves as an excellent foundation for graduate study in other fields.

The department, which is largely professional in its orientation, is one of 106 departments or schools of journalism in the United States with national accreditation and is among the leaders in its emphasis on ethics and quality writing. More than half of its classes are “writing-intensive,” and most call for more writing than that designation requires. Students are encouraged to work for *Ka Leo O Hawai'i*, the campus newspaper, and to participate in the department's extensive program of professional internships, many of which offer pay as well as valuable experience.

Accreditation

The program is accredited by the Accrediting Council on Education in Journalism and Mass Communications.

Advising

Advising is mandatory for all journalism majors.

Undergraduate Study

Bachelor's Degree

Requirements

- 30 credit hours minimum (maximum of 33) in journalism courses
- 15 additional non-introductory credit hours in a discipline of choice
- 90 credit hours in non-journalism courses
- All students enrolled in journalism classes requiring off-campus assignments must sign a University of Hawai'i Waiver Form—Assumption of Risk and Release

Required Courses

- For all students: JOUR 150, 205, 206, and 365
- For students in print journalism sequence: JOUR 315, 415, 445, and 460
- For students in broadcast journalism sequence: JOUR 315, 366, 436, 466, and 460
- For students in public relations sequence: JOUR 320, 410, and 420.

Liberal Studies

Colleges of Arts and Sciences

Hawai'i 2

2500 Campus Road

Honolulu, HI 96822

Tel: (808) 956-7297

Web: www.hawaii.edu/libst/

Faculty

P. Manicas (Director), PhD

E. Drechsel, PhD

J. Odin, PhD

Degree Offered: BA in liberal studies

The Academic Program

The objective of the Liberal Studies Program is to provide students with an opportunity to pursue a course of study that is not restricted to conventional departmental or unit boundaries. A crucial feature is the advising process, which aims to develop the student's ability to formulate a major equivalent comprised of non-introductory courses with thematic integrity and continuity.

This ensures that while flexibility in the curriculum is encouraged, it precludes loss of academic substance and rigor. Thus students create their own degree proposals that draw upon a number of disciplines in the study of a particular problem or theme.

While the program primarily encourages creation of individually conceived curricula, it also serves to accommodate students in a variety of fields that lack an undergraduate major and are interdisciplinary in nature:

1. Pre-professional majors (e.g., pre-law, pre-med, pre-optometry, pre-physical therapy);
2. Undergraduate majors that are established only as graduate programs (e.g., astronomy, educational psychology, English as a second language, linguistics);
3. Majors that are predominantly interdisciplinary (e.g., aging, comparative literature, environmental studies, international studies, Pacific Islands studies, peace studies, women's studies); and
4. Majors that combine work in several colleges (e.g., business communications, arts administration, health and public policy, etc.).

Degree proposals must focus upon the identified academic theme, be made in writing, and be accepted by the liberal studies faculty before the student enrolls for 21 of the 36 credits required in the major equivalent.

Liberal studies students must satisfy the University degree requirements and those for the Colleges of Arts and Sciences. Students must also maintain a minimum 2.5 GPA for the major equivalent courses. These courses may not be taken CR/NC, unless mandatory. Successful candidates earn a bachelor of arts in liberal studies from the Colleges of Arts and Sciences.

There are a number of interdisciplinary programs within the University that offer undergraduate courses but do not provide a baccalaureate degree. Students electing to pursue a major in these disciplines presently do so in liberal studies.

Details about admission to the program and assistance in preparing an individually designed major are available at the program office.

Library and Information Science

College of Natural Sciences

Hamilton Library, Ground Floor

2550 McCarthy Mall

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Tel: (808) 956-7321

Fax: (808) 956-5835

E-mail: slis@hawaii.edu

Web: www.hawaii.edu/slisl/

Faculty

*V. Harada, EdD (Chair)—school library administration, information literacy

*d. Bair-Mundy, MLIS—information systems

*P. Jacsó, PhD—CD-ROM and online technology, computer system analysis

*R. Knuth, PhD—youth service, international librarianship

*D. Nahl, PhD—information services, information literacy

*L. N. Osborne, PhD—information systems, library automation

Adjunct Faculty

K. Anderson, MLIS—science information resources

R. Chapman, PhD—information services

L. Davis, MLIS—preservation

D. French, MLS—information services

R. Hensley, MLS—information services

M. Jackson, PhD—library administration

V. Lebbin, MLS—social sciences resources

A. Luster, PhD—library administration

K. Peacock, PhD—Pacific Islands resources

S. Roggia, MLS—collection management

M. Suzuki, MLIS—government documents

C. Tachihata, PhD—Hawaiian information resources

L. Wageman, MLS—Asian languages collection

The Academic Program

Founded in 1965, the Library and Information Science (LIS) Program prepares professionals for work in libraries and other types of information-handling agencies. It currently offers a master's in library and information science (MLISc) and a Certificate in Advanced Library and Information Science and participates in an Interdisciplinary doctoral program in communication and information sciences. The LIS program is aware of the opportunities and the responsibilities inherent in its Pacific setting and the unique cultural amalgam of Hawai'i. Its major goals are:

1. To furnish students with the knowledge, skills, and attitudes that are basic to professional competence and career-long professional growth in the field of library and information services.

2. To expand the knowledge base of the profession through research.
3. To share its resources by extending services to the University of Hawai'i and its academic units and to the people of Hawai'i and beyond.

Graduate Study

Master's Degree

The MLISc degree program was first accredited by the American Library Association in 1967 and was reaccredited in 1974, 1980, 1986, and 1996. The curriculum is subject to continuous review and modification, and every effort is made in academic advising to ensure that students plan programs of study suited to their individual goals. Entering students are expected to be computer literate. Graduate standing is the normal prerequisite for all courses.

Degree Requirements

Students are required to take the following courses:

LIS 601 Introduction to Reference and Information Services

LIS 605 Basic Cataloging and Classification

LIS 610 Introduction to Library and Information Science

In addition, they must take one of the following:

LIS 650 Management of Libraries and Information Centers

LIS 684 Administration of School Library Media Centers

Plan A (Thesis)

The normal requirement for the MLISc degree under the thesis option is a minimum of 42 credit hours of approved graduate study. At least 27 credits must be taken in LIS courses or a combination of LIS and approved Information and Computer Sciences courses. In addition, 3 credit hours in LIS 695 Seminar in Research in Librarianship and 6 credit hours in LIS 700 Thesis Research must be taken. No directed reading credits are allowed as part of thesis research.

General examination is not required for admission to candidacy. After completing 15 credits of course work, students are advanced to candidacy upon the recommendation of the program's graduate faculty. The oral examination is not required, but research results will be presented at a student-faculty colloquium.

Plan B (Non-thesis)

The normal requirement for the MLISc degree under the non-thesis option is a minimum of 42 credit hours of approved graduate study. At least 36 credits must be taken in LIS courses or in a combination of LIS and approved ICS courses. Up to 6 credits may be taken in other schools or colleges when the courses are relevant to the individual student's specialization and approved by the LIS program chair and the Graduate Division.

The maximum course load is 15 credit hours per term. Therefore, 42 credit hours would require at least two terms and a summer. A full load is a minimum of 8 credit hours per term. The program may be undertaken on a part-time basis but must be completed within five years (a two-year extension is allowed by the Graduate Division for a total of seven years).

Students who were in MLISc-degree programs from other ALA-accredited library programs may, in special circumstances, transfer up to 21 credit hours toward their MLISc degree at UH Mānoa, provided the work to be credited has been completed within the time limit previously cited. Such requests must be included in the application.

Comprehensive Examination

All Plan B students are required to take an oral comprehensive examination as a requirement for the MLISc degree. The examination is taken during the semester the student expects to graduate.

Distance Education

The MLISc program utilizes the Hawai'i Interactive Television System (HITS) to deliver courses to remote sites in the state. LIS has been one of the pioneers on campus in using this innovative instructional delivery system. It currently offers approximately 35 percent of its courses through HITS; at least two courses are available through HITS each fall and spring.

Summers-Only Program

Students may select to enroll in the MLISc program exclusively during the summer sessions. There are four sessions in the summer, each three weeks long. Only one course may be taken in each three-week session. Every effort is made to ensure a balanced selection of courses during the summers. The deadline for the summers-only program is April 1 of each year. The summers-only program is not open to international students.

Dual Master's Degree Programs

Students may pursue the MLISc degree and a second master's concurrently, cooperating with the following departments and fields of study: information and computer sciences (MS), history (MA), Pacific Islands studies (MA), American studies (MA), Asian studies (MA), and law (JD). For more information on these programs, contact the LIS program chair or the other respective departments.

Doctoral Degree

Interdisciplinary Doctoral Degree Program

LIS participates in an interdisciplinary PhD program in communication and information sciences (CIS) integrating computer science, communication, library science, and management information systems. Because of the broad knowledge base required to support the interdisciplinary approach, the program also draws on political science, economics, engineering, operations research, and behavioral sciences. This unique program is sponsored by four academic faculties: communication, decision sciences, information and computer sciences, and library and information science.

For information on admission and requirements, refer to the "Communication and Information Sciences" section within the Colleges of Arts and Sciences.

School Library Media Specialist Certification

The LIS program recommends graduates to the Hawai'i Department of Education for certification as school library media specialists. To be eligible, graduates must meet the MLISc degree program requirements and the course requirements approved for certification by the Hawai'i Department of Education. The National Association of State Directors of Teacher Education and Certification (NASDTEC) Standards for Advanced Programs are used in conducting periodic reviews of the program.

A student who enters the LIS program to earn this certification must have completed a state-approved teacher education program. For more specific and current information on prerequisites and required as well as recommended LIS courses, contact the LIS program chair.

Certificate Program

The Certificate in Advanced Library and Information Science (CALIS) offers two options. Option A is available for those

who complete a successful, coherent program of specialized study and research beyond the MLISc degree. The program allows for specialization 1) applying computer and information technologies to information environments and 2) extending information management skills in information system design, evaluation, and the development of user services.

Option B focuses on school librarianship. It allows for specialization in 1) applying computer and information science technologies in elementary and secondary school libraries, and 2) extending curriculum planning skills in information literacy and general literacy instruction.

For both options, students must complete a research paper that meets the approval of the CALIS Committee and give an oral presentation of their research to students and faculty. Students are expected to remain enrolled each semester until the requirements are completed. If it is necessary to withdraw temporarily, students must reapply for admission within application deadlines before returning. Credits more than five years old cannot be applied to the certificate requirements; thus, the program must be completed in five years. For more specific information on prerequisite and elective courses, contact the LIS program chair.

Linguistics

College of Languages, Linguistics and Literature

Moore 569
1890 East-West Road
Honolulu, HI 96822
Tel: (808) 956-8602
Fax: (808) 956-9166
E-mail: linguist@hawaii.edu
Web: www2.hawaii.edu/ling

Faculty

- *M. L. Forman, PhD (Chair)—general linguistics, ethnographic linguistics, Philippine studies
- *B. W. Bender, PhD—general linguistics; morphology; Micronesian linguistics
- *R. Bley-Vroman, PhD—English syntax, language acquisition
- *R. A. Blust, PhD—historical linguistics; Austronesian linguistics and culture history; field methods
- *R. L. Cheng, PhD—Chinese linguistics, Japanese linguistics
- *P. J. Donegan, PhD—natural phonology, vowel systems, acquisition; typology; computerized lexicography; Munda languages

- *J. Haig, PhD—Japanese linguistics
- *R. A. Jacobs, PhD—syntax and syntactic change; Oceanic, English, and American Indian linguistics; discourse grammar and applied linguistics
- *P. A. Lee, PhD—linguistic theory, formal linguistics, syntax and semantics, pragmatics
- *P. G. Lee, PhD—theoretical linguistics, phonology, syntax, computer applications
- *A. V. Lyovin, PhD—language typology; Sino-Tibetan, comparative linguistics
- *M. Meyerhoff, PhD—language variation (intergroup and interpersonal), language and gender, creole studies
- *W. O'Grady, PhD—syntax, language acquisition, Korean
- *A. M. Peters, PhD—children's speech; neurolinguistics; psycholinguistics
- *K. L. Reh, PhD—phonology, Micronesian linguistics
- *L. A. Reid, PhD—Austronesian, especially Philippine and Formosan languages; lexicography; discourse analysis
- *H. M. Sohn, PhD—Korean linguistics
- *D. Stampe, PhD—computational linguistics; phonology and prosody; holistic typology and drift; Munda languages
- *S. Starosta, PhD—syntactic theory; Asian and Pacific languages
- *A. V. Vovin, PhD—history of the Japanese and Korean languages, comparative Altaic linguistics, the Ainu language

Cooperating Graduate Faculty

- D. E. Ashworth, PhD—language learning and teaching, Japanese linguistics
- J. M. Birmes, PhD—sociolinguistics, discourse analysis, ethnosemantics, Tai linguistics
- J. D. Brown, PhD—language learning and teaching, language testing
- C. J. Chaudron, PhD—applied psycholinguistics, discourse analysis
- H. M. Cook, PhD—Japanese linguistics, sociolinguistics, discourse analysis and pragmatics
- R. Day, PhD—language learning and teaching, discourse analysis, language planning
- E. Drechsel, PhD—ethnolinguistics; American Indian languages
- J. D. Ellsworth, PhD—classical linguistics, Indo-European linguistics
- E. Hawkins, PhD—language learning and teaching, Polynesian linguistics
- H. I. Hsieh, PhD—Chinese linguistics, semantics, pragmatics, mathematical linguistics
- G. Kasper, PhD—second-language curriculum, discourse analysis, interlanguage pragmatics
- Y. C. Li, PhD—Chinese linguistics, semantics, language learning and teaching
- M. Long, PhD—second-language acquisition, language teaching
- R. A. Moody, PhD—language learning and teaching, Spanish and Portuguese
- T. V. Ramos, PhD—Philippine linguistics
- K. A. Reynolds, PhD—classical Japanese, history of the Japanese language, Japanese sociolinguistics

* Graduate Faculty

- R. Schmidt, PhD—psycholinguistics, sociolinguistics, language learning and teaching
- L. Serafim, PhD—Japanese linguistics; Japanese language history, dialectology, and Ryukyuan languages
- R. N. Sharma, PhD—Indo-Aryan linguistics, Hindi, Sanskrit
- J. Ward, PhD—Polynesian linguistics, Tahitian, Balinese

Affiliate Graduate Faculty

- S. P. Harrison, PhD—Oceanic linguistics

Adjunct Faculty

- K. Cook, PhD—cognitive and relational grammar; Polynesian languages, especially Samoan

Degrees Offered: BA in liberal studies (linguistics), MA in linguistics, PhD in linguistics

The Academic Program

Linguistics (LING), also called linguistic science or the science of language, is the study of human language, including its origin and development into attested varieties. Major subfields are grammar (including phonetics, phonology, morphology, syntax, semantics, discourse analysis, pragmatics, and the relation between writing and speech), historical linguistics, sociolinguistics and dialectology, psycholinguistics (including developmental psycholinguistics and neurolinguistics), mathematical and computational linguistics, ethnographic linguistics, stylistics, and poetics.

Because of the unique properties of language among human capacities and institutions, students majoring in linguistics acquire a vantage point for formulating and testing views about basic questions that arise in one form or another in all of the human sciences, as well as the metalanguage used by all scholars dealing with language. Major applications include language planning, language teaching, speech synthesis and recognition, treatment of language disorders, repair of communication breakdowns, and information technology. Our program presents unique opportunities for the study of Austronesian (Malayo-Polynesian) linguistics and for access to speakers of Pacific and Asian languages. It is also especially strong in computational lexicography, ethnolinguistics, language acquisition, and pidgin and creole studies.

The program is recognized as one of the top 25 in the United States.

Advising

All faculty in the department participate in the advising of students majoring in linguistics. Undergraduates majoring in linguistics under liberal studies are advised initially by the department chair. Graduate majors are advised by the chair of the graduate field of study. Students are later assigned to other faculty members as advisers according to their special interests.

Undergraduate Study

Bachelor's Degree

Students may major in linguistics for the BA degree at the University through the Liberal Studies Program. In this program, students create for themselves a major equivalent with the guidance of a faculty adviser. The major equivalent may combine the study of linguistics with that of one or more foreign languages or with related disciplines, such as anthropology or psychology. Students majoring in linguistics in this way may include some or all of the MA core of courses in their BA programs and are thus able to do more advanced work in their later MA program.

Graduate Study

The faculty represents a variety of theoretical viewpoints. The various faculty members are especially qualified to direct research on languages of the Pacific and parts of Asia. Fields of special competence include descriptive and comparative linguistics, general linguistic theory, language contact and variation, ethnolinguistics, language development, and language data processing. In addition, the department faculty and cooperating faculty in fields such as Asian languages and literature, English, English as a second language, and European languages and literature supervise work in applied linguistics. Research, upon approval by the student's dissertation committee, may also include studies of language use in education, law, or other institutions of society; social and cultural influences on language acquisition and use; bilingualism, multilingualism, foreign accent, and translation; and the interrelations of language and literacy.

Although the Department of Linguistics is primarily a graduate department and is thus focused mainly on research, it recognizes that many graduates will eventually seek teaching positions and

would be more likely to obtain one if they can provide evidence of teaching experience in linguistics or a language-related field.

Accordingly, the department requires each student enrolled in either the MA or PhD program, in addition to the 30 and 33 credits required, respectively, for the completion of those degrees, to have at least 1 credit of LING 699 (Directed Research) or 799 (Apprenticeship in Teaching Linguistics) that involves teaching a linguistics or language-related course (such as a foreign language course) under the supervision of a faculty member either at the University or, by special arrangement, at another institution.

Students may be excused from this requirement if they have already had an equivalent teaching experience before coming into the program. In addition, the chair of the graduate field of study may waive this requirement if it is determined that the student was unable to obtain an appropriate teaching appointment through no fault of his or her own and that no suitable alternative was available.

Students admitted to graduate programs in linguistics normally have a background in at least one foreign language. Some background in mathematics or one of the sciences is also useful. Students without a course equivalent to LING 320 are required to take this course to make up for this deficiency in their preparation for graduate work.

The GRE General Test is required of all applicants.

The MA program provides a basic introduction to the subject matter and skills of the discipline. The PhD program provides full professional training for careers in research and teaching. Employment opportunities for graduates of both programs today often require additional knowledge of one or more related disciplines. For example, there are openings in anthropology and ESL departments for persons trained in linguistics and anthropology. Students are, therefore, encouraged to broaden their training in linguistics by including work in other disciplines. Such programs, and those that include many of the specializations previously listed, will involve the inclusion of faculty members from other fields of study on students' program committees. Students should make known their interests to the chair as early as possible so that appropriate advisers can be chosen to direct students to courses, and any key prerequisite courses, that will

help them explore their interests further. It is also possible for students to include concentrations in linguistics in their programs for the MA degree in Asian studies or Pacific Islands studies.

The courses listed below are offered to guide students in their preparation for the various examinations, although individual study must be done in areas not covered by course offerings. Linguistics courses bearing 700-level numbers are seminars, and various sections of these seminars are typically offered in a given semester, depending on the interests of the resident faculty and students. Each semester there are normally a number of seminars dealing with geographical areas, particular language families, the structures of individual languages, and particular theoretical problems. A major portion of the work done beyond the MA level is in seminars and in directed research.

Master's Degree

Requirements

Students must complete LING 410, 420, 421, 422, 615, 645 (or their equivalents), and at least one 700-level seminar.

The department offers the MA Plan A, Plan B, and Plan C programs. In addition to the University-wide residence requirement of a minimum of two semesters of full-time work, all three programs require that students demonstrate competence in one language other than their native language.

Plan A requires a thesis (12 credit hours) and a minimum of 18 credit hours of course work. A final oral examination covering the thesis and related areas is also required.

Plan B requires a minimum of 30 credit hours and a final seminar presentation near the end of the course work. The topic and format of the seminar must be approved in advance by the graduate chair.

Plan C requires a final examination with both written and oral portions. Plan C is open to selected students with some previous work in linguistics who show both high potential for scholarly development and the motivation and discipline necessary for an independent course of study. A committee of faculty is appointed for each prospective student for Plan C. The committee administers a general examination during the student's first semester of study to determine the appropriateness of Plan C, advises the student in developing a program of study, and administers the final examination.

Doctoral Degree

Requirements

Students in the PhD program are required to complete a minimum of 33 credit hours of course and seminar work at the University of Hawai'i (exclusive of LING 800) beyond those counted toward their MA degrees (or, for students not holding an MA, beyond those specified for the MA as above). Courses in field methods (LING 630), phonology (LING 621), and grammar (LING 622) are required of all PhD students.

PhD students must pass a preliminary examination, a comprehensive examination, and a final oral examination in defense of the dissertation. The preliminary examination is normally taken at a point soon after the completion of the core of courses required for the MA. It consists of two parts, the first of which is a written examination. Students are encouraged to form their PhD program committees in consultation with the graduate chair as soon as possible after they have completed this part. The second part of the PhD preliminary examination is fulfilled by having a paper written by the student accepted for dissemination in the departmental Working Papers series or published in an acceptable form elsewhere. Both parts of the preliminary examination are waived for those students receiving the MA under Plan A who also have their theses accepted for publication in an outlet agreed to beforehand by the linguistics faculty. Students hoping to have their theses published under this latter provision are required, before submitting their theses for publication, to identify the publication outlet (or sequence of outlets) to which they plan to submit their theses and, for each outlet, to provide as much background information as possible, including the names of the editorial board, stated review policies, a list of recently published titles, and other relevant bibliographic information. The faculty will review the proposed outlets and indicate which, if any, it finds acceptable.

The preliminary examination is offered once each semester, in August and January. The exam consists of four sections: general linguistics, historical-comparative linguistics, phonology, and grammar-syntax. Students must take all four sections when they first take the exam. They are given the advantage of averaging among the four to achieve an average pass. Students who do not pass all four sections need retake only those sections they did not pass; their best

scores on each section will be averaged to achieve an average pass. This examination must be passed within two attempts.

Students must also demonstrate competence in two languages other than their native language. One of the languages must be in the "research tool" category.

A "research-tool language" should be one of the major languages of the world in which there is ample published material on linguistic topics: Chinese, English, French, German, Japanese, Russian, or Spanish. Students should demonstrate their ability to read linguistic materials in one of these languages. They will be expected to take the usual reading/translation test in the chosen language. (Foreign students may use English if it is not their native language, and they will be considered as having satisfied this requirement when the English Language Institute certifies them as exempt from taking any further ELI courses.)

If a student can demonstrate that another language would be an appropriate language as his or her research-tool, that language may be approved by the chair of the graduate field as a "research-tool language" for that student. For example, Dutch may be an appropriate "research tool language" for a student who is working with Dutch materials dealing with the languages of Indonesia.

The other language may be any language, including any of the designated research languages. It may also be American Sign Language or any other language for which a qualified examiner can be found in Hawai'i. The additional language is required of doctoral candidates in linguistics to encourage some increased breadth of language background beyond that provided by the research-tool requirement and as such does not include the same reading/translation requirement. Accordingly, students may satisfy the second language requirement by demonstrating a certain degree of speaking proficiency and knowledge of the structure of the language. Passing a fourth semester foreign language course (e.g., Japanese 202) with a grade of B or better will be deemed sufficient to satisfy this requirement. Alternatively, students may take a placement test to demonstrate that they have the equivalent of four semesters of the language.

Students are admitted to candidacy after demonstrating competence in both languages and performing successfully on the comprehensive examination.

The comprehensive examination is both written and oral. Students are expected to demonstrate expertise in three areas of specialization chosen from among the following: phonological theory, syntactic theory, phonetics, semantics, morphology, language in its social and cultural context, pragmatics, psycholinguistics, neurolinguistics, discourse analysis, computational linguistics, language acquisition, language learning and teaching, language planning, multilingualism, pidgin and creole studies, translation, typology and universals, lexicography, or the linguistics of any of the following areal or genetic groupings: Austroasiatic, Austronesian, Chinese, English, Indo-European, Japanese, Korean, Sino-Tibetan, or Tai. Related disciplines may also be designated as areas of specialization. These particulars are determined when a student's doctoral committee is formed, after the preliminary examination has been passed.

To gain approval of dissertation topics, students are expected to develop detailed written proposals and defend them successfully in oral examinations conducted by their committees. In addition to traditional dissertation topics of a theoretical, descriptive, or historical nature, the faculty is open to topics in applied linguistics, when it can be demonstrated that the project will add to the knowledge of language, broadly conceived. Research may include studies of language use in education, law, or other institutions of society; social and cultural influences on language acquisition and use; bilingualism, multilingualism, foreign accent, and translation; the interrelations of language and literacy; etc. Although many such topics can also be treated within disciplines such as anthropology, psychology, literature, and pedagogy, when presented for the PhD in linguistics they are expected to have a linguistic perspective and to make a distinctive linguistic contribution. The decision as to whether such expectations are met is here, as elsewhere, made by the student's dissertation committee. Committees for applied topics will include members drawn from the faculties of closely related and cooperating fields of study such as Asian languages and literatures, English, English as a second language, and European languages and literature. Students wishing to explore such areas are encouraged to include relevant courses beyond those required for the MA as electives early in their program.

Mathematics

College of Natural Sciences

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Faculty

- *T. Hoover, PhD (Chair)—operator theory
- *C. Allday, PhD—algebraic topology
- *E. Bertram, PhD—group theory and combinatorics
- *D. Bleecker, PhD—differential geometry
- *R. Brown, PhD—algebra and number theory
- *R. Colby, PhD—ring theory
- *T. Craven, PhD—commutative algebra
- *G. Csordas, PhD—complex function theory
- *K. Dovermann, PhD—algebraic topology
- *R. Freese, PhD—lattice theory, general algebra
- *M. Gotay, PhD—mathematical physics, symplectic geometry
- *H. Hilden, PhD—geometric topology
- *G. Hile, PhD—partial differential equations
- *E. Lady, PhD—abelian groups
- *W. Lampe, PhD—universal algebra
- *R. Little, PhD—algebraic topology
- *A. Mader, PhD—group theory
- *D. Myers, PhD—mathematical logic
- *J. Nation, PhD—lattice theory
- *N. Nobusawa, PhD—algebra
- *M. Ortel, PhD—complex function theory
- *L. Ramsey, PhD—harmonic analysis
- *K. Rogers, PhD—number theory
- *D. Ross, PhD—logic, probability
- J. Siu, MA—mathematics education
- *W. Smith, PhD—analysis, function theory
- *D. Stegenga, PhD—analysis
- *L. Wallen, PhD—functional analysis, geometry
- *J. Weiner, PhD—differential geometry
- *G. Wilkens, PhD—differential geometry, control theory
- *J. Williamson, PhD—complex function theory
- *L. Wilson, PhD—singularity theory
- *L. Yang, PhD—analysis
- *R. Yeh, PhD—analysis

Degrees Offered: BA in mathematics, BS in mathematics, MA in mathematics, PhD in mathematics

The Academic Program

The mathematics (MATH) program offers preparation in the full spectrum of mathematical sciences, including algebra, geometry, differential equations, real and complex analysis, logic, number theory, and probability and statistics, as well as various topics in applied mathematics. Mathematics majors begin with the study

of calculus and linear algebra. After completion of these fundamental courses, students may choose to specialize. The department advises each prospective major on requirements and course options to meet his or her needs and interests. Departmental advisers are also available every day to all students.

Depending upon individual interest, students of mathematics may pursue careers in a variety of fields such as teaching, computer science, operations research, statistics, business, and economics. In addition, students who continue on to the graduate program may choose to become professors and/or research mathematicians. The faculty has the competence and resources required to provide the basic mathematical preparation required for any of these professions.

A goal of all non-survey mathematics courses is the development of precision of thought and expression. This receives special emphasis in the many writing-intensive courses the department offers.

Undergraduate Study

BA Degree

Requirements

Students must complete 18 credit hours in mathematics courses numbered above 300, including:

- 3 credit hours in a writing-intensive mathematics course
- 6 credit hours in courses numbered above 400
- 6 credit hours in a sustained two-course sequence approved by the department
- Only courses in which a student earns a grade of C or better will be counted toward fulfillment of major requirements
- A cumulative 2.0 GPA in all completed upper division mathematics courses is required
- All mathematics majors are required to see a mathematics adviser each spring semester prior to fall registration

BS Degree

Requirements

Students must complete 24 credit hours in mathematics or other approved courses numbered above 300, including:

- 6 credit hours in writing-intensive courses
- 6 credit hours in a sustained two-course sequence approved by the department

- 15 credit hours in additional upper division mathematics courses or appropriate non-introductory courses in the natural or information sciences
- Only courses in which a student earns a grade of C or better will be counted toward fulfillment of major requirements
- A cumulative 2.0 GPA in all completed upper division mathematics courses is required
- All mathematics majors are required to see a mathematics adviser each spring semester prior to fall registration

Students must also demonstrate the ability to program scientific problems on a computer

Minor

Requirements

Students must complete MATH 231 plus 12 credit hours in mathematics courses numbered above 300, including:

- 3 credit hours in a writing-intensive course
- 6 credit hours in courses numbered above 400

Graduate Study

Prospective graduate students are expected to have adequate undergraduate preparation in linear algebra, advanced calculus, and abstract algebra. Applicants must submit to the department their scores for the GRE General Test; applicants for the graduate assistant positions are strongly encouraged to submit scores for the subject test in mathematics as well. The department requires a score of at least 650 on the quantitative section of the GRE General Test for admittance as a regular student. The department requires a general examination of all incoming graduate students for course placement purposes. This diagnostic examination consists of two parts, algebra and analysis, and is designed to evaluate the student's command of undergraduate mathematics in the areas of linear algebra, advanced calculus, and abstract algebra.

Master's Degree

Requirements

The department does not have a thesis option (Plan A) for the MA, and most students will select Plan B. An exceptional student may be admitted to Plan C at the discretion of the graduate chair. Plan C does not require a specific number of

credit hours, but Plan C students are required to pass an oral examination in addition to the written master's exam.

Doctoral Degree

Requirements

For the PhD degree, the department requires that the student show proficiency in two of the following languages: French, German, Russian, or a computer language. Teaching experience is required of all PhD students. To be admitted to PhD candidacy, the student must satisfy the language requirements and pass three written examinations: (a) linear algebra and abstract algebra; (b) real analysis and the basic facts of complex analysis and general topology; and (c) a third field chosen by the student with the approval of the graduate chair. All new students in the PhD program shall complete a minimum of five mathematics department courses numbered between 600 and 690, other than 611, 612, 621, 631, 632, 644, 645, 649. These five courses may be taken under the CR/NC option. Exceptions: Up to two 3-credit 649 (alpha) seminars (meeting three hours/week) may be substituted for (up to) two of these required five courses, with the written approval of the graduate chair. Also, with the written approval of the graduate chair, credit may be given for equivalent courses taken in another mathematics department or for graduate-level courses taken in another department that are recommended by the student's thesis adviser and directly related to the dissertation topic; such credit for graduate courses taken in another department is limited to a total of no more than two courses.

Microbiology

College of Natural Sciences

Snyder 207
2538 McCarthy Mall
Honolulu, HI 96822
Tel: (808) 956-8553
Fax: (808) 956-5339

Faculty

- *P. Q. Patek, PhD (Chair)—cellular immunology
- *B. G. Adams, PhD—regulatory mechanisms and genetics of eucaryotic microorganisms
- *M. Alam, PhD—microbial physiology and biotechnology
- *R. D. Allen, PhD—ultrastructure and cell biology

- *J. T. Douglas, PhD—medical microbiology and infectious diseases
- *S. Kathariou, PhD—molecular genetics of virulence factors and pathogenicity
- *P. C. Loh, PhD—animal virology and animal cell culture
- *F. M. Robert, PhD—microbial ecology and bioremediation

Cooperating Graduate Faculty

- D. Borthakur, PhD—molecular genetics of nitrogen fixation
- S. P. Chang, PhD—immunology, molecular biology, molecular approaches to vaccine development
- A. K. Fok, PhD—cell biology
- R. S. Fujioka, PhD—environmental microbiology
- D. M. Morens, PhD—epidemiology, viral pathogenesis
- G. M. L. Patterson, PhD—industrial microbiology of blue-green algae
- E. G. Ruby, PhD—molecular microbial physiology

Degrees Offered: BA in microbiology, BS in microbiology, MS in microbiology, PhD in microbiology

The Academic Program

Microbiology (MICR) deals with microscopic forms of life and their activities. Bacteria, algae, fungi, protozoa, and viruses are included in this discipline. The field is diverse and concerns the nature of microorganisms, as well as their interactions—both advantageous and adverse—with other organisms and with the environment. Entire academic disciplines and commercial enterprises are based on what microorganisms do. For example, the very forms that may cause infectious diseases and epidemics may also support industries that produce vaccines or antimicrobial agents. Microorganisms play an essential role in the cycling of the limited supply of nutrients available on Earth's surface by decomposing plant residues and animal remains and by being primary producers of food in the oceans. Many microorganisms or their products may be eaten, drunk, used as fuel, or carefully disposed of as undesirable. They may be used to clean up the environment or controlled only with great effort to prevent corrosive, obnoxious, or destructive activities that they may bring about. Microbiology also deals with the physiology, biochemistry, genetics, and molecular biology of microorganisms. Many of the advances in DNA technology are mediated through bacteria, yeasts, and viruses; much of what we know about metabolism in general comes from their study.

Advising

Students can contact the department's main office at 956-8553 for information regarding advising services.

Undergraduate Study

BA Degree

Requirements

Students must complete the following:

- MICR 351
- Three courses from MICR 431, 451, 461, 463, 475, 485, and 490, plus two associated laboratories
- BIOL 172, 270
- CHEM 273/273L, 274/274L
- MATH 205 or MATH 215
- PHYS 151/151L, 152/152L; or PHYS 170/170L, 272/272L
- 9 credits from an integrated group of courses selected from biochemistry, biology, botany, chemistry, genetics, microbiology, and zoology

BS Degree

Requirements

Students must complete the following:

- 23 credit hours in microbiology, including required courses:
 - MICR 351, 431, 461, 475; and
 - One course from MICR 451, 463, 485, or 490, plus three associated lab courses
- The following required related courses:
 - BIOL 172, 270
 - BIOC 441 or ENBI 402
 - CHEM 273/273L
 - MATH 205 and 206 or MATH 215 and 216
 - PHYS 151/151L, 152/152L; or PHYS 170/170L, 272/272L
- 6 credit hours of approved major electives from BOT 430; CHEM 351 and 352; BIOL 375; FSHN 403, 430; ZOOL 340, 416, 417, 631, and 632; and PH 663

Major electives should be chosen with the aid and approval of a department adviser to provide a well integrated and coherent program. Prospective majors should consult the microbiology advisers promptly, so as to design a curriculum that satisfies the major requirements.

Minor

Requirements

Students must complete 15 credits, including MICR 351 and microbiology courses at the 400 level.

All prerequisites for these courses must be met. Persons wishing to complete the minor and graduate in four years should have completed CHEM 272, if possible, before the middle of the junior year.

Graduate Study

The department offers programs leading to the MS and PhD in microbiology with areas of specialization in microbial ecology, biochemistry, physiology, genetics, and ultrastructure; metabolic regulation and the regulation of gene expression; medical microbiology; animal and environmental virology and viral pathobiology; and immunology, immunogenetics, and immunochemistry. In addition, an option is offered in cell biology that leads to the MS and PhD in microbiology. Research programs in interdisciplinary fields are possible.

Applicants for advanced degree programs in the department must supplement the forms and transcripts required by the Graduate Division with three letters of recommendation and the official scores from the GRE General Test and the subject test in biology. These supplementary items should be sent directly to the department.

Complete details on the graduate program in microbiology and the availability of financial aid to prospective students are outlined in a departmental brochure available on request from the department, Snyder 207, 2538 McCarthy Mall.

Courses for the graduate programs are to be selected from the list below and from other graduate offerings in related disciplines as directed by the student's adviser or advising committee. The following courses may be repeated: MICR 625, 632, 661, 671, 680, 681, 690, 699, 700, 795, and 800. However, repeated courses other than MICR 690, 699, 700, 795, and 800 may only be used for credit once per degree. MICR 690 is a required course.

Required courses for the cell biology emphasis (MS) are MICR 461, 641, 690, and 699, plus courses in biochemistry and biophysics.

Potential degree candidates are required to take a diagnostic exam (MS) or a qualifying exam (PhD). Course deficiencies shall be made up before admission to candidacy.

Master's Degree

Intended candidates for the MS degree should present a minimum undergraduate preparation in biological and physical

sciences including biology, genetics, microbiology, organic chemistry, physics, and calculus. Deficiencies in some of these areas do not preclude admission. Qualified students with undergraduate majors in fields other than microbiology are welcome.

Requirements

The prospective MS candidate may select either the Plan A or Plan B program. Under Plan A, 30 credit hours must be completed. These comprise 14 credit hours of course work in classes above the 600 level (including no more than 2 credit hours of MICR 699), 1 credit hour of seminar (MICR 690), at least 9 credit hours in classes 400 level and above, and up to 6 credit hours for thesis (MICR 700). For a detailed explanation, refer to the department bulletin.

Under Plan B the 30 credit hours comprise at least 18 credit hours at the 600 level, including one seminar and excluding directed research. A minimum of 6 credit hours of directed research (MICR 699) is also required. In Plan B, six of eight areas of a comprehensive examination must be passed. Areas covered in the exam include general microbiology, medical microbiology, microbial physiology, microbial ecology, genetics, virology, immunology, and ultrastructure. For a detailed explanation, refer to the department bulletin.

Doctoral Degree

The doctoral degree (PhD) is offered in microbiology in the various areas of interest represented by research programs of the department's graduate faculty. In addition, the doctorate may be obtained jointly through microbiology and the cell, molecular, and neurosciences (CMNS) program or the marine biology (graduate) program.

Intended candidates for the PhD degree are expected to possess the MS degree in microbiology or to be able to pass at least four sections of the MS comprehensive examination.

Requirements

The PhD candidate must demonstrate the ability to do original experimental research and to produce an acceptable dissertation. A comprehensive examination, written and oral, is required, and the dissertation must be successfully defended before the faculty. At least one year of experience in teaching in a laboratory course is considered part of the training of the PhD candidate. The

specific requirements for each of the joint degree programs are modified somewhat from those given above.

Music

College of Arts and Humanities

Music 3

2411 Dole Street

Honolulu, HI 96822

Tel: (808) 956-7756

Fax: (808) 956-9657

Web: www2.hawaii.edu/~uhmusic

Faculty

*L. Wright, PhD (Chair)—musicology

*T. Bingham, MA—music education

*E. D. Bomberger, PhD—musicology

T. Carney, DMA—choral music

*P. Coraggio, MS—piano performance

*D. E. Hall, PhD—musicology

*A. Johansson, MM—voice performance

*E. T. Kudo, DMA—composition

*B. W. Lee, PhD—ethnomusicology

*B. P. McLain, PhD—music education

*H. Miyamura, MA—woodwind performance

*J. Moulin, PhD—ethnomusicology

*J. Mount, MM—voice performance

*G. Okamura, MA—music education

*L. Paxton, MM—voice performance

*E. Shipwright, EdD—piano performance

*H. Susilo, MA—ethnomusicology

*R. D. Trimillos, PhD—ethnomusicology

*D. Womack, DMA—composition

*B. Yasui, DMA—composition

Degrees Offered: BA in music, BEd in elementary education (music), BEd in secondary education (music), BMus, MA in music, MMus, PhD in music

The Academic Program

The music (MUS) department offers the Bachelor of Arts in music, bachelor of music, master of arts in music, master of music, and doctor of philosophy in music. In conjunction with the College of Education, the department offers the bachelor of education in elementary education (music) and the bachelor of education in secondary education (music). Information about each of these programs may be found in the *Music Department Graduate Booklet* or *Music Department Undergraduate Bulletin*, available in the department office.

The department is housed in a complex of buildings, including studios, practice and rehearsal facilities, and the Mae Zenke Orvis Auditorium, noted for its

fine acoustics. In addition to many offerings in Western classical, vocal, and instrumental music, the department specializes in non-Western music, notably the musics of Asia and the Pacific.

Accreditation

The bachelor's, master's, and PhD programs are fully accredited by the National Association of Schools of Music (NASM).

Advising

Students interested in majoring in music, minoring in music, or participating in various ensembles may obtain information at the department office and arrange to see a music adviser.

Undergraduate Study

Bachelor degree concentrations include performance and composition, music education, and general music studies.

For specific course requirements, see the *Music Department Undergraduate Bulletin*, available from the department office. All prospective majors and new and transfer students should consult the undergraduate chair when making plans to enter the University.

BA Degree

Requirements

Major requirements include approximately 41 credit hours in various music courses. Bachelor of Arts majors may select an emphasis from among general music, theory, Hawaiian music, musical theater, and musicology.

BMus Degree

Requirements

BMus candidates must complete approximately 80 credit hours and major in composition or performance (guitar, piano, voice, and selected orchestral instruments).

BEd Degree

Prospective music education majors should see the chair of the music education committee in the Department of Music for information and requirements. This degree program is offered in elementary and secondary education in conjunction with the College of Education.

Minor

Requirements

Students can pursue an interest in music while continuing their chosen major. The

minor program requires a minimum of 15 credit hours in three of four areas in music: theory, performance, ethnomusicology, and history. For further information, contact the music department office.

Graduate Study

Master's Degree

The department offers programs leading to the MA in music with concentrations in ethnomusicology, music education, musicology, and theory and to the MMus with concentrations in composition and performance (voice, piano, and selected instruments).

Admission Requirements

Applicants for admission to the master's degree program must have an undergraduate degree with a major in music or a bachelor's degree and evidence of an equivalent musical background; three letters of recommendation; and, for non-native speakers of English, a TOEFL score of 500 minimum for performance or 540 for other concentrations. Two copies of all transcripts should be sent with the application. In the following concentrations, these additional requirements must be met:

1. Ethnomusicology—Background in cultural anthropology is desirable and, depending on the thesis research, may be required.
2. Music Education—Minimum of one year of full-time music teaching experience in a public or private school.
3. Composition—Three original scores representative of various forms and media.
4. Performance—An audition of works representative of various musical styles. An applicant not residing in Hawai'i must submit an unedited tape recording comparable in scope and length to an in-person audition and, if admitted, will audition before the department admissions faculty before registering for the first semester of residency to ascertain appropriate placement in the curriculum sequence. A recent University of Hawai'i at Mānoa graduate may be admitted without a hearing if the BMus senior recital is considered to be of high enough quality by the majority of the department admissions faculty.
5. Musicology—Sample of academic writing proficiency (a 10-page term paper in English from an upper division music history course is preferred).

* Graduate Faculty

6. Theory—Sample of academic writing proficiency (e.g., undergraduate term paper).

An applicant must declare a specific concentration within the MA or MMus; admission, if granted, is for that concentration only. If a student later wishes to change to another concentration, the student must petition the graduate faculty in music for approval.

More detailed information on all degree programs is contained in the *Music Department Graduate Booklet*, available on request from the department office, 2411 Dole Street, Honolulu, HI 96822.

Prior to enrolling for the first semester of study, each classified graduate student will take a diagnostic examination in music history (part I) and theory (part II). Students in ethnomusicology and performance are also tested in their area of concentration (part III). The content of the diagnostic examination consists of material normally included in the work required for a bachelor's degree. The purpose of this examination is twofold: (a) to assess the student's background and determine if there are deficiencies that should be remedied and (b) to assist the adviser and the student in planning a program of study. Detailed information about the examination is available on request.

Before being admitted to candidacy for a degree, each graduate student must pass the department's general examination, which consists of three parts: music history, theory, and the student's area of concentration. Successful performance on specific parts of the diagnostic examination exempts the student from the equivalent parts of the general examination. Parts I and II of the general examination must be taken prior to enrolling for the second semester of study. All parts of the general examination must be passed before the student earns 18 credit hours toward the degree. Credits earned in excess of this limit will not be counted if they are earned before all three parts of the general examination are passed. When any part of the general examination is not passed, the student must take that part again the next time it is offered. If the examination is not taken, a failure will be reported; students failing the examination a second time will be dropped from the program. Any exceptions to these procedures must receive prior approval by petition to the graduate faculty.

When all portions of the general examination have been passed, the student will be advanced to candidacy.

Some concentrations require language competence:

1. Ethnomusicology—A reading or speaking knowledge of a foreign language relevant to the thesis research (or equivalent competence in linguistics).
2. Musicology—A reading knowledge of French or German.
3. Theory—A reading knowledge of French, German, or Latin.
4. Music Education—Language appropriate to the area of research or research statistics.

Degree Requirements

Plan A requires a minimum of 30 credit hours, 22 in course work and 8 of thesis, and is taken by candidates concentrating in ethnomusicology, music education, musicology, theory, and composition. (Candidates in music education may choose either Plan A or Plan B, described below.) An ethnomusicology thesis is usually based on fieldwork. Composition students must compose an original work in one of the larger forms, plus write a detailed essay on the background and problems involved or a detailed theoretical analysis of the work.

Plan B also requires a minimum of 30 credit hours but does not include a thesis. This plan is taken by candidates in performance and is an option for candidates in music education.

Plan B students in music education will be required to fulfill the following requirements:

1. A comprehensive three-hour examination, exhibiting strength in written expression and a grasp of the essentials of the broad field of music education; and
2. A project or paper about some specific aspect of music education whose size and scope will be determined by the student and the faculty member directing the project.

Under Plan A, the oral final examination is arranged by the student in consultation with the thesis committee, usually during the semester in which all course work has been completed and after the student has completed the thesis document. Copies of the document must be presented to the committee at least two weeks prior to the examination. At the examination, the student's knowledge and understanding of the field of concentration are examined with emphasis on the content of the thesis.

Candidates concentrating in performance are required to give a public recital. Additionally, in the recital semester and before the recital date, the student will meet with the recital committee for a one-hour oral examination to discuss historical and analytical aspects of the works to be performed in the graduate recital.

Doctoral Program

The department offers programs leading to the PhD in music with concentrations in composition, music education, ethnomusicology, and musicology.

Admission Requirements

Applicants for admission to the PhD program must present a master's degree in music (in the area of emphasis) or equivalent, an excellent academic record (two copies of all college transcripts), three confidential letters of recommendation on forms provided by the music department, a sample of academic writing proficiency such as recent term papers, a GRE General Test score, and, for non-native speakers of English, a TOEFL score of 560 or better. Application forms are available at the music department or the Graduate Division. The completed forms should be submitted with two copies of all transcripts by **February 1** for the following fall semester and by **September 1** for the following spring semester.

In the following concentrations, these additional requirements must be met:

1. Composition—A master's degree in composition or the equivalent in terms of course work and original composition; a score of one large-scale work; scores of two shorter works; and a tape of at least one of the above.
2. Ethnomusicology—A major research paper in ethnomusicology as evidence of extensive background in musical traditions other than Western art music.
3. Musicology—A master's degree in musicology or a minimum of four graduate seminars in musicology, and a 7,500-word research paper in English on a subject in historical musicology.
4. Music Education—A minimum of two years full-time music teaching in a public or private school; three letters of recommendation on the applicant's teaching ability, at least two of which must be written by the applicant's job supervisor (principal or other supervisor); and one of the following: (a) a videotape of a teaching demonstration (or actual teaching), or (b) an in-person teaching demonstration.

An applicant must declare a concentration in one of the four areas previously listed. Admission, if granted, is for that concentration only. If a student later wishes to change to another concentration, the student must petition the graduate faculty in music for approval. Each student will have a principal adviser who must be a member of the music department's graduate faculty. An application will be denied if it is determined that no principal adviser in the applicant's area of interest is available on the music department's graduate faculty.

Degree Requirements

This degree requires an emphasis on ethnomusicology courses for students who are not concentrating in the area of ethnomusicology. This emphasis ensures that all PhD graduates will be able to teach introductory courses in world music. Requirements for music PhD students also include MUS 659 Seminar in College Music Teaching, followed by supervised college teaching experiences.

The PhD student must spend three semesters in residence (full-time work or the equivalent in credit hours) at UH Mānoa and must complete the degree within seven years.

Language Requirements. Before advancing to candidacy, reading proficiency must be satisfactorily demonstrated as follows:

1. Ethnomusicology—One dissertation research language and one library research language.
2. Music Education—Language appropriate to the areas of research or research statistics.
3. Musicology—Two European languages: German and one other language, preferably French.

Diagnostic and Qualifying Exams.

Prior to enrolling for the first semester of study, each PhD applicant will take a diagnostic exam in music history, theory, and the major area of research (if it is ethnomusicology) to determine whether or not proficiency equivalent to that of a master's level is met in each of these areas. A successful diagnostic exam will count as the qualifying exam in that area. Deficiencies can be made up either by retesting or, in musicology and ethnomusicology, by completing specified courses with a grade of B or better. Only one failure of the qualifying exam is allowed. A retest is normally taken the next time the exam is scheduled. Deferral of the retest must receive prior approval by the graduate

chair. (The student submits a petition to the graduate chair no less than five weeks before the exam date.) All deficiencies must be made up by the end of the first year.

An advisory committee, made up of three graduate music faculty members and approved by the graduate chair, will consider the test results in advising the student to begin the program. The student's principal adviser, appointed by the graduate chair, serves as the chair of this committee.

Comprehensive Exam and Advancing to Candidacy. This exam is given to measure the student's readiness to begin significant research in the selected major area of research. It is given only after successful completion of course work, fulfillment of residency requirements, successful completion of all language requirements, and notice from the advisory committee that the student is judged to be sufficiently prepared to pass this examination. This is a two-part exam consisting of a written portion and a two-hour oral portion, passed or failed as a whole. A student failing this exam may retake the exam once, but this must be done within one year. Passing this exam enables the student to begin the dissertation process and receive a certificate from the University indicating that all requirements of the doctorate except for the dissertation have been completed. Following the comprehensive exam, the formation of a five-member doctoral committee, and submission and approval of a dissertation proposal, the student is advanced to candidacy.

After this occurs, all that remains is fieldwork (for ethnomusicology majors only), writing of the dissertation, and the oral defense of the dissertation.

Final Oral Examination. Basically a defense of the dissertation, this exam is conducted by the five-member doctoral committee, made up of graduate faculty members appointed by the music graduate chair and approved by the Graduate Division dean. The chair of the student's advisory committee normally serves as the chair of the student's doctoral committee. At least one member must be from outside the music department, but music department members make up the majority. All committee members must be present at the exam. (Dissertation proposals must be approved by this committee.) This exam is subject to other regulations detailed in the "Graduate Education" section in this *Catalog*.

The date of the final oral exam is arranged by the student in consultation with the doctoral committee; usually, it is during the semester in which the student

has completed the dissertation document. Copies of the document must be presented to the committee at least two weeks prior to the examination. At the examination, the student's knowledge and understanding of the field of concentration is examined based on the content of the dissertation.

Peace Studies

College of Social Sciences

Social Science 717
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-7427
Fax: (808) 956-5708
E-mail: uhip@hawaii.edu
Web: www2.hawaii.edu/uhip/

Faculty

R. Summy, EdD (Director)—peace theory, nonviolence
B. Barnes, JD—conflict resolution
B. Hallett, PhD—peace studies

Cooperating Faculty

C. Blake, PhD—anthropology
R. Chadwick, PhD—political science
C. Crawford, ThD—religion
G. Fontaine, PhD—communication
M. Heberle, PhD—English
K. Ikeda, PhD—sociology
G. Kent, PhD—political science
A. Marsella, PhD—psychology
J. Morgan, PhD—geography
K. Phillips, PhD—English
I. Rohter, PhD—political science
L. Ruby, PhD—art
W. Sharkey, PhD—speech
L. Sponsel, PhD—anthropology
C. Stephenson, PhD—political science
M. Tehranian, PhD—communications

Affiliate Faculty

I. Aoude, PhD—ethnic studies
C. Araki, PhD—education
J. Barkai, JD—law
T. Brislin, PhD—journalism
D. Chandler, PhD—sociology
J. Haak, MLS—library services
B. Jacob, PhD—Social Science Research Institute
M. Jones, PhD—physics
N. Kent, PhD—ethnic studies
R. Lamb, PhD—religion
K. Lowry, PhD—urban research and planning
J. Lum, PhD—educational foundations
F. Mackenzie, PhD—oceanography
N. Milner, PhD—political science
D. Neubauer, PhD—political science
G. Simson, PhD—English
M. Tiles, PhD—philosophy
J. Van Dyke, JD—law

Degree and Certificate Offered: BA in liberal studies (peace and conflict studies). Certificate in Peace Studies.

The Academic Program

Peace and conflict education (PACE) studies examines the causes of war and other forms of violence, the nonviolent ways to resolve destructive conflicts and engage in peacemaking, and the conditions necessary for creating a positive peace. As an interdisciplinary field, PACE finds its center in the social sciences, but it also extends to the humanities and the natural and physical sciences. PACE students learn critical thinking related to issues of justice, conflict resolution, security and peace, and steps to effect these goals, including the making and evaluating of policies.

PACE is an individually designed interdisciplinary program that is coordinated by the Spark M. Matsunaga Institute for Peace. Students may either complete a BA degree with a major equivalent in peace and conflict studies through the Liberal Studies Program, or they may earn a peace certificate that is available to undergraduate and graduate students prior to their graduation from UH Mānoa. Both the certificate and major can be designed to accommodate the student's personal goals and interests.

Students taking these courses go on to careers in diplomacy (including the UN and its affiliates), Third World aid and development (research, administration, and fieldwork), mediation services, public relations, defense planning, management operations, industrial relations, education (teaching and administration), welfare and public interest work, journalism, service industries, and, of course, the fields of peace and conflict research, peace education, and peace advocacy. The development of perspectives and skills in peace, justice, and conflict resolution are relevant in the general areas of private business, the arts, national and international nongovernmental organizations, and national, regional and international government bodies.

The heads of private and public bodies, including UH officials, are increasingly calling for people expert in the management of conflict. A rising backlog of court cases, the cost and delay of justice, crime in the streets, domestic violence, disorder in the schools, ongoing conflict in various workplace settings, and people generally unable to cope with the stress of modern living, all contribute to a

pressing need for more peacemakers, mediators, and facilitators capable of resolving conflict with justice.

An appreciation of the diverse cultural perspectives that Asians and Pacific Islanders bring to the study of peace and conflict is featured throughout the PACE program. The island of O'ahu (meaning "the gathering place") nurtures a rich ethnic and cultural pluralism that provides a unique setting for the study and practice of peacemaking and the nonviolent resolution of conflict.

Undergraduate Study

Bachelor's Degree

The equivalent of an undergraduate major in peace and conflict resolution is available through the BA program of liberal studies. For information contact the Matsunaga Institute for Peace or the Liberal Studies Program. Interested students should refer to the "Liberal Studies" section within the Colleges of Arts and Sciences.

Major Requirements

- PACE 210 Survey Peace and Conflict Studies
- POLS 221 Problems of War and Peace
- PACE 345/ANTH 345 Aggression, War and Peace
- PACE 495 Practicum and Internship*
- The remaining 24 credit hours, or eight courses, to meet the major's minimum requirement of 36 credit hours must be selected from either the peace studies or conflict resolution stream as long as at least one course is done from the other stream. For example, a student may elect to do seven conflict resolution courses but would have to do one of the peace studies courses. Or the student may elect to concentrate in the peace studies stream and take one conflict resolution course at a 7/1 ratio. The mix could also be 6/2, 5/3 or 4/4.

Peace Studies Stream

- PACE 373/POLS 373 Nonviolent Political Alternatives
- POLS 353/WS 353 Alternatives to Bureaucracy
- WS 304 Women, War and the Military
- ECON 454 Economics of Cooperation or ECON 466 Growth and Crisis in the Global Economy
- PACE 380 Peace Through Literature*

- PACE 315 Personal Peace
- PACE 410 History of Peace Movements
- GEOG 336 Geography of Peace and War
- COM 459 Topic of Communication and Peace
- BIOL 310 Environmental Issues
- PACE 412 Gandhi, King, and Nonviolence*
- ANTH 423 Social and Cultural Change
- PACE 399 Directed Reading
- PACE 485 Topics in Peace and Conflict Resolution
- PACE 496 Internship*

Conflict Resolution Stream

- PACE 247 Survey of Conflict Management
- PACE 340 Negotiation*
- PACE 447 Mediation Skills: UH Basic*
- PACE 460 Facilitation and Group Process*
- PACE 477 Culture and Conflict Resolution
- PACE 478 International Disputing and International Law*
- SP 455 Conflict Resolution
- COM 340 Intercultural Communication
- POLS 360 Public Law and Judicial Behavior I
- SOC 433 Analysis in Law and Social Change
- POLS 325E International Organizations
- FAMR 350 Leadership and Group Process
- SOC 451 Analysis in Marriage and the Family
- PACE 399 Directed Reading
- PACE 485 Topics in Peace and Conflict Resolution
- PACE 496 Internship*
- A student may not apply towards the major more than 9 credit hours from any combination of PACE 399, PACE 495, and PACE 496.
- A 2.5 GPA must be maintained in the major course work.

Certificate in Peace Studies

To receive a Certificate in Peace Studies, students must take PACE 210, PACE 495, and 9 credit hours from any of the remaining above courses except PACE 496. Courses must be distributed between those emphasizing conflict resolution and those emphasizing social justice or conflict prevention. At least one course should come from a discipline other than PACE. Maintenance of an overall GPA of 2.5 is required in prerequisite and certificate courses.

* A new course submitted but not approved by the Colleges of Arts and Sciences at date of publication.

Philosophy

College of Arts and Humanities

Sakamaki D-301
2530 Dole Street
Honolulu, HI 96822
Tel: (808) 956-8649
Fax: (808) 956-9228
E-mail: philo@hawaii.edu
Web: www2.hawaii.edu/phil

Faculty

- *E. Deutsch, PhD (Chair)—comparative philosophy, Indian philosophy, metaphysics, aesthetics
- *T. Albertini, PhD—Renaissance and early modern philosophy, history of Roman law, Semitic languages
- *R. T. Ames, PhD—Taoist philosophy, Confucian philosophy, ancient Chinese political philosophy, comparative philosophy
- *R. Bontekoe, PhD—metaphysics, epistemology, hermeneutics
- *A. Chakrabarti, PhD—Indian philosophy, philosophy of language, philosophy of mind
- *C. Y. Cheng, PhD—philosophy of language and logic, American philosophy, classical Chinese philosophy, Neo-Confucian philosophy
- *V. Dalmyia, PhD—epistemology, feminist philosophy
- T. Jackson, PhD—specialist, director of philosophy in the schools; logic, comparative philosophy, philosophy for children
- *D. J. Kalupahana, PhD—Indian philosophy, Indian and Chinese Buddhist philosophy, comparative philosophy
- *K. Kipnis, PhD—philosophy of law, social and political philosophy, ethics
- *S. Odin, PhD—Japanese philosophy, comparative philosophy, American philosophy
- *G. R. Parkes, PhD—comparative philosophy (continental European, Chinese, and Japanese), environmental philosophies, philosophies of culture
- *R. C. Roberts, PhD—social and political philosophy
- *J. E. Tiles, PhD—ancient philosophy, American philosophy, philosophical logic, philosophy of science
- *M. E. Tiles, PhD—history and philosophy of mathematics, contemporary French philosophy of science, science and technology

Cooperating Graduate Faculty

R. A. Amundson, PhD—philosophy of science
P. T. Manicas, PhD—political, social philosophy

Degrees Offered: BA in philosophy, MA in philosophy, PhD in philosophy

The Academic Program

Philosophy (PHIL) is an open inquiry that involves the disciplined examination of our most comprehensive goals, standards, and criteria. For example: how should we conduct ourselves in our relations with one

another? (ethics); what standards should we use to assess our institutions? (social and political theory); how may we achieve knowledge and understanding of the world around us? (epistemology, philosophy of science); what are the most general structures of thought and reality? (philosophy of logic and language, metaphysics); and what place does art have, or what place should it have, in human life? (aesthetics). In pursuing these questions, philosophy is often led to confront issues about the ultimate nature of reality and value or to consider possible limitations on our ability to answer or even to ask such questions. Philosophy proceeds with its task in part through contributing to ongoing discussions and debates within disciplines and traditions and also by cross-disciplinary and cross-cultural comparisons.

Students majoring in philosophy work to develop for themselves a comprehensive view of the aspirations and achievements of human culture and in the process are encouraged to acquire the skills of careful reading and interpretation of texts, of writing that conveys clearly their understanding of some issue, and of responding critically to ideas that other people advance. The Department of Philosophy's faculty has expertise in an unusually diverse range of philosophic traditions. The faculty includes specialists in Chinese, Japanese, Indian, Buddhist, and Islamic thought, as well as in many of the important Western traditions. The department as a whole has long been recognized internationally for its comparative work between philosophic traditions.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete 30 credit hours of philosophy courses, including required courses:

- PHIL 110
- Two courses from PHIL 211, 212, 213, or 414 (Alpha)
- One course from PHIL 300 to 318
- One course from PHIL 330 to 380
- Five additional courses above the 100 level (electives)

Minor

Requirements

Students must complete 15 credit hours of philosophy above the 100 level. A minor will have any one of the following themes:

* Graduate Faculty

Asian philosophy; religion and metaphysics; ethics and law; science, technology and values; and humanities and the arts.

For details of which courses fall under these themes, students should consult the department undergraduate adviser.

Graduate Study

The department offers graduate training leading to the MA and PhD degrees. Students with BA degrees may apply to the MA program. Students are accepted directly into the PhD program only if they have already received the MA degree or the equivalent from an accredited institution and have met any other departmental requirements.

Specific requirements for all graduate degrees are detailed in a brochure available from the department upon request.

Whatever their field of specialization, graduate students in philosophy must acquire a thorough knowledge of the history and problems of Western philosophy. On the basis of this foundation, students may further specialize in one of three areas of study: Western philosophy, Asian philosophy, or comparative philosophy.

Although the Western philosophical tradition remains the fundamental frame of reference for the department, the opportunity provided for specialization in the area of Asian philosophy is unique in that the University of Hawai'i is the only institution of higher learning in the United States with a regular program leading to the PhD degree with areas of specialization in Indian, Buddhist, Chinese, Japanese, and comparative philosophy. The area of comparative philosophy is the most demanding; at the PhD level its requirements include proficiency in both the Western and Asian fields. The candidate is expected to gain a mastery of some specific topic that can be approached through the contexts of two or more philosophic traditions.

All graduate students shall develop their course of study in consultation with the chair of the graduate program.

The MA and PhD in Asian philosophy are recognized Western Interstate Commission for Higher Education (WICHE) regional graduate programs. Residents of Alaska, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, Utah, Washington, and Wyoming are eligible, on admission, to enroll at Hawai'i-resident tuition rates.

Master's Degree

The MA program places primary emphasis upon course work and does not involve the writing of a thesis. Only Plan B (non-thesis) is offered.

Admission Requirements

Students seeking admission must have a BA degree, including the equivalent of 30 credit hours in philosophy. Students who lack this preparation must make up deficiencies either before or during graduate study. In the latter case, students will be admitted only conditionally, pending removal of the deficiencies. Deficiencies may also be designated in cases where a student's background does not include a sufficient number and range of courses in Western philosophy. The GRE General Test is required of all program applicants to whom it is accessible.

Degree Requirements

To be eligible for conferral of the MA degree, a student must maintain a minimum GPA of 3.3 while completing at least 30 credit hours of course work, at least 18 of which must be in courses numbered 600 and above. In addition, students submit two or three papers for a culminating exam, which includes an oral component. Also required for the MA degree are four semesters (or the demonstrated equivalent) of at least one philosophically significant language other than English: typically classical Greek, Latin, French, German, classical Chinese, Japanese, Sanskrit, or Pali.

Doctoral Degree

The doctoral program consists of two stages. The first stage is that leading to admission to candidacy; the second, to the awarding of the degree. Normally the first involves at least two years of course work beyond the MA in preparation for departmental and language examinations. The second stage involves writing a dissertation and passing an oral examination in its defense. Students must attain certification for PhD candidacy—that is, fulfill all the requirements for the PhD except for the writing and oral defense of the dissertation—within four years of admission to the PhD program.

Admission Requirements

Students seeking admission must hold an MA degree or the equivalent in philosophy and have earned a minimum GPA of 3.3 in courses taken for the MA. Students may be required to make up deficiencies upon entry into the PhD program (see requirements for MA degree above). The GRE General Test is required of all program applicants to whom it is accessible.

Degree Requirements

To be eligible for conferral of the doctor of philosophy degree, a student must maintain a minimum GPA of 3.3 while completing at least 30 credit hours of course work beyond the requirements for the MA. A minimum of 18 of these credit hours must be taken at or above the 600 level. Students are required to demonstrate competence in each of three general areas: history of philosophy, metaphysics, epistemology, logic, and philosophy of science; ethics, aesthetics, social and political philosophy, and philosophy of law. Course listings made available each semester will indicate the general area or areas within which each course fits. Students are required to pass two examinations in an area related to the subject matter of their prospective dissertation, to complete an original dissertation, and to pass a final oral dissertation defense. In addition, students shall demonstrate proficiency in at least one (and where deemed necessary two) philosophically significant language(s) other than English: typically classical Greek, Latin, French, German, classical Chinese, Japanese, Sanskrit or Pali. Language proficiency examinations will be conducted through the Graduate Division and the department of the University responsible for teaching that language.

Physics

College of Natural Sciences

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Honolulu, HI 96822
Tel: (808) 956-7087
Fax: (808) 956-7107
E-mail: physics@hawaii.edu
Web: www.phys.hawaii.edu/

Faculty

- *J. Gaines, PhD (Chair)—condensed matter, experiment
- *T. Browder, PhD—elementary particles, experiment
- *P. Crooker, PhD—condensed matter, experiment
- *A. Feldman, PhD—physics education
- *F. Harris, PhD—elementary particles, experiment
- *C. Hayes, PhD—condensed matter, experiment
- *M. D. Jones, PhD—elementary particles, experiment
- *L. Kofman, PhD—astrophysics
- *P. K. Lam, PhD—condensed matter, theory
- *J. G. Learned, PhD—particle astrophysics
- J. M. J. Madey, PhD—tree electron laser physics
- *S. Olsen, PhD—elementary particles, experiment
- *S. Pakvasa, PhD—elementary particles, theory
- *M. W. Peters, PhD—elementary particles, experiment

- *W. Pong, PhD—solid state, experiment
- *K. Sattler, PhD—condensed matter, experiment
- *V. J. Stenger, PhD—particle astrophysics
- E. B. Szarmas, PhD—tree electron laser physics
- *X. R. Tata, PhD—elementary particles, theory
- *S. F. Tuan, PhD—elementary particles, theory
- *C. Vause III, PhD—condensed matter, theory
- H. Yamamoto, PhD—elementary particles, experiment
- *D. Yount, PhD—elementary particles, experiment

Affiliate Graduate Faculty

W. Laidlaw, PhD—condensed matter, theory
W. Simmons, PhD—elementary particles, theory

Degrees Offered: BA in physics, BS in physics, MS in physics, PhD in physics

The Academic Program

Physics (PHYS) is the study of matter and energy and how they interact at the most basic levels. Areas include mechanics, optics and lasers, thermodynamics, electricity, magnetism, nuclear phenomena, condensed matter, and elementary particles. Physics is widely regarded as the most basic of all the sciences. The University of Hawai'i at Mānoa offers both the bachelor of arts and bachelor of science degrees in physics. The faculty members teaching the courses are at the forefront of research in physics both in experiment and theory. In the field of elementary particles, some faculty members are doing experiments in Japan to detect neutrino oscillations and studying high-energy gamma rays coming from the stars. Others are involved in experiments at the Beijing (China) accelerator and the KEK accelerator in Japan. In condensed-matter physics, they investigate novel materials, study electrical noise in composites, probe the exotic phases of liquid crystals, and use a scanning tunneling microscope to take pictures of individual atoms. A new research effort in free electron laser (FEL) physics has begun, capable of working at the forefront of medical research, chemistry, material science, or basic physics. Often, the undergraduate physics majors work on these projects along with graduate students and the faculty.

Undergraduate Study

BA Degree

Requirements

Students must complete 40 credit hours, including:

- PHYS 170/170L, 272/272L, 274/274L, 310, 350, 400, 430, 450, and 480/480L
- One course from PHYS 440, 481, or 490

- Two courses from PHYS 305, 475, or 481L
- CHEM 171/171L
- MATH 205, 206, 231, 232, and 311

Upon approval of a physics department adviser and chair, the PHYS 170 through 272L requirements may be satisfied by PHYS 151 through 152L.

BS Degree

Requirements

Students must complete 43 credit hours, including:

- PHYS 170/170L, 272/272L, 274/274L, 310, 311, 350, 400, 430, 450, 480, and 480L
- One course from PHYS 440, 481, or 490
- Two courses from PHYS 305, 475, or 481L
- CHEM 171/171L
- MATH 205, 206, 231, 232, and 311

Upon approval of a physics department adviser and chair, the PHYS 170 through 272L requirements may be satisfied by PHYS 151 through 152L; and requirements for PHYS 450, 480L, 481 (or 440 or 490), and 481L may be modified so as to accommodate special emphasis or interdisciplinary programs for which the major in physics is appropriate.

Minor

Requirements

- PHYS 151 and 152 (plus labs) or PHYS 170 and 272 (plus labs)
- PHYS 274 (lab not necessary)
- 15 additional upper division credit hours, including PHYS 310, 350, and 480
- Grade of C or better in the above courses

Upon recommendation of a physics department adviser and chair, requirements for PHYS 310, 350, and 480 may be modified if an equivalent course is taken in another department.

Graduate Study

This program offers opportunities for study and research leading to the MS and PhD degrees in physics. The staff and facilities are especially aimed toward experimental and theoretical work in elementary particles, electronic structure of solids, liquid crystals, composite materials, low-temperature physics, scanning tunneling microscopy and spectroscopy, and surface science.

Intended candidates for the MS or PhD in physics must present a minimum of 35 undergraduate credit hours in physics, including atomic and nuclear physics,

electromagnetism, mechanics, quantum mechanics, and thermodynamics. Courses in general chemistry and differential equations are also required. Official scores of the GRE General Test and the subject test in physics must be submitted prior to admission.

At least one year of experience as a teaching assistant is required of all MS or PhD candidates. All graduate students are required to attend the weekly departmental seminar.

Master's Degree

Students wishing to terminate their formal education with the MS degree generally select Plan A (thesis) so as to gain some research experience, as well as formal class work. These students are prepared to enter teaching positions at the community college level or industrial and civil service positions at the junior scientist and engineer level.

Students planning advanced graduate work generally complete the Plan B (non-thesis) or Plan C (examination) requirements for the MS degree. At this point most of their formal class work has been completed and further work consists mainly of seminars, directed research, and the dissertation.

Requirements

For the MS Plan A, students must complete 30 credit hours of course work, including (a) a minimum of 18 credit hours of physics courses numbered 600 to 798, including PHYS 610, 650, 670, and 690; (b) minimum of 6 credit hours of thesis; and (c) approved electives, which may be selected from PHYS 699 for a maximum of 2 credit hours and courses in mathematics, chemistry, meteorology, engineering, and philosophy. Other courses can be included on a case-by-case basis at the discretion of the department chair. A final oral examination covers the thesis and related areas and completes the Plan A requirements.

For the MS Plan B, students must complete 30 credit hours of course work, including (a) a minimum of 18 credit hours of physics courses numbered 600 to 798, including PHYS 610, 650, 670, and 690; and (b) approved electives, as in Plan A. A written qualifying examination completes the Plan B requirements.

For the MS Plan C, only the minimum residency requirement must be satisfied. Admission to Plan C requires the approval of the physics graduate program advisory committee. A written qualifying examination and a final oral examination complete the requirements for Plan C.

Doctoral Degree

The PhD degree is essentially a research degree. Students complete an original and significant piece of research and are at the forefront of one area of physics. Students are expected to enter the academic world in a teaching and research capacity or industrial and government research laboratories as senior scientists.

Requirements

To be admitted to the PhD program, students must perform satisfactorily on a written qualifying examination followed by an oral comprehensive examination. The qualifying examination must be taken during the students' first five semesters as regular classified graduate students. Students who fail to perform satisfactorily on the written or oral examinations may repeat them the following year. Students who fail twice cannot continue in the graduate program.

In addition to the courses required for the MS degree, students are responsible for the material covered in PHYS 651 and 671. A scholarly dissertation must be written, and a final oral examination in defense of the dissertation completes the requirements for the PhD.

Political Science

College of Social Sciences

Social Science 640
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-8357
Fax: (808) 956-6877
E-mail: polisci@hawaii.edu
Web: www2.soc.hawaii.edu/pols/

Faculty

- *K. Ferguson, PhD (Chair)—feminist theory, political theory, organizational theory
- *B. Aquino, PhD—Southeast Asian and Philippine politics, women and politics
- *D. Bwy, PhD—political theory, methodology
- *R. Chadwick, PhD—international relations, global modeling, methodology
- *J. A. Dator, PhD—political futures, media, Asian politics
- J. Goldberg-Hiller, PhD—American politics, judicial politics, public policy
- *M. Haas, PhD—Asian politics, development, international relations, methodology, peace studies
- *M. Henningsen, PhD—political theory, European politics, genocide/Holocaust
- *H. S. Kariel, PhD—political theory, media

- *G. Kent, PhD—international relations, development, food and nutrition, children, pedagogy
- *S. Krishna, PhD—comparative politics, international political economy, South Asia
- *Y. Kuroda, PhD—comparative politics, Japan/ West Asia political socialization
- *O. Lee, PhD—Chinese politics, international relations, American politics
- *N. Milner, PhD—law and politics, public policy, conflict studies
- *D. E. Neubauer, PhD—public policy, political economy, health politics
- *L. Nitz, PhD—political economy, public policy, methodology
- *I. S. Rohter, PhD—political ecology, Hawai'i politics, green politics
- *G. Schubert, PhD—political behavior, political theory, politics and the life sciences
- *M. J. Shapiro, PhD—political theory, media, politics of culture
- N. Soguk, PhD—international relations, international organizations, migration, human rights, Middle East
- *C. M. Stephenson, PhD—international organization, security, environment, peace studies
- *D. S. Suh, PhD—comparative politics, comparative communism, Korean politics
- *P. Turnbull, PhD—politics of Hawai'i, American politics, cultural politics
- *J. Wilson, PhD—political philosophy, American politics
- *K. Zhou, PhD—comparative politics, Chinese politics, women and development

Affiliate Graduate Faculty

- C. Morrison, PhD—Southeast Asian international relations

Degrees Offered: BA in political science, MA in political science, PhD in political science

The Academic Program

Political science (POLS) examines politics not only in government and among nations but also in private organizations, businesses, universities, families, language, and daily life. Various methods are used to do this, ranging from the interpretive and historical to the quantitative and statistical.

Political science graduates enter numerous professions: journalism, foreign service, social services, government, law, law enforcement, teaching, civil service, business, librarianship, and research. Undergraduate majors have done all of these and more. So have the department's graduate students, many of whom come from abroad and return to their home countries to become leaders in their fields. The Department of Political Science provides a sound undergraduate education that helps prepare people to think critically

and constructively about the world and to be active, concerned citizens in whatever walk of life they choose. Its internship program permits undergraduates to earn academic credit while working in community or governmental institutions and processes.

At the graduate level, the department stands out in the fields of international relations, political theory, comparative studies, Asian politics, futures studies, and policy analysis. The department is an open, informal place where students, staff, and faculty alike are encouraged to participate in departmental affairs and governance. For further information, call (808) 956-8357 or write to the department.

Advising

Students may write to, or make appointments to see, either the graduate chair or the undergraduate chair, who will discuss the options available and assign students, if necessary, to a faculty member who specializes in a field of study.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete 27 credit hours, including:

- 18 credits at 300 level or above
- Any 100-level POLS course, or POLS 221, or POLS 272
- POLS 300 and 310
- Two courses from POLS 320, 330, 340, 350, 360, 370, and 380

Minor

Requirements

Students must complete 15 credit hours at the 300 level or above, including one course from POLS 300, 310, 320, 330, 340, 350, 360, 370, or 380.

Students should choose one of the 100- or 200-level political science core courses as part of their General Education Core in social sciences, since a 100- or 200-level course is prerequisite for 300-level courses.

Graduate Study

The department has three different graduate degree programs: master's degree Plan A, for which a master's thesis is required; master's degree Plan B, for which a culminating experience is required; and the doctor of philosophy (PhD) program. The department offers

specializations in alternative futures, Asian and Pacific politics, comparative politics, international relations, political behavior, political theory, and public policy.

A completed application includes a statement of purpose from the applicant, three letters of recommendation, transcripts, and scores from the GRE General Test. A paper or some other work that indicates the applicant's writing and analytical abilities is required. Further information regarding the requirements for all three programs is available in a brochure. Write to the graduate secretary for the brochure as well as application information and forms.

The application deadline is **February 1** for admission in the fall semester. No spring semester admissions are taken.

Graduates in political science have entered careers in teaching, research, and service in non-governmental organizations and various levels of government.

Master's Degree

The department offers MA Plan A (thesis) and Plan B (culminating experience) degrees that can be tailored to a student's interests and needs. The MA program invites applicants who are prepared to think critically and constructively about political phenomena. All MA students are required to take three of the following courses regardless of program (Plan A or Plan B): POLS 610, 620, 630, 640, 650, 660, 670, and 680.

Doctoral Degree

The department's PhD program encourages students to pursue specialized interests as well as to broaden their understanding of political phenomena. The department looks for students who are prepared to construct a successful course of study based on their individual interests, in conjunction with appropriate advising and course work. We encourage applicants who approach political questions in a critical and creative manner and who combine work from different specializations and disciplines to pursue their own particular projects.

Honors and Awards

Undergraduate

Thomas Hamilton Memorial Scholarship—\$150 for a student with outstanding scholarship and all-around performance who has completed at least two courses in political theory.

Philip E. Jacob Award—\$500 for the outstanding graduating senior in political science.

Carl Knobloch Prize Fund—\$100 for a student with an excellent academic record who also has an outstanding record of community and/or University service.

Richard Kosaki Student Assistance Fund—\$250, first prize; \$150, second prize; \$100, third prize, for excellence in research, based on papers written as part of political science course work.

Graduate

Norman Meller Award—\$1,500 for fall semester to a graduate student with an outstanding academic record.

Werner Levi Award—\$1,500 for spring semester to a graduate student for meritorious academic achievement.

Harry J. Friedman Memorial Scholarship—for outstanding work in comparative politics.

Population Studies

College of Social Sciences

Social Science 405

2424 Maile Way

Honolulu, HI 96822

Tel: (808) 956-7551

Fax: (808) 956-7738

E-mail: popstudy@hawaii.edu

Web: www2.soc.hawaii.edu/css/dept/ppst

Faculty

*G. Fuller, PhD (Director)—geography

*M. Chapman, PhD—geography

*C. M. Douglass, PhD—urban and regional planning

*N. Etkin, PhD—anthropology

*Y. J. Lee, PhD—sociology

*A. Mason, PhD—economics

*S. Millman, PhD—sociology

*G. Russo, PhD—economics

*C. Stephenson, PhD—political science

Affiliate Graduate Faculty

L. J. Cho, PhD—sociology and economics

M. Choe, PhD—public health

G. Feeney, PhD—population studies

A. Onaka, PhD—population studies

P. Pirie, PhD—population studies

R. Retherford, PhD—sociology

P. Xenos, PhD—sociology

Certificate Offered: Certificate in Population Studies

The Academic Program

Population Studies (PPST) is an interdisciplinary graduate certificate program whose faculty come from University of Hawai'i departments in the College of Social Sciences and the School of Public

Health, from the Program on Population, East-West Center, and from the Department of Health, State of Hawai'i. The Population Studies Program serves both independent graduate study and degree candidates in other University units who wish to understand population processes and to develop special competence in applying the concepts and tools of demography and of their discipline to the study of human populations. The program focuses on the links between population processes and their variable contexts (historical, environmental, cultural, social, economic, and political) in the contemporary world, especially Asia and the Pacific, as well as on the concepts and tools of demographic analysis.

Population Studies consists of a core of basic information and five themes or key issues in population inquiry: demographic methods, health and development, population and environment, reproduction and human resources, and social mobility and spatial dynamics. Each of these is conceived as an overlapping circle to emphasize the exchange of information and ideas about human populations, based on courses and seminars drawn from population studies and the social, health, and human sciences. Each of the five thematic clusters in population has a faculty leader, responsible for facilitating its intellectual integrity and routine operation.

Certificate in Population Studies Requirements

The interdisciplinary graduate Certificate in Population Studies consists of 16 credits of course work, earned with a grade of more than B- in any course, and either a comprehensive examination or a research paper. Specific requirements are as follows:

- A core of four courses (10 credits), including Introduction to Human Population (PPST 650), Methods of Demographic Analysis (PPST 691), Faculty Seminar Series (PPST 649), and the Interdisciplinary Seminar in Population Studies (PPST 750).
- Two courses (6 credits), numbered 600 or above, selected from any of the five thematic clusters in population (demographic methods, health and development, population and environment, reproduction and human resources, and social mobility and spatial dynamics). On petition, the program director may accept 600-level courses or above that are not listed

within any of the five thematic clusters but have significant population content. Courses taken for credit may be applied to both a graduate degree and the interdisciplinary certificate.

- Either a research paper of publishable quality on a population topic or a comprehensive examination in the interdisciplinary study of human populations. Students may choose to enroll for 3 credits of Directed Reading and Research (PPST 699) when undertaking their research paper.

Each year, the program director appoints a committee of three faculty members to both administer the comprehensive examination and assess completed research papers. Four of six questions must be answered in the comprehensive examination, which will be written and followed by an oral discussion. It will be broad in scope and assume basic knowledge of the concepts, substance, and techniques of population. Questions will be concerned with the integration of material, plausible argument, and reflective statement. Research papers must be of publishable quality, and a student choosing this option will have a faculty adviser who is not a member of the assessment committee.

Specializations

Demographic Methods

Provides additional training in the concepts and techniques of demographic analysis. Many Asia/Pacific countries do not have accurate and timely systems of vital registration or have limited or imperfect data on population characteristics. Specialized training allows students to estimate and assess more correctly demographic parameters using these types of data. Courses cover field methods for collecting valid and reliable information about population, as well as survival models, analysis of categorical data, and other state-of-the-art statistical techniques for data analysis. Students taking courses within this cluster should prepare themselves through broad coverage of social statistics.

Health and Development

Explores the physiological, cultural, and social impacts of international development that introduces biomedicine, impacts food producing technology, and affects the political economy of health and health care. Courses in this specialization address physiological and social factors affecting health through the life

cycle; reproduction and health; cultural diversity and health (gender, class, ethnicity; epidemiology of infectious and chronic diseases) including malaria, HIV/AIDS, cardiovascular disease; and the economics of health and health care.

Population and Environment

Considers the relationship of population to the quality of the natural environment and its ability to sustain life. Major themes include the debate over sustainable development and the impact of population growth on land and sea resources, pollution and climate, together with relationships between population and culture, consumption and distribution of resources, and human conflict. Specific issues include use and quality of energy, water and land, deforestation and desertification, agricultural and industrial practices, and urbanization. The cluster focuses on issues of the commons, particularly governance, including the role of international governmental and nongovernmental organizations and social movements.

Reproduction and Human Resources

Examines the dynamics of producing human resources and their interactions with economic, social, and cultural factors. Analyses focus on both the quantity and quality of human resources, their causes and consequences. Topic areas include marriage and family, human fertility, reproductive health, child survival, and the interaction of investment in human capital with economic development. Study of the organization, implementation, and evaluation of family planning programs also forms part of this interdisciplinary cluster.

Social Mobility and Spatial Dynamics

Focuses attention on social mobility in society and over space. It covers mobility both *in situ* and over space within and among social formations. It includes such topics as social stratification and inequality, labor markets and systems, and the spatial dynamics of migration and social change associated with urbanization, rural-urban relations, and regional development. These dimensions of population can be viewed at all social and spatial scales, from household and neighborhood to the urban, regional, national, and international level. Each topic is intrinsically multidimensional and lends itself to interdisciplinary perspectives. Courses are assembled to allow for such perspectives, while keeping consistent attention to spatial processes and patterns of population.

Psychology

College of Social Sciences

Gartley 110
2430 Campus Road
Honolulu, HI 96822
Tel: (808) 956-8414
Fax: (808) 956-4700

Faculty

- *K. A. Minke, PhD (Chair)—human learning, paradigmatic behaviorism, statistics and methodology
- *M. Rapport, PhD (Graduate Chair)—attention deficit disorders, childhood psychopathology, psychopharmacology
- *M. E. Bitterman, PhD—behavioral neuroscience, animal learning
- *D. D. Blaine, PhD—quantitative methods, individual differences in learning and cognition
- *R. J. Blanchard, PhD—behavioral neuroscience, aggression, emotion, fear and anxiety
- *J. G. Carlson, PhD—stress psychophysiology, behavioral medicine, clinical
- *B. Chorpita, PhD—clinical childhood anxiety disorders
- *T. J. Ciborowski, PhD—developmental, sport psychology, cross-cultural
- *R. A. Dubanoski, PhD—developmental, environmental toxins/sensitivities (on leave—Dean of College of Social Sciences)
- *E. Hatfield, PhD—social, emotions, social-psychophysiology
- *S. N. Haynes, PhD—clinical, medical, psychopathology, assessment
- *E. M. Heiby, PhD—clinical depression, compliance assessment, integrated behavioral theory
- *L. M. Herman, PhD—animal behavior/cognition; whales, dolphins
- *L. A. James, PhD—social-personality, library skills, psycholinguistics
- *J. Junginger, PhD—clinical psychology
- *A. J. Marsella, PhD—clinical, psychopathology, cross-cultural
- *C. R. O'Donnell, PhD—community, crime, social ecology
- *R. L., Randall, PhD—statistics
- *H. L. Roitblat, PhD—cognition, comparative cognition
- *S. I. Shapiro, PhD—psychology of knowledge and wisdom, Asian psychology, transpersonal psychology
- C. H. Sophian, PhD—developmental, cognitive development in children
- *G. Tanabe, PhD—community
- *K. M. Vitousek, PhD—clinical, cognitive behavioral approaches, eating disorders
- *D. L. Watson, PhD—self-control, applied social, higher education
- *A. Wyllie, PhD—adult mental illness

Cooperating Graduate Faculty

R. W. Brislin, PhD—social-personality
P. Couvillon, PhD—behavioral neuroscience

B. D. DeBaryshe, PhD—social development, parent-child relations, stress and resilience
P. W. Dowrick, PhD—video research
C. Gotay, PhD—gerontology
V. A. Kameoka, PhD—clinical
J. Mobley, PhD—animal cognition
P. E. Nachtigall, PhD—marine mammal behavior
A. M. Peters, PhD—psycholinguistics

Affiliate Graduate Faculty

J. S. Annon, PhD—clinical
H. S. Bracha, MD—schizophrenia
J. T. Fawcett, PhD—social-personality
E. Kubany, PhD—clinical
W. T. Tsuchima, PhD—neuropsychology

Degrees and Certificate Offered: BA in psychology, MA in psychology, PhD in psychology, Certificate in Clinical Psychology (Respecialization)

The Academic Program

Psychology (PSY) can be defined as the science of mind and behavior. Some psychology majors are preparing to enter graduate school, where they will be trained to become professional psychologists. Others use psychology as a pre-professional major for other fields, such as law or medicine. The majority of psychology majors, however, are using psychology as a general liberal arts major. Psychology is qualified as a discipline for this purpose. An understanding of the spectrum of psychological knowledge, methods, and concepts facilitates and enhances productivity in virtually every area of human endeavor. This understanding also promotes interpersonal skills and sensitivities, as well as critical thinking skills. Collectively, these understandings foster a respect for others, which is a core element of the curriculum of the psychology department.

The University of Hawai'i at Mānoa is fortunate in having a psychology department composed of an unusually large number of internationally recognized figures in the field. Not only do students get to learn from these scholars in the classroom, but many receive direct training in cutting-edge research and the application of psychological knowledge. Areas of concentration include behavioral neuroscience, clinical studies (an APA accredited program), community and culture, developmental psychology, experimental psychopathology, health psychology, marine mammal behavior and biology, marine mammal sensory systems, social-personality, and teaching, learning, and cognition.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete 36 credit hours, including:

- 15 credits at the 300 level or above
- One course in statistics (PSY 210 or SOCS 225)
- One course in methodology (PSY 212 or 311)
- One course from three of these four sets:
PSY 220, 322, 324, 325
PSY 230
PSY 240
PSY 250 or 260
- 3 credit hours in the advanced seminar series (PSY 4X9), excluding PSY 499)

A minimum GPA of 2.5 in psychology must be maintained.

PSY 100 is prerequisite to all other courses except PSY 170 and may be counted toward the major or the social science core requirement, but not both. No more than a combined total of 15 credits of practicum, teaching, and directed research may be counted for the major; no more than 9 credit hours in PSY 499 may be counted. Nevertheless, students intending to do graduate work are encouraged to enroll in PSY 499 and in PSY 408 or 478.

New majors should consult the chair of undergraduate studies as soon as possible for advising. Transfer students must earn at least 15 psychology credit hours at the Mānoa campus.

Graduate Study

The graduate program in psychology is designed to provide students with a strong background in theory, research methodology, and psychological issues. Currently, there are 10 concentrations in which students can receive specialized training: behavioral neuroscience, clinical studies (an APA accredited Program), community and culture, developmental psychology, experimental psychopathology, health psychology, marine mammal behavior and biology, marine mammal sensory systems, social-personality, and teaching, learning, and cognition. Specific details concerning each of the concentrations, their requirements, and faculty research interests may be obtained in one of four ways: (a) by writing to the Department of Psychology, University of Hawai'i, 2430 Campus Road, Gartley Hall, Honolulu, HI 96822, (b) by

faxing your request to (808) 956-4700, (c) by sending an e-mail communication to M. D. Rapport, Chair of Graduate Studies (largo@hawaii.edu), or (d) by accessing the department's Web site (see above address).

Applications are considered only for the fall semester. Applicants should possess a bachelor's degree, have a minimum of 24 credit hours of undergraduate work in psychology (including courses in basic psychology such as research methodology, statistics, and learning, abnormal, social, developmental, personality, cognition, and physiological psychology), a cumulative grade point average of at least 3.0, strong letters of recommendation from professors, competitive general and psychology GRE scores (past applicants admitted as graduate students in the department tend to score at or above the 600 level on the various sub-domains of the GRE), and preferably one to two years of research experience. An application packet and detailed information relevant to the application process can be obtained from the Graduate Chair using the mailing, Fax, or e-mail addresses listed above. Completed applications must be received by the Graduate Division no later than January 1 each year, with the exception of GRE scores (which can arrive during the month of January).

Master's Degree

The master's degree program includes a thesis and at least 32 credit hours of courses specified by the department and specific area of concentration. Detailed descriptions of specific requirements for each area of concentration are contained in the application brochure. The department does not offer a terminal master's degree program in psychology. Only students interested in pursuing a PhD degree are considered for admission. Students with a BA degree are admitted to the master's program and, upon successful completion, petition for entry into the doctoral program. Consult the application brochure for specific details concerning requirements and procedures for degree-seeking candidates.

Doctoral Degree

Students must complete their master's degree (from UH or another accredited institution of higher learning) prior to entering the doctoral program in psychology at the University of Hawai'i. Specific course work and other relevant departmental and concentration specific

requirements are described in detail in the application brochure. Student must pass comprehensive examinations before proceeding to the dissertation.

Additional information concerning changes in the standards, specialization, other requirements, performance standards, and financial assistance is described in the application brochure and is available from the department (see above addresses to communicate your request).

Public Administration

College of Social Sciences

Social Science 631
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-8260
(808) 956-3687
Fax: (808) 956-9571
Web: www2.soc.hawaii.edu/pub/

Faculty

*R. Pratt, PhD (Director)—political science
*D. Foley, PhD—public administration
S. Daniels, PhD—political science

Cooperating Graduate Faculty

D. Callies, JD—intergovernmental regulations
J. Dator, PhD—political science
K. Kim, PhD—planning information systems
K. Lowry, PhD—urban and regional planning
J. Mak, PhD—economics of tourism
N. Milner, PhD—political science
D. Neubauer, PhD—political science

Adjunct Faculty

J. Guden, JD
C. Grandy, PhD

Degree and Certificate Offered: MPA, Certificate in Public Administration

The Academic Program

The public administration (PUBA) program at the University of Hawai'i is designed to enhance leadership in public service in Hawai'i and the Pacific. Located in the College of Social Sciences, it offers a 30-credit master's degree and a 15-credit certificate. The program's format emphasizes interdisciplinary learning, collaborative teaching, and the development of close relationships between participants. It creates an environment in which many of the complex issues facing those with public

responsibilities are addressed while also giving participants specific skills useful to their work.

Financial support for the degree and the certificate is available through the Herman S. Doi Fellowship. For further information, contact the program office in Social Science 631 or call (808) 956-8260 or (808) 956-3687.

Graduate Study

Master's Degree

The master's degree consists of a core year, an individuated concentration, a practicum experience, and a capstone. The core year and capstone must be taken first and last in the program, respectively. Once the program begins in the fall, new admissions are not made until the following year.

The core year consists of an integrated, collaboratively taught curriculum offered in a format that balances lecture and discussion sessions. The curriculum is highly interdisciplinary and integrates a series of topics deemed essential to effective work in public service roles. These include communications, the political-economic context of public institutions, economic processes, public ethics, policy processes, administrative law, bureaucratic structure and organizational change, and the role of personal and organizational culture.

The individuated concentration is intended to balance the common work of the core year. It allows each student to design a program of study built around a theme of special personal and professional interest. The concentration is satisfied by completion of 9 credit hours in course work, directed reading, or directed research. Themes are created by the student working in conjunction with a faculty adviser. Anyone electing the thesis (Plan A) option may substitute concentration credits for thesis work with approval of the faculty adviser.

The practicum is designed to place individuals in a setting where they may compare organizational structure and processes. The length and specific nature of the practicum varies according to the students' experience in public organizations. In some cases placement in one organization may be modified to become work on a project that takes place across several organizations.

The capstone consists of a 1-credit planning seminar during the semester preceding that in which graduation will occur and the concluding 3-credit seminar

itself. The focus of the capstone is on group analysis of a public issue of importance in Hawai'i and the Pacific.

The degree program is of interest to individuals with some experience in public service institutions, such as government and nonprofit organizations, or in positions with a public service component in other institutions. Spaces also are available for people with no experience who wish to enter public service. The program is compatible with the schedules of people working full-time and can be completed in two to three years.

Requirements

MPA candidates must complete 14 credit hours of core requirements, 9 credit hours of individual concentration, 3 credit hours of practicum, and 4 credit hours of capstone. The thesis option may be selected to replace some or all of the concentration credits.

Certificate

Certificate in Public Administration

The certificate is designed for people with experience in public service work who do not wish to obtain a degree.

Those enrolled in the certificate program participate in the core year, at the end of which they create a professional development seminar series. The seminar allows a deeper focus on issues of special interest. There is also the option of arranging a practicum as an additional learning experience, something encouraged by the program.

Requirements

The program is composed of 15 credit hours, 14 of which are taken in the core year and 1 in the professional development seminar series.

Religion

College of Arts and Humanities

Sakamaki A-311
2530 Dole Street
Honolulu, HI 96822
Tel: (808) 956-8299
Fax: (808) 956-9894

Faculty

- *G. Tanabe, PhD (Chair)—Buddhism, Japanese religions
- *H. J. Baroni, PhD—Japanese and East Asian religions
- *D. W. Chappell, PhD—Buddhism, Chinese religions
- *J. P. Charlot, DTh—Polynesian/Hawaiian religions

* Graduate Faculty

*S. C. Crawford, ThD—Asian and Christian ethics, Indian religion

*R. Lamb, PhD—methodology, South Asian religions

*L. A. Siegel, PhD—Indian religions

Cooperating Graduate Faculty

G. D. Panisnick, PhD—Western religions

Degrees and Certificate Offered: BA in religion, MA in religion, Graduate Certificate in Religion

The Academic Program

In keeping with the purposes and ideals of the University, the Department of Religion (REL) endeavors to take advantage of Hawai'i's social and cultural ties with Asia and the Pacific and, simultaneously, to contribute to the enhancement of those ties. We in Hawai'i are the beneficiaries of a rich confluence of diverse ethnic, linguistic, aesthetic, political, and religious traditions. Within this extraordinary polycultural and multireligious milieu, the department serves as a link between the academic community and the many Asian and Pacific religious communities that flourish in the islands: Buddhism, Confucianism, Taoism, Shinto, Hinduism, and Hawaiian and Polynesian religions. Given these resources, Hawai'i is an ideal site and context for a direct study of Asian and Pacific religious phenomena. The Department of Religion is dedicated to the cultivation of a broad humanistic appreciation of a wide range of religious traditions, diverse mythologies, ritual practices, philosophical speculations, ethical imperatives, and institutional histories.

Undergraduate Study

Bachelor's Degree

Undergraduate education in religion includes survey courses in Western, Asian, and Pacific religions. There are also thematic courses dealing with such issues as sexuality and death, politics and ethics, and the relationship between religion and other disciplines, such as anthropology, political science, and sociology.

Requirements

Students must complete 27 credit hours at the 200 level and above, including at least 9 credit hours in 300- and 400-level courses. Required course: REL 300.

Minor

Requirements

Students must complete 15 credit hours at the 300 level and above. Required course: REL 300.

Graduate Study

Master's Degree

In its commitment to both scholarship and pedagogy, the department maintains two graduate programs leading to the MA degree: a thesis-based MA program (Plan A), in which students conduct advanced research in the religious traditions of a selected geographical area in Asia or Polynesia; and a cross-cultural and professional track (Plan B), designed to train students to teach religious studies at the community college level. All students are required to do a semester of fieldwork in religion either in Hawai'i or abroad.

Admission Requirements

Applicants to the MA program in religion must hold a bachelor's degree from an accredited U.S. college or university or its equivalent from a recognized foreign institution of higher learning. An undergraduate major in religion is appropriate but not required. In support of applications for admissions, each student is required to send directly to the department prior to the application deadline (a) three *original* letters of recommendation from referees familiar with his or her *academic* work and (b) a specimen of his or her written work, preferably an academic paper previously written on some topic related to religion.

For complete details on the graduate program in religion, contact the department office.

Plan A (Thesis) Requirements

The thesis program in Asian and Polynesian religions prepares students for advanced research in religion. Required are 30 credit hours including 15 credit hours from the following :

- REL 600 History & Theory of the Study of Religion (3)
- REL 625 Applied Methods in the Study of Religion (3)
- REL 630 Field Research in Religion (3)
- REL 700 Thesis Research (3, 3)

Area requirements (9 credit hours) include at least three 600-level courses in one of the following areas: East Asia, Polynesia, or South Asia.

Students must also complete 6 credits of elective courses, which include other religion department and/or other discipline complementary courses (400 level or above).

In addition, students are required to take two years of the language appropriate to their field of specialization within their area (e.g., Sanskrit, Hindi, Chinese, Japanese, Hawaiian, Samoan, or another Asian or Polynesian language as advocated and approved by the area adviser).

Plan B (Non-thesis) Requirements

The professional degree program is for students wishing to teach in the community colleges or at the high school level. Students must complete 30 credit hours, including 15 credits from the following courses:

- REL 600 History & Theory of the Study of Religion (3)
- REL 630 Field Research in Religion (3)
- REL 650 Seminar on World Religions (3)
- REL 680B Teaching Religion (3)
- REL 680C Teaching Religion Practicum (3)

Area requirements include 9 credits in at least one 600-level course in each of three different areas: East Asia, Polynesia, and South Asia.

Students must also complete 6 credit hours of electives, which may include other religion department and/or other discipline complementary courses (400 level or above).

In addition, Plan B students are encouraged, but not required, to study a language.

Certificate in Religion

The certificate program is a 15-credit program for students who want to pursue graduate study in religion but who do not necessarily need or want a master's degree. Application requirements are the same as for the MA degree program.

The program consists of required and elective courses. The required courses are REL 600 History and Theory of the Study of Religion (3 credits) and REL 650 Seminar on World Religions (3 credits). The elective courses, which must total 9 credits, are grouped into two options. In the world religions option, students must take at least one graduate-level course in the following three different areas: (a) East Asia, (b) Polynesia, and (c) South Asia. In the area specialization option, students must take at least three graduate-level courses in one of the following areas: (a) East Asia, (b) Polynesia, or (c) South Asia.

* Graduate Faculty

Students, after completing the requirements for the certificate, may apply for admission to the MA program in religion. If they are accepted into the program, their course credits may be applied to the MA degree, but then the certificate will not be awarded.

Russian Studies

College of Languages, Linguistics and Literature

Moore 458

1890 East-West Road

Honolulu, HI 96822

Tel: (808) 956-4167

Certificate Offered: Certificate in Russian Studies

To receive a Certificate in Russian Studies a student must complete certain requirements in addition to a regular major. These are advanced reading and conversation courses in Russian, equivalent to at least the third-year level, and 9 credit hours of work, exclusive of courses taken as part of the major, chosen from an approved list of courses. For more information contact Professor James E. Brown, Department of European Languages and Literature, 458 Moore Hall, (808) 956-4167.

Second Language Acquisition

College of Languages, Linguistics and Literature

Department of English as a Second Language

Moore 570

1890 East-West Road

Honolulu, HI 96822

Tel: (808) 956-8610

Fax: (808) 956-2802

Web: www.lll.hawaii.edu/esl

Faculty

*C. Chaudron, PhD (Chair)—psycholinguistics, discourse analysis, second language reading and writing, classroom research, and research methods

*D. Ashworth, PhD—Japanese, second language acquisition and pedagogy, dialectology and sociolinguistics

*F. Bail, PhD—human learning and development, instructional formats

*A. Bayer, PhD—language and literacy in education

- *J. Bilmes, PhD—discourse analysis, Thai sociolinguistics and pragmatics, conversational analysis
- *R. Bley-Vroman, PhD—second language analysis, interlanguage syntax, formal models of second language acquisition
- *J. D. Brown, PhD—second language testing, research methods, curriculum design
- *H. Cook, PhD—Japanese sociolinguistics, discourse analysis, language socialization and pragmatics
- *G. Crookes, PhD—classroom teaching, classroom-centered research, materials and syllabus design, discourse analysis, methodology of science
- *K. Davis, PhD—qualitative research, language policy and planning, literacy, bilingual education
- *R. Day, PhD—second language pedagogy, learning and use, classroom research, discourse analysis, teacher training, pedagogical grammar
- *D. Eades, PhD—ethnography of communication, interactional sociolinguistics, non-standard language varieties, especially in education, language, and law
- *M. Forman, PhD—ethnographic linguistics, Philippine studies
- *T. Hudson, PhD—language testing, reading, methods and materials, ESP, research methods
- *R. Jacobs, PhD—English syntax, pedagogical grammar, structure of text, Amerindian and Pacific languages, linguistic theory, literature teaching
- *S. Jacobs, EdD—teaching of writing to native and nonnative speakers of English, acquisition of literacy, text analysis
- *K. Kanno, PhD—Japanese second language acquisition, pedagogical grammar, language analysis
- *G. Kasper, PhD—second language curriculum, discourse analysis, interlanguage pragmatics, qualitative second language research methods
- *Y. C. Li, PhD—Chinese syntax and semantics, second language learning and testing
- *M. Long, PhD—second-language learning, classroom research, second language research methods, methodology, materials
- *R. Moody, PhD—Portuguese and Spanish, second language learning, applied linguistics
- *W. O'Grady, PhD—syntax, language acquisition, Korean
- *A. Peters, PhD—child first- and second-language acquisition, language socialization, biological foundations of language
- *T. Ramos, PhD—Philippine linguistics, second language learning and teaching, child language acquisition, multilingualism, sociolinguistics
- *K. Rehg, PhD—phonology, bilingual education, Micronesian linguistics
- *H. Roitblat, PhD—cognition, comparative cognition
- *R. Schmidt, PhD—second language learning, sociolinguistics and ESL, second language phonology, Arabic, Portuguese

*K. Wolfe-Quintero, PhD—interlanguage analysis, writing pedagogy

*S. Zhang, PhD—research methodology, design and statistics, computer applications, Chinese-English translation and interpretation

Degree Offered: PhD in second language acquisition

Academic Program

The PhD program in second language acquisition (SLA) is administered by the Department of English as a Second Language. The graduate faculty of the program is interdisciplinary—drawn not only from the ESL department but also from faculty in the Departments of Teaching Education and Curriculum Studies, East Asian Languages and Literatures, Educational Psychology, English, European Languages and Literature, Hawaiian and Indo-Pacific Languages, Linguistics, and Psychology. The University also offers an MA in ESL (see the “English as a Second Language” section within the Colleges of Arts and Sciences for more information).

The courses in the program are organized into four areas of specialization:

1. Second Language Analysis—Structural analysis of learners' language development; comparison of native and nonnative languages; second-language varieties; differences arising from social and geographical contexts; phonological, grammatical, and discursal properties; typological factors; putative universals.
2. Second Language Learning—Studies of the biological, psychological, social, and cultural factors in the language-learning process; the role of universals; interlanguages; the processes of comprehension and production.
3. Second Language Use—Studies of the social functions of second and foreign languages; pidgins, creoles, and dialect variation; roles of social and geographical contexts; pragmatics; discourse analysis; cross-cultural and inter-ethnic communication; sociopolitical factors.
4. Second Language Pedagogy—Research into language-learner needs (including immigrant needs); formulation of needs-based curriculum objectives and syllabi; computer-aided instruction; program administration; evaluation and language assessment.

Graduate Study Doctoral Degree

The basic requirement for admission into the PhD program is the completion of an MA in ESL, applied linguistics, or second- or foreign-language education. Applicants with graduate degrees in such related disciplines as anthropology, education, English, modern languages, linguistics, and psychology are also welcome. In addition to the admission requirements of the Graduate Division, the SLA PhD program requires (a) letters of recommendation (three of which should be from academic sources); (b) copies of an MA thesis, publications, or other research; (c) a statement of research interests; (d) a brief description of relevant professional experience and language skills; and (e) GRE General Test scores (for both native and nonnative speakers of English). Applicants whose native language is not English must score at least 600 on the Test of English as a Foreign Language (TOEFL).

Students are normally admitted for the fall semester, but spring admission is possible in special cases. Candidates are encouraged to apply early. There are various sources of financial aid. The program strives to provide financial support for the best qualified doctoral students throughout their course of studies by means of research and teaching assistantships. Write to the ESL department for additional information.

Requirements

Students work closely with their advisers and doctoral committees in defining their individualized programs. In order to establish a common core of expertise among students, specific courses are designated according to the background of each student. The basic preparation expected as part of their MA training is at least one graduate-level course in each of the four areas of specialization comparable to the courses indicated as such below. Beyond basic preparation, each doctoral student's program must include a minimum of two graduate-level courses in each of three of the subfields of specialization and a minimum of two graduate-level courses in research methods. At least two courses must be at the 700 level.

Doctoral candidates must pass a comprehensive examination before the dissertation and a final oral examination defending the dissertation.

Students must also demonstrate competence in two languages other than their native language. The languages chosen should be relevant to their program or professional plans. This requirement may be satisfied by course work or examination. Reading knowledge is required for one language. This part of the requirement must be satisfied before advancement to candidacy. For the second language, either reading competence or oral proficiency will fulfill the requirement, which must be satisfied before the comprehensive examination is taken. A specified level of computer literacy may also satisfy the second language requirement. Where the doctoral committee considers it appropriate for specific programs, additional language requirements may be imposed.

The following is a partial listing of courses available in each of the four subfields of second language acquisition. These are listed to indicate the range of offerings at the University of Hawai'i at Mānoa and to guide students and their doctoral committees in designing plans of study. The courses listed do not constitute a closed list; other courses may be approved by students' doctoral committees. In addition, the majority of the 600- and 700-level courses listed have prerequisites, which students may be required to take in the appropriate departments.

Second Language Analysis

- ESL 640 English Syntax (3) (basic preparation)
- ESL 642 Comparative Grammar and Second Language Acquisition (3)
- ESL 680N Second Language Analysis
- CHN 641 Contrastive Analysis of Mandarin & English (3)
- CHN 642 Contrastive Analysis of Mandarin & English (3)
- CHN 750C Research Seminar in Chinese Language: Structure (3)
- EL 681A Topics in Language (3)
- ENG 745 Seminar in English Language (3)
- JPN 634 Advanced Japanese Syntax & Semantics (3)
- JPN 650C Topics in Japanese Linguistics: Japanese/English Contrastive Analysis (3)
- LING 650 Advanced Linguistic Analysis (3)
- LING 651 Advanced Linguistic Analysis (3)

Second Language Learning

- ESL 650 Second Language Acquisition (3) (basic preparation)
- ESL 673 Applied Psycholinguistics & SLA (3)
- ESL 680E Second Language Learning (3)
- ESL 750 Seminar in Second Language Acquisition (3)
- EDEP 768C Seminar in Educational Psychology: Learning (3)

- LING 616 Biological Foundations of Language (3)
- LING 670 Developmental Linguistics (3)
- LING 750Q Seminar: Language Acquisition (3)
- PSY 726 Seminar in Cognitive Science (3)

Second Language Use

- ESL 660 Sociolinguistics & Second Languages (3) (basic preparation)
- ESL 680U Second Language Use (3)
- ESL 760 Seminar in Second Language Use (3)
- CHN 750E Research Seminar in Chinese Language: Sociolinguistics (3)
- JPN 633 Japanese Sociolinguistics (3)
- LING 635 Language Variation (3)
- LING 750S Seminar: Sociolinguistics (3)

Second Language Pedagogy

- ESL 613 ESL Listening & Speaking (3)
- ESL 614 ESL Writing (3)
- ESL 620 ESL Reading (3)
- ESL 630 Program Development in ESL (3)
- ESL 671 Research in Language Testing (3)
- ESL 680P Second Language Pedagogy (3)
- ESL 710 Teaching English as a Second Language (3) (basic preparation)
- ESL 730 Seminar in English as a Second Language (3)
- CHN 750B Research Seminar in Chinese Language: Teaching Methods (3)
- EALL 601 Methods of Teaching East Asian Languages (3)
- EDCI 631 Content Area: Language & Learning (3)
- EDCI 641 Seminar in Foreign Language (European Languages) (3)
- EDCI 667A Seminar in Curriculum (3)
- EDEP 768G Seminar in Educational Psychology: Educational Evaluation (3)
- ENG 680 Theory & Practice of Teaching Composition (3)
- ENG 740 Seminar in Composition Studies (3)
- JPN 650P Topics in Japanese Linguistics: Pedagogy (3)

Research Methods

- ESL 670 Second Language Research Methods (3)
- ESL 672 Second Language Classroom Research (3)
- ESL 675 Second Language Interpretive Qualitative Research
- ESL 678 Microanalysis in Second Language Research
- ESL 680R Second Language Research Methodology (3)
- EALL 603A Bibliographical & Research Methods (East Asian Languages and Literatures) (3)
- EDEP 602 Computer Analysis of Data (3)
- EDEP 604 Multiple Regression in Behavioral Research (3)
- EDEP 768H Seminar in Educational Psychology: Research Methodology (3)
- EL 630A Seminar in Research Methods (European Languages) (3)
- LING 630 Field Methods (3)

* Graduate Faculty

Sociology

College of Social Sciences

Social Science 247
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-7693
Fax: (808) 956-3707
E-mail: socdept@hawaii.edu
Web: www2.soc.hawaii.edu/soc

Faculty

- *K. Ikeda, PhD (Chair)—evaluation research, social change, ethnic relations
- *H. R. Barringer, PhD—theory construction, migration and assimilation, comparative sociology (Korea)
- *D. B. Chandler, PhD—sociology of law, victimology, conflict resolution
- *L. Edles, PhD—sociological theories, cultural analysis and political sociology
- *C. M. Endo, PhD—social stratification and mobility, methodology
- *D. T. Johnson, PhD—criminal justice, comparative sociology (Japan), law and society
- *H. Koo, PhD—development, social stratification, comparative institutions
- *Y. J. Lee, PhD—methods, demography, family, gender stratification, aging/life-course, East Asia
- *P. T. Manicas, PhD—theory, conflict, sociology of knowledge and political sociology
- *A. B. Robillard, PhD—Pacific Basin health development, ethnomethodology
- *L. O. Ruch, PhD—formal organization, sex roles, victimology
- *P. G. Steinhoff, PhD—conflict theory, comparative sociology (Japan)
- *D. W. Swift, PhD—sociology of education, telecommunications
- *E. L. Wegner, PhD—social psychology, sociology of medicine and aging
- *M. G. Weinstein, PhD—sociology of community, field methods, sociology of knowledge
- *S. Yeh, PhD—urban and population studies

Cooperating Graduate Faculty

- L. B. Arthur, PhD—design and society
- M. Chesney-Lind, PhD—criminology, gender and women's issues
- J. Chinen, PhD—women and work intersection of race, class and gender, race and ethnic relations
- S. Millman, PhD—demography
- F. S. Odo, PhD—Asian immigration to the United States, Japanese in Hawai'i
- D. W. Wood, PhD—health services administration and planning

Affiliate Graduate Faculty

- L. J. Cho, PhD—demography, human ecology
- C. T. Hayashida, PhD—gerontology, medical, health services and policy
- B. Koppel, PhD—rural sociology, social organization of agriculture
- *K. A. Joe Laidler, PhD—criminology, deviance, sociology of law, methodology
- Y-S. F. Lee, PhD—environmental sociology
- J. Leon, PhD—survey research

- K. O. Mason, PhD—demography, gender, research methods
 R. D. Retherford, PhD—population, social change
 M. Sakurai, PhD—mathematical decision-making models, operations research, game theory
 *A. So, PhD—China, development, Chinese Americans
 P. S. Xenos, PhD—social demography, comparative social stratification

Adjunct Faculty

- P. Adler, PhD—conflict management, community studies
 J. Dannenberg, JD—law and society
 J. Manis, PhD—social psychology, social problems

Degrees Offered: BA in sociology, MA in sociology, PhD in sociology

The Academic Program

Sociology (SOC) is the study of how society organizes itself and how various groups interact with each other and the consequences of these processes. Sociology's subject matter includes marriage and family patterns, race and ethnic relations, demography, social change, class structure, formal organizations including bureaucracies, value systems, conflict, deviant behavior, and the people and institutions of other societies.

Sociology uses a range of research techniques for studying social phenomena that can be applied to many areas, whether one is interested in the incidence of crime, client satisfaction, policy evaluations, or demographic trends. In addition to preparing people as professional sociologists in academic settings, sociology is an excellent background for careers in law, social work, public health, urban planning, public administration, and other fields. The graduate program provides students with a foundation in basic theory and methods of research. In addition, faculty and advanced graduate students are involved in several broad areas of sociological interest: the comparative sociology of Asia; population studies; the study of crime, law, deviance, and human services in the United States; aging and medical sociology; and race and ethnic relations.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete a prerequisite introductory sociology course and 30 credit hours of upper division courses, including:

- 9 credit hours at the 400 level
- SOC 300 and 321

- One course from SOC 475, 476, 478, or SOCS 225 (Note: SOCS 225 is a lower division course and cannot be counted toward required upper division credit hours)

Consult the department for graduate and career opportunities.

Minor

Requirements

Students must complete a prerequisite introductory-level sociology course and 15 credit hours, including:

- SOC 300
- One 400-level course
- Three other upper division sociology courses

All courses must be passed with a grade of C or better.

Graduate Study

Two programs of graduate study in sociology are offered: a PhD program, intended to provide a professional basis for research and university teaching, and an MA program, designed to offer a general sociology curriculum and specialized areas of study relevant to career lines other than university scholarship. Applicants for graduate study in the department must specify which program they wish to enter. Letters of recommendation and GRE General Test scores are required of all applicants; scores for the GRE subject test in sociology are not required but are recommended. A sample of written work is also required of applicants to the PhD program. An undergraduate major in sociology is not required for admission, but some sociology background is recommended. Makeup course work may be required in some cases. Applications will be accepted for either fall term or spring term admission. The application deadline for admission is **February 1** for the fall semester and **September 1** for the spring semester. The department also provides a more detailed statement of its graduate degree programs and procedures. Persons interested in applying should request a copy of *A Program of Graduate Study* from the department.

Master's Degree

The department offers the MA Plan A (thesis) and MA Plan B (non-thesis).

Plan A (Thesis) Requirements

The general MA curriculum in sociology (Plan A) should prepare the student for

possible positions in government and private industry, especially in research activities. In addition, preparatory training is provided to those who aspire to a doctoral degree, but the general MA candidate cannot assume that satisfactory completion of this curriculum will automatically lead to placement in the department's PhD program.

The Plan A program aims to provide the student with a firm foundation in sociological theory, methods of social research (including statistics), and the application of theory and methods to various areas of study.

A minimum of 24 credit hours of course work is required for this program, with an additional 6 credit hours for thesis (SOC 700). All candidates are required to take at least one course each in the areas of sociological theory, research methodology, and social statistics. A minimum of 12 credit hours must be taken in a subfield that reflects the student's special interests. All courses credited toward the 30-credit hour minimum required for the MA degree must be passed with a grade of B or better. At least 12 credit hours of the 30 must be at the 600 level or higher (exclusive of the 6 credit hours for thesis).

The first semester's work is planned in consultation with the graduate chair or an interim adviser appointed by the graduate chair. During the first semester, under the guidance of the graduate chair or the interim adviser, the student prepares a statement outlining a study plan that reflects his or her special interests and meets the credit requirements of the program. Also, the graduate chair or the interim adviser assists in forming the student's three-member thesis committee. One member of the thesis committee may, but need not, be from outside the department. The thesis committee approves the thesis topic, supervises thesis work, conducts the final oral examination in defense of the thesis, and certifies the completion of the thesis, after which the student is certified as having completed the MA degree program in sociology.

Plan B (Non-thesis) Requirements

Plan B (non-thesis) is offered only in the specialized area of population studies. The population studies program is designed to provide practical training in demographic techniques and to teach the student facts and theories of population studies. Details regarding this area may be obtained from the sociology department.

Doctoral Degree

This is an academic-oriented program. It is designed to provide the student with a firm foundation in sociological theory, methods, and research so the student is prepared to engage in professional research and university teaching.

The course requirement for the PhD program is 33 credits (eleven courses), comprised of (1) five core courses in theory and methods, (2) five substantive courses at the 600 level or above, and (3) one course of SOC 699. The student can complete this 33-credit requirement in either Phase I or Phase II of the PhD program. All courses must be passed with a grade of B or above, and the student must maintain a B average (3.0 GPA) for continued registration.

The first phase of the PhD program provides basic training in theory, methods, and research. The requirement in this phase is to complete the five core courses in theory and methods, and it is recommended that courses at the 400 level or above and one course of SOC 699 be taken. In addition, the student submits a tutorial paper and another term paper. At the end of this phase of work, the student goes through a qualifying review. After passing this qualifying review, the student is allowed to proceed to complete the second phase of the PhD program.

This second phase provides advanced training in areas of concentration and dissertation research. The course requirement in this phase is—if the student has not completed it in Phase I—to take 15 credits (five courses) of substantive courses at the 600 level or above. In addition, the student is required to write and present a research paper of the format and quality publishable in a professional journal, take written and oral comprehensive examinations on two selected areas of concentration, write a dissertation proposal, finish a PhD dissertation, and orally defend the PhD dissertation.

Requirements for Phase I

30 credits of course work, including:

- Five core courses (15 credits) in theory and methods
- Four other social science courses (12 credits) at the 400 level or above, excluding SOC 699
- One course of SOC 699 (3 credits)

In the second or third semester, the student takes a directed reading course for the purpose of preparing a tutorial paper.

One Tutorial Paper and One Term Paper. By the beginning of the second

semester, the student should meet with the temporary faculty advisers to plan his or her guidance committee. The three-member guidance committee may be comprised entirely of graduate faculty in the Department of Sociology or, if desired, two from inside the department and one from outside.

In the second or third semester, the student will take a directed reading course (SOC 699) to prepare a tutorial paper to be submitted for qualifying review. The guidance committee should include the faculty member with whom the student takes SOC 699.

In the fourth semester, the student selects one of the best term papers he or she has written while doing course work, makes revisions, and submits it along with the tutorial paper he or she has prepared through SOC 699 to the guidance committee for evaluation.

The guidance committee then evaluates the student's performance to determine whether the student should be granted an MA degree. The guidance committee makes this decision on the basis of (1) fulfillment of the 30-credit requirement, which includes 18 credits of courses at the 600 level or above by the fourth semester; and (2) the quality of the two papers submitted. After the guidance committee makes the decision to grant the MA degree, the student may request the graduate chair to certify completion of the MA degree en route (Plan B). Students who already hold an MA in sociology from the University of Hawai'i or another institution may not exercise this option.

Qualifying Review. If the student wishes to proceed to Phase II of the PhD program, the student should request the chair and members of the guidance committee to write a letter of evaluation to the qualifying review committee no later than the sixth week of the fourth semester. The chair of the student's guidance committee may submit a petition to the graduate chair for extension beyond the fourth semester to take the qualifying review.

Each semester, a department-wide qualifying review committee is formed by the sixth week of the semester. This committee evaluates students wanting to continue in the PhD program based on the following information: (1) the student's grades, especially from the required core courses; (2) the two papers submitted by the student; and (3) letters of evaluation from the chair and members of the guidance committee.

The qualifying review committee makes the following evaluation on the student: Honors, Pass, Fail.

When the student who receives a "Pass" or above will be allowed to proceed to fulfill the PhD requirements in Phase II. Should the student receive a "Fail," it will be reported to the Graduate Division.

The student who failed may request a second qualifying review. Dismissal from the PhD program is final if the student receives a second "Fail" from the qualifying review committee.

The PhD Committee. After the student has passed the qualifying review, the graduate chair should immediately assist the student in selecting the chair of his or her PhD committee. The PhD committee chair will assist in forming a five-person PhD committee, including at least one member, but no more than two members, from outside the department.

Requirements for Phase II

In order to prepare the student for advanced training in areas of concentration and serious dissertation research, a total of five substantive courses (15 credits) at the 600 or 700 level (excluding SOC 699) are required for the PhD program. A substantive course is defined as any course not specifically classified as theory or methods. The student may have already taken some substantive courses in Phase I. However, if the student has not fulfilled this five substantive course requirement prior to the qualifying review, he or she must fulfill it before submitting the dissertation proposal.

The Research Paper. The PhD committee will aid the student in developing a research paper that meets the standards and the format implied by the term "publishable journal article." This research paper can be an extension of an earlier paper used for the qualifying review at the end of the MA Program en route.

Upon approval of the research paper, the student must arrange for presentation of the research paper (in any public academic forum). The presentation gives the student the experience of intellectual exchange in a professional setting. Public presentation of the research paper must be fulfilled before submitting the dissertation proposal.

Comprehensive Examination.

Upon approval of the research paper, the student takes the comprehensive examination from the PhD committee. It is composed of two parts: written and oral.

The written comprehensive examination will cover two broadly defined

substantive areas, as determined by the student and the PhD committee. The student develops a bibliography for each area, which may serve as a basis for preparing the substantive areas.

The PhD committee makes up three to five questions from the two selected areas of concentration. The student picks up the questions from the graduate secretary on a Monday morning. The student must return the answers to the graduate secretary by the following Monday at noon.

The PhD committee evaluates the written examination and then proceeds to hold a closed oral examination to determine whether or not the student is prepared to undertake dissertation research.

On the basis of the written and oral examinations, the PhD committee renders a decision on the student's overall performance on the comprehensive examination. The decision will be either "Honors," "Pass," "Conditional Pass," or "Fail."

Should the student fail the comprehensive examination, the failure must be reported to the Graduate Division. The student may take the comprehensive examination a second time after consultation with the graduate chair. Dismissal from the program is automatic if the student fails the retake examination.

Prospectus and Dissertation. After successful completion of the comprehensive examination, the student is admitted to PhD candidacy and proceeds to the dissertation prospectus.

By now, the candidate should have developed some ideas about research interests, data, and methods. The prospectus is prepared with the help of the student's PhD committee. The completed prospectus is then evaluated by the student's PhD committee. The committee makes the final decision on the acceptability of the prospectus.

The dissertation itself should represent an original contribution to the field of sociology in the form of a monograph or a major journal article.

Dissertation Defense. Examination procedures for the dissertation defense are described in the *Graduate Bulletin*. Departmental options are as follows:

- recommend approval as is or with minor revisions, in which case the candidate files a copy according to Graduate Division requirements;
- recommend major revisions or rewriting, in which case a second dissertation defense will be scheduled; or

- recommend that the PhD not be awarded.

The original copy of the dissertation must be submitted to the Graduate Division. In addition, the department requires a copy for its files.

Speech

College of Arts and Humanities

George 326
2560 Campus Road
Honolulu, HI 96822
Tel: (808) 956-8202
Fax: (808) 956-3947
Web: www.hawaii.edu/speech

Faculty

- *M. D. Miller, PhD (Chair)—persuasion and social influence, quantitative methods
- *K. S. Aune, PhD—relational management, emotion
- *R. K. Aune, PhD—message and information processing, encoding and decoding in relational communication and social influence, research methods
- *R. E. Cambra, PhD—interpersonal and instructional strategies, negotiation, intercultural
- *A. S. E. Hubbard, PhD—verbal communication, conflict and relational management, research methods
- *M. S. Kim, PhD—intercultural/international communication, persuasion and social influence
- R. S. Klinge, PhD—persuasion and social influence, health communication
- *T. R. Levine, PhD—relational, social influence, research methods
- *K. Nishiyama, PhD—intercultural communication
- *W. F. Sharkey, PhD—family communication, interpersonal and social relations

Cooperating Graduate Faculty

- R. Bristen, PhD—cross-cultural communication
- J. H. Bentley, PhD—critical methods
- J. G. Carlson, PhD—behavioral medicine
- T. Hilgers, PhD—discourse evaluation, language production, comparison of written and oral communication

Degrees Offered: BA in speech, MA in speech

The Academic Program

The Department of Speech (SP) has as its primary objectives the development of knowledge in and instruction concerning the process of speech communication. This involves three fundamental areas of emphasis. The first area is human message

processing, which involves understanding the function and structure of the various codes, verbal and nonverbal, used to form messages in speech communication, as well as examining the encoding and decoding processes involved in speech communication. The second is relational communication, which focuses on factors that influence growth, maintenance, and termination of relationships. The third is social influence, dealing with the processing of beliefs, attitudes, and/or behavioral modification, including gaining compliance, conflict resolution, persuasive campaigns, and propaganda.

Speech is predominantly a discipline of systematic, purposeful thinking and communicating. Students obtain a liberal education of considerable breadth and depth in regard to speech communication theory. Furthermore, they are afforded ample opportunity to develop their communicative skills by applying theory in such diverse activities as interviewing, group discussion, organizational communication, intercultural communication, public speaking, interpersonal communication, debate, and performance of literature. Indeed, the basic philosophy of this department—and it is stressed in every course and co-curricular program offered—is that there is no surer preparation for professional life and participation in society than an education that enhances the ability of the individual to maintain lifelong learning and the skills to communicate effectively.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete 33 credit hours, including:

- SP 201, 251, 302, 381, 364
- SP 370 or SP 470

SP 201 and 302 should be taken no later than the semester after the major is declared. SP 151 and SP 200 do not count toward the 33-credit-hour minimum.

Minor

Requirements

Students must complete 15 credit hours of speech, including:

- SP 381 and 364
- SP 370 or SP 470
- 6 credit hours of non-introductory elective courses

Graduate Study

Master's Degree

The department offers an MA focusing on interpersonal and organizational relations. Course work, seminars, and student research in the program develop a cross-situational understanding of theory and research in the three areas central to the discipline: message processing, relational communication, and social influence.

All applicants for the MA program in speech must supplement the application and transcripts required by the Graduate Division with three letters of recommendation (preferably from professors with whom the applicant has worked), a one-page statement of goals, and the GRE General Test scores. These supplementary items should be sent directly to the department.

Intended candidates for the MA should have a strong undergraduate preparation in speech or a closely allied discipline. Students who lack this preparation must make up deficiencies either before or during graduate study. In the latter case, the student will be admitted conditionally, pending removal of the deficiencies.

Further details on the program and the faculty, as well as any changes in course offerings, may be requested from the department.

Requirements

The department offers both Plan A (thesis) and Plan B (non-thesis) programs. Plan A requires a minimum of 30 credit hours of graduate work, at least 24 of which must be in speech courses numbered 600 and above, including 6 credit hours of SP 700 Thesis Research. Plan B requires a minimum of 30 credit hours of graduate work, at least 24 of which must be in speech courses numbered 600 and above. Speech courses numbered 400 to 499 and courses from allied disciplines may be counted toward the degree only with prior consent of the graduate chair. SP 601 and 602 are required for both Plan A and Plan B programs.

For graduation, each candidate must present an acceptable thesis (applied research report for Plan B) and must pass a final oral examination based on the thesis for Plan A or on course work and the research report for Plan B.

Theatre and Dance

College of Arts and Humanities

Kennedy Theatre 115
1770 East-West Road
Honolulu, HI 96822
Tel: (808) 956-7677
Fax: (808) 956-4234
Web: www.hawaii.edu/theatre

Faculty

- *E. Wichmann-Walczak, PhD (Chair)—Asian theater
- *M. Boyd, MFA—technical theater
- *J. Brandon, PhD—Asian theater
- *J. Burk, PhD—dramatic literature, theory
- *G. Cannon, AB—acting, directing, TV/film
- *W. D. Carroll, PhD—playwriting, directing, theory
- *J. Dodd, MFA—scene design
- *S. Finney, MA—costume design
- *E. Fisher, MA—modern techniques, dance history, choreography
- *P. Gaither Adams, MFA—modern dance, choreography
- *P. Hunt, EdD—dance and theater for children
- *T. Hunt, PhD—theater for children, puppetry, creative drama
- *T. Knapp, Dipl—acting, directing
- *G. Lizenbery, BFA (Director of Dance)—modern dance, kinesiology
- *R. Long, PhD—Asian theater, acting
- *L. O'Malley, PhD—theater history, dramatic literature
- K. Pauka, PhD—Asian theater
- *J. Van Zile, MA—dance ethnology, notation

Affiliate Graduate Faculty

- M. Cristofori, MA—theory and dance history
- H. Glass, MA—improvisation, choreography
- P. Leong, MA—Asian theater, movement
- M. Wong, MA—modern dance, choreography

Degrees Offered: BA in dance, BA in theatre, BFA in dance theatre, MA in dance, MA in theatre, MFA in dance, MFA in theatre, PhD in theatre

The Academic Program

The Department of Theatre (THEA) and Dance (DNCE) is comprised of two separate but related disciplines.

Theater includes the study of dramatic literature and theory; acting and directing; stage, costume, and lighting design; stagecraft; playwriting; and Asian and youth theater. Imaginative and creative individuals interested in the disciplined, practical application of classroom theory are suitable candidates as theater majors. Teaching and professional stage, film, and television work are typical professions of theater majors, but the analytical and practical skills, discipline and self-confidence, creativity, problem

solving, and ability to work toward common production goals are applicable to all professions. The theater major will benefit from a comprehensive curriculum that includes the world's most noted Asian theater program and a nationally respected youth theater program.

Dance is the art of human motion. It encompasses the study of human movement as it relates to the physical sciences, music, theater performance and production, history, cultural context, education, visual design, and human expression. Dance majors find careers in the areas of performance, choreography, teaching, arts administration and production, therapy, history and criticism, and research. The University's dance program offers comprehensive theory courses and a wide variety of dance techniques and styles. The program is considered unique due to its offerings in dance ethnology and Asian and Pacific dance.

Affiliations

The department's Asian theater program is affiliated with the Association for Asian Performance.

The dance program is affiliated with the American College Dance Festival Association and the Council of Dance Administrators.

Advising

After being admitted as majors in the theater program, undergraduates must consult each semester with the theater undergraduate adviser. Newly admitted theater graduate students should consult each semester with the director of graduate studies in theater for initial advising. After one year of study, a graduate student is expected to select from the graduate faculty a permanent adviser well-versed in the area of the student's concentration.

In dance, undergraduate majors must consult with the dance undergraduate adviser every semester. Graduate students should consult with the director of graduate studies in dance.

Undergraduate Study

Bachelor's Degree

BA in Theatre

Students must complete 42 credit hours, including:

- THEA 240, 311, 312, 411, and 412
- Two courses in Asian theater (one in theory/history/literature, one in performance)
- One course each in acting, voice/move-

- ment, directing, design, and youth theater
- 6 credits of theater workshop
- Recommended additional courses: ART 101, DNCE 150 or 255, MUS 106 or 107, and PHIL 200

BA in Dance

Students must complete 40 credit hours: 29 credits of required courses and 11 of elective courses. Elective credit hours are determined in consultation with an adviser and based on the student's desired focus within dance, such as children's dance, choreography, dance ethnology, or dance science.

Required courses:

- DNCE 151, 255, 260, 360 or 361, 370 or 490, 452 or 453
- THEA 200
- 11 credits of dance technique at the 200 level or above, including:
 - 3 credits in ballet
 - 3 credits in modern dance
 - 3 credits from *two different* Asian/Pacific dance forms
- For dance ethnology focus, 12 credits of electives (6 of which must be in dance) from:
 - MUS 107
 - DNCE 361, 362, 452, 453, 499
 - Asian/Pacific performance courses
 - Related courses in ethnomusicology, Asian theater, anthropology, Hawaiian studies, Pacific Island studies, or ethnic studies
- For all other foci, 11 credits of electives to be selected from:
 - DNCE 250, 360, 361, 362, 370, 371, 372, 452, 453, 459, 460, 470, 471, 480, 490, 499, 660, 693
 - THEA 200

BFA in Dance Theatre

This program is designed for students who wish to pursue professional careers as dancers, teachers, and/or choreographers. Admission to the program is by audition held annually. Interested students should notify the Department of Theatre and Dance as early as possible, since the BFA requires 60 credit hours in dance, including advanced-level dance technique courses, plus 2 credit hours in theater practicum.

Requirements

Students must complete 62 credit hours, including:

- DNCE 151, 250, 360, 361, 362, 370, 371, 372, 452, 453
- 1 credit hour of DNCE 495

- 6 credit hours of DNCE 321
- 6 credit hours of DNCE 331
- 3 credit hours of DNCE 470 or 480
- 2 credit hours in two different Asian or Pacific dance performance courses
- 6 credit hours of ballet technique at the 300 level or higher (DNCE 321 or 421) or 6 credit hours of modern dance technique at the 300 level or higher (DNCE 331 or 431)
- 6 credit hours of DNCE 421 or 431
- 2 credit hours of THEA 200

Recommended courses:

- DNCE 255, 490, 660, 693
- THEA 101, 221

Minor in Dance

Requirements

Students must complete 15 credit hours numbered 200-level and above, including:

- 9 credit hours in courses numbered 300 or above
- Maximum of 9 credit hours from dance technique courses

Minor in Theatre

Requirements

Students must complete 15 credit hours in courses numbered 200 or above, including 9 credit hours in courses numbered 300 or above, and participate in two Kennedy Theatre productions.

Graduate Study

Most graduates, especially those with PhD degrees, pursue teaching careers, but there are many career opportunities in community theaters, dance companies, radio, television, films, and professional theaters.

The degrees in Asian theater are recognized Western Interstate Commission for Higher Education (WICHE) regional graduate programs. Residents of Alaska, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, Utah, Washington, and Wyoming are eligible, upon admission, to enroll at Hawai'i-resident tuition rates.

Master's Degrees

Master's Degrees in Theatre

Master's degrees in theatre offered are the MA Plan A (thesis) and Plan B (non-thesis) and the MFA Plan B (creative/performance). For the MA Plan A, the candidate does research in theater history, theory,

or dramatic literature; the thesis may be in Asian, Western, or youth theater. For the MA Plan B, a generalist degree, the candidate takes additional advanced course work in lieu of writing a thesis. The MFA Plan B emphasizes creative or performance work in six concentrations: acting, directing, design, and playwriting (each of these four may include Western, Asian, and youth theater work), Asian performance, and youth theater.

Applicants must present an adequate undergraduate background and submit three letters of recommendation, as well as official scores from the GRE General Test. The department expects that all incoming graduate students will have taken at least two courses in dramatic literature and one course in each of the following four areas: acting, directing, design or technical theater, and theater history. If such courses have not been taken, they will be made up as undergraduate deficiencies while in residence for the master's program and will not count toward the credit accumulation for the master's degree. The TOEFL minimum score for foreign students is 600. Applicants for the MA Plan A degree are also expected to submit a major paper; those seeking the MFA degree should present appropriate supplementary materials such as slides, photographs, video, or play scripts.

Application deadline for the fall semester is **February 1 (January 15** for foreign applicants). Upon the successful completion of 12 graduate credit hours within the department, the elimination of any undergraduate deficiencies, and (for MFA students) the presentation of an acceptable qualifying creative project, the student may be admitted to candidacy.

Students pursuing an MA in theatre develop, with an adviser, a program appropriate for their interests (minimum of 39 credit hours). The program must include 3 credit hours in each of the following areas: research methods (THEA 600); Asian theater theory/history; Western theater theory/history; youth theater, creative drama, creative movement, or Western puppetry; Asian or Western acting or directing; design/technical theater; and graduate theater workshop (THEA 690), in which students receive 1 or 2 credit hours (depending upon extent of involvement) for working on a single Kennedy Theatre production. A minimum of 18 credit hours must be in courses numbered 600 to 798 (excluding 700); a minimum of 6 credit hours must

be in Asian theater (excluding 690); credit for 699 may not exceed 9 credit hours. In addition, MA Plan A students must complete 6 credit hours of THEA 700 Thesis Research. For both MA degrees, students will take a three-hour written comprehensive examination followed by an oral examination. MA Plan A students will have an additional oral comprehensive on the written thesis.

MFA students in all concentrations will take a minimum of 60 credit hours comprised of 12 credit hours of foundation courses (3 credits in research and 9 in history and/or theory); 39 credit hours of concentration courses, including enrollment in THEA 690 Graduate Theater Workshop, in which students receive 1 or 2 credit hours (depending upon extent of involvement) for working on a single Kennedy Theatre production, and a culminating project for which the student will enroll in 6 credit hours of THEA 695 Creative Project; and 9 credit hours of electives. Of the total 60 credit hours, 30 must be at the 600 level or above. There is no written comprehensive examination for the MFA degree. However, the culminating project will include a written component that goes beyond the descriptive record of the project; the thesis committee, in conjunction with the candidate, will decide the nature, extent, and scope of the written component in each case. Additionally, each student will be given an oral examination on the culminating project.

To receive a list of specific recommended courses for meeting MA and MFA requirements, contact the departmental director of graduate studies. Students will select their elective courses (MA Plan A, 12 credits; MA Plan B, 18 credits; or MFA Plan B, 9 credits) in consultation with their advisers to reflect their special interests. Students with sufficient undergraduate preparation may take approved related graduate courses in other departments for credit toward their degree.

In consultation with an adviser, each MFA student develops a program appropriate for his or her interests within the specific requirements of one of the following concentrations:

Acting. For the concentration in acting, students must complete 3 credits in research; 9 credits in history and/or theory (minimum 3 credits in Asian and 3 credits in Western); 6 credits in voice; 6 credits in movement and/or dance; 12 credits in acting (minimum 3 credits in Asian and 3 credits in Western); 3 credits

in additional creative/performance courses in above areas or in directing, design/technical theater, or playwriting; 6 credits of THEA 690 Graduate Theater Workshop (a minimum of 4 credits in acting and 1 credit in technical theater; 1 credit may be in design, directing, playwriting, etc.); a minimum of 2 credits in faculty-directed and 2 credits in student-directed shows); and 6 credits of THEA 695 Creative Project.

Design. For the concentration in design, students must complete 3 credits in research; 9 credits in history and/or theory, Asian and/or Western (minimum one 3-credit seminar); 3 credits in costume design or construction (400 level or above); 3 credits in lighting design (400 level or above); 3 credits in set design (400 level or above); 3 credits of THEA 657 Topics in Theater Design; 9 credits in additional design courses (costume, lighting, or set, 400 level or above); 6 credits in creative/performance courses (in at least two areas including acting, directing, dance, playwriting, puppetry, or theater management); 6 credits of THEA 690 Graduate Theater Workshop (minimum 4 credits in design; 2 credits may include acting, directing, playwriting, stage managing, etc.; minimum 2 credits in faculty-directed and 2 credits in student-directed shows); minimum 3 credits in Asian theater (excluding THEA 690); and 6 credits of THEA 695 Creative Project.

Directing. For the concentration in directing, students must complete 3 credits in research; 9 credits in history and/or theory (minimum 3 credits in Asian and 3 credits in Western, 3 credits of which must be in theory); 3 credits in script analysis; 12 credits in graduate-level directing (minimum 3 credits in Asian and 3 credits in Western); 6 credits in design/technical theater (in two areas—theater design, costume, lighting, or set); 6 credits in creative/performance courses (in at least two areas—acting, choreography, dance, movement, music, playwriting, puppetry, or voice); 6 credits of THEA 690 Graduate Theater Workshop (minimum 4 credits in directing including assistant directing and dramaturgy; 2 credits may include acting, design, playwriting, stage managing, etc.; minimum 2 credits in faculty-directed and 2 credits in student-directed shows); and 6 credits of THEA 695 Creative Project.

Playwriting. For the concentration in playwriting, students must complete 3 credits in research; 9 credits in history

and/or theory (including 3 credits in Asian and 3 credits in Western, both at 600 level or above); 9 credits in playwriting (excluding THEA 318); 3 credits in script analysis; 3 credits in contemporary dramatic literature or theater history; 6 credits in design/technical theater (including 3 credits in lighting design); 3 credits in acting or directing (Asian or Western); 3 credits in movement, dance, or music (Asian or Western); 3 credits in puppetry or youth theater; 3 credits of THEA 690 Graduate Theater Workshop in dramaturgy; electives may include an additional 3 credits of THEA 690 (in acting, design, directing, playwriting, stage managing, etc.); and 6 credits of THEA 695 Creative Project.

Asian Performance. For the concentration in Asian performance, students must complete 3 credits in research; 9 credits in Asian theater history/theory; 9 credits in Asian acting; 6 credits in Asian/multicultural directing; 3 credits in Asian/Pacific music and dance (minimum 1 credit in music and 1 credit in dance); 3 credits in design/technical theater or playwriting; 6 credits of additional creative/performance courses in above areas or courses at the graduate level in Western acting or directing; 6 credits of THEA 690 Graduate Theater Workshop (minimum 4 credits in Asian performance—acting, directing, or puppetry; 2 credits may include other courses in acting, design, directing, playwriting, stage managing, etc.; minimum 2 credits in faculty-directed and 2 credits in student-directed shows); and 6 credits of THEA 695 Creative Project.

Youth Theater. For the concentration in youth theater, students must complete 3 credits in research; 9 credits in Asian and/or Western history and/or theory; 3 credits in creative drama; 3 credits in youth theater; 3 credits in puppetry; 3 credits of THEA 779 Seminar in Theater/Dance for Children; 21 credits in creative drama, creative movement, design, directing, playwriting, puppetry, and/or youth theater, including 1 to 6 credits of THEA 690 Graduate Theater Workshop in acting, design, directing, playwriting, stage managing, etc.; minimum 3 credits in Asian theater (excluding THEA 690); and 6 credits of THEA 695 Creative Project.

Master's Degrees in Dance

The department's graduate offering in dance include the MA Plan A (two options), the MA Plan B (two options), and the MFA Plan A. For admission to the master's in dance program the GRE is not

required; for foreign students the minimum TOEFL score is 540. The MA Plan A requires a written thesis. In Plan B, a generalist degree, the candidate takes additional course work in lieu of a thesis. The MFA Plan A requires a creative performance thesis with accompanying written documentation. Intended dance candidates for all degrees must present an adequate undergraduate background in dance or a related field and submit three letters of recommendation. MFA candidates in dance must also submit a video (VHS format) of their choreography and performance. MA candidates must submit a sample of written work, such as a major paper. The application deadline for the fall semester is **February 1 (January 15 for foreign applicants)**. Spring semester application deadline is **September 1 (August 1 for foreign applicants)**. Upon the successful completion of 12 graduate credit hours within the department, the elimination of any undergraduate deficiencies, and (for MFA students) the presentation of an acceptable example of creative work, the student may be admitted to candidacy.

The MA Plan A emphasizes research in dance ethnology or other general areas. The MA Plan A, Option I (dance ethnology emphasis) requires a minimum of 36 credit hours, including DNCE 651, 652, 653, 661, 654 or 655, and 700 (6 credit hours); 3 credit hours in 400-level Asian or Pacific performance courses; related area electives (6 credit hours); dance electives (3 credit hours); and general electives (3 credit hours). All electives must relate to thesis research. Candidates must pass a reading or speaking proficiency exam in a foreign language relevant to their area of thesis research or must satisfactorily complete four semesters of a language relevant to their area of thesis research.

MA Plan A, Option II (general) requires a minimum of 36 credit hours, including DNCE 651, 652, and 700 (6 credit hours); 9 credit hours from DNCE 321, 331, 421 or 431; 600-level dance theory electives (6 credit hours); general electives (6 credit hours); and 3 credit hours in two different Asian or Pacific dance forms.

MA Plan B, Option I (dance education emphasis) requires a minimum of 36 credit hours, including DNCE 651, 652, 691, 693 and 659 or 699; 9 credit hours from 321, 331, 421, 431; 3 credit hours in 300- to 400-level Asian or Pacific dance courses; and 9 credit hours of electives (3 credits at the 600 level).

MA Plan B, Option II (general) requires a minimum of 36 credit hours, including DNCE 651, 652, and 659 or 699; 9 credit hours from 321, 331, 421, 431; 3 credit hours from 300- to 400-level Asian or Pacific dance courses; 6 credit hours of 600-level dance theory electives; 3 credit hours of 600-level electives outside of the dance area; and 6 credit hours of general electives.

The MFA Plan A emphasizes performance and choreography. The MFA Plan A requires a minimum of 60 credit hours, including DNCE 421 or 431 (18 credit hours); DNCE 651, 652, 660, 661, 671, and 672 (4 credit hours); DNCE 679 (2 credit hours), 691, and 700 (6 credit hours); 2 credit hours in two different Asian or Pacific dance forms; 3 credit hours in 600-level dance electives; 6 credit hours in non-dance electives; and 1 credit hour in a general elective. MFA candidates must participate in two dance productions a year.

The nature of the required performance in productions should be determined in consultation with the student's adviser.

MFA Plan A and MA Plan B require written comprehensive examinations and an oral defense of the examination. MA Plan A and MFA Plan A require an oral defense of the thesis.

Doctoral Degree

The Doctor of Philosophy degree given for scholarship in theater history, theory, or criticism, not creative or artistic work, is offered in three areas: (a) Western theater, (b) Asian theater, and (c) comparative Asian-Western theater. The PhD degree is not conferred for the acquisition of academic credits. It is granted only to candidates who demonstrate outstanding ability to do imaginative research and who present the results in a cogent dissertation.

A candidate for the degree is required to successfully complete three semesters of full-time residence, required courses (detailed below), other courses as deemed necessary by the student's doctoral committee, examination in the research language(s) used in the student's dissertation research, a written and oral comprehensive examination and an oral defense of the student's dissertation. The minimum residence requirement is three semesters of full-time work or the equivalent in credits at the University. At the end of the second semester in residence, the graduate faculty will provide the candidate with an assessment of her or his progress to date.

Required courses in the Western area are THEA 600, plus three other 600- to 700-level courses from a departmental list of approved courses; required courses in the Asian area are THEA 464, 465, and 466, as well as THEA 660 if the candidate's dissertation requires field research. The curriculum of the comparative Asian-Western theater area is determined by the student's doctoral committee. A high level of accomplishment in the foreign language or languages appropriate to the proposed area of research is required and will be determined by examination.

Proficiency in teaching, whether lecturing before large classes or teaching smaller classes and leading discussions, is considered part of the training of all PhD candidates, who should demonstrate this proficiency by giving several such lectures or by serving as teaching assistants.

Written comprehensive examinations and two hours of oral comprehensive examinations are required of all candidates before admission to candidacy. These are given after a student has completed the language requirement and before embarking on the dissertation. Written comprehensive exams shall consist of nine questions, one or more of which will specifically address the candidate's major area of research and one or more of which may be of a special nature at the discretion of the candidate's committee. The comprehensive includes questions on both Asian and Western drama and theater; further guidelines are available from the graduate adviser. The questions on the written portion are posed by the theater and dance graduate faculty and members of the student's committee. The doctoral committee consists of at least five graduate faculty, of whom a majority are from the Department of Theatre and Dance and at least one from another department.

Applicants for admission to the program must submit a detailed statement of the dissertation research they propose, three letters from those acquainted with their academic work, a sample of their research (such as a seminar paper or a master's thesis), and official GRE General Test scores. The application deadline for admission in the fall semester is **February 1 (January 15 for foreign applicants)**. Requirements include a broad background in the humanities, a master's degree in theatre or its equivalent, and competence in dramatic production.

Candidates for the PhD who do not complete all requirements within seven years after admission into the doctoral program may be readmitted to candidacy only on the approval of the department's doctoral faculty and the Graduate Division.

Urban and Regional Planning

College of Social Sciences

Social Science 107
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-7381
Fax: (808) 956-6870
E-mail: idwp@hawaii.edu
Web: www.durp.hawaii.edu

Faculty

- *K. E. Kim, PhD (Chair)—planning theory, planning methods, infrastructure planning, and alternative tourism planning
- *M. Douglass, PhD—regional and rural development planning, urbanization and national development, international and local development on Pacific rim and in Asia
- *P. Flachsbarth, PhD—planning methods and models, environmental planning, energy, land use planning, and urban transportation planning
- *R. Kwok, PhD—urbanization in China, East Asian development, spatial planning and urban design, development and regional economics
- *G. K. Lowry, PhD—alternative dispute resolution, coastal management, planning theory, and community-level planning
- *L. Minerbi, Dott Arch, MUP—comparative urbanism, settlement planning, environmental planning, urban design, community development, planning with indigenous people, and Pacific Island planning
- *K. Suryanata, PhD—political ecology, agriculture, rural development in Asia, environment and development, community-based resource management
- *K. Umemoto, PhD—community planning, planning theory, social theory, social policy, community economic development, and race in ethnic relations

Cooperating Graduate Faculty

- D. L. Callies, JD—land use management and control, intergovernmental relations
- M. Chapman, PhD—population studies
- L. Cox, PhD—agricultural and resource economics
- A. B. Etherington, MA—housing, community services in developing countries of Southeast Asia
- D. Foley, PhD—strategies of citizen participation, communications, community development
- N. Lewis, PhD—geography of health and disease, marine resource utilization and management, and women in development

- J. M. McCutcheon, PhD—social, cultural, and urban history
- D. Neubauer, PhD—political analysis, appraisal of health care delivery systems and policy discourse, alternative economic development, and political economy in Hawai'i
- L. H. Nitz, PhD—public policy and political economics
- C. Papacostas, PhD—transportation engineering and design
- L. Rose, PhD—microeconomics, urban economics, land and housing
- M. Tehranian, PhD—communications planning
- W. Wood, PhD—international public health planning
- S. Yeh, PhD—housing, urban sociology, development planning
- W. H. R. Yeh, MArch—architectural and urban design

Degree and Certificates Offered:

MURP, Certificate in Planning Studies, Professional Certificate in Urban and Regional Planning

The Academic Program

Urban and regional planning (PLAN) is a dynamic field, that is still evolving. It emerged out of the convergence of two concerns: (1) the provision of urban infrastructure and (2) the initiation of social reform. While the underlying focus on community well-being continues, urban and regional planning today has broadened to include the development, implementation, and evaluation of a wide range of policies. Specifically, urban and regional planners, in both developing and developed countries, are concerned with the following:

1. The use of land in the city, in the suburbs, and in rural areas, particularly with the transition from one use to another;
2. The adverse impacts of human activities on the environment and the possible mitigation of those impacts;
3. The design of the city and the surrounding region so as to facilitate activities in which people need and want to engage;
4. The organization of settlement systems and the location of human activities in urban and regional space;
5. Identification of social needs and the design and provision of services and facilities to meet those needs;
6. The distribution of resources and of benefits and costs among people;
7. The anticipation of change and its impact on how people do and can live;
8. Participation of citizens in planning processes that affect their future; and

9. The way that choices are made, decisions implemented, and actions evaluated, and the means by which those processes can be improved in urban and regional areas.

The Department of Urban and Regional Planning takes a multidisciplinary approach to planning education, recognizing in particular the important contributions to planning that can be made by the social and natural sciences and by the architectural, public health, social work, and civil engineering professions; emphasizes extensive community involvement; engages in research that focuses on application of planning methodologies and implementation of planning endeavors; recognizes the close relationship between urban and regional planning and politics; acknowledges the difficulty of resolving the value differences that lie at the heart of most planning problems; and appreciates both the importance and the elusiveness of critical concepts, such as "the public interest," to urban and regional planning.

UH Master of Urban and Regional Planning (MURP) graduates, of whom there are about 250, hold planning and related positions in a variety of public agencies, academic institutions, nonprofit organizations, and private firms in Hawai'i, on the continental United States, and in the Asia Pacific region.

Accreditation

The department is accredited by the Planning Accreditation Board.

Graduate Study

The department offers a multidisciplinary approach to planning education. Students are provided with an opportunity to develop an individualized but integrated course of study drawing on this department and other departments and professional schools in the University. Faculty and students engage in both funded and non-funded research and community service. The graduate curriculum focuses on theory, methodology, and practice in the following areas: community planning and social policy, environmental planning, urban and regional planning in Asia and the Pacific, and land use and infrastructure planning. Planning in the developing countries of Asia is emphasized.

For further information regarding the master's degree or certificate programs, students should write to the department.

Master's Degree

Students enter the MURP program from a variety of fields, usually the social sciences, architecture, engineering, public health, social work, and, increasingly, the natural sciences, but also from such diverse fields as philosophy, human development, and history. Students coming into the program are required to have an adequate background in descriptive and inferential statistics or to acquire this background prior to enrollment in PLAN 601 and 605.

Native speakers of English are required to take the GRE General Test. Others will be expected to have achieved adequate preparation in English as evaluated by the TOEFL. Each applicant should provide two letters of reference, preferably from individuals acquainted with the applicant academically or professionally. In addition, applicants must complete a self-assessment form and an express information form (available from the department). An interview with a member of the faculty, if feasible, is highly recommended. The deadline for application for admission is **February 1** for the fall semester and **September 1** for the spring semester.

Standards for a graduate with a MURP degree include the following:

1. Knowledge of the structure and the growth and transformation processes of human settlements;
2. Knowledge of planning theory, history, and ethics, including an understanding of the social and political nature of planning;
3. Knowledge of general methods and models appropriate to urban and regional planning, including methods appropriate to a chosen area of concentration;
4. Knowledge of planning information systems and computer applications in planning;
5. Ability to structure and evaluate alternative plans and strategies for resolving or mitigating planning problems;
6. Ability to communicate, especially in written and oral form; and
7. Ability to plan with, rather than for, clients.

MURP graduates hold a variety of planning and related positions in public agencies, nonprofit organizations, and private firms. In Hawai'i these include the state Department of Business, Economic Development and Tourism; the Department of Health; the Land Use Commission; the Legislative auditor; the Department of

Hawaiian Home Lands; the House Majority Research Office; the Hawai'i Community Development Authority; the Housing Finance and Development Corporation; the Department of Public Safety; the Department of Land and Natural Resources; the U.S. Department of Housing and Urban Development; the Honolulu City and County Departments of General Planning; Land Utilization, Housing and Community Development, and Parks and Recreation; the Office of the Managing Director; the Office of Council Services; the Planning Departments of the counties of Hawai'i, Kaua'i, and Maui; the Neighborhood Justice Center; banks and trust companies; consulting firms; development corporations; real estate firms; university research and extension organizations; and community colleges.

On the continental United States, graduates are city and county planners, program analysts in federal agencies (e.g., Office of Coastal Resource Management and Office of Management and Budget), and planning consultants. Other graduates include a planner for a nonprofit housing corporation, a lawyer-planner, and a law professor. Overseas positions include planners with regional planning, housing redevelopment and environmental agencies, the United Nations, and private development and consulting firms, as well as faculty in university programs. Several MURP graduates are pursuing doctoral degrees in planning, geography, political science, and economics, while others are seeking law degrees.

Requirements

The MURP degree is a two-year professional program that requires a minimum of 42 credit hours. It is designed to equip students to fill professional planning and policy analysis roles in public agencies, private firms, and community groups, particularly in Hawai'i, Asia, and the Pacific Basin. All students complete the core sequence (planning theory, planning methods, and models, a 6-credit-hour practicum, and three of the following courses: PLAN 610, 620, 630, and 640). The remainder of the academic program, including a second methodology course, is individually designed with concentration in a specialized area of the student's own choosing (with the consent of his or her adviser), provided adequate academic resources are available in the department and at the University. Grades of B or better are required in PLAN 600, 601, 602, and 605, and an average of B or better must be earned in all courses counted toward the MURP degree. MURP students

receiving a grade lower than a B will be allowed one additional opportunity to achieve a B or better in each core course.

Both Plan A (thesis) and Plan B (non-thesis) programs are available. All students are required to pass a final, which includes a successful defense of the thesis on the selected area of concentration, and to meet the program standards for graduation.

Professional Certificate in Urban and Regional Planning

The Professional Certificate in Urban and Regional Planning is designed for practicing planners eligible for graduate admission who are not able to attend school for the two years required to earn a MURP degree.

Professional certificate candidates specialize in one of the following four fields: community planning and social policy, environmental planning, land use and infrastructure planning, or urban and regional planning in Asia and the Pacific.

Professional certificate candidates are required to earn 18 credit hours including PLAN 600; 602 or 603; and 601 or 605. Each candidate selects a field of interest in which he or she takes three courses including PLAN 610, 620, 630, or 640. The specific courses are selected in consultation with the candidate's faculty adviser.

Applicants for the professional certificate program should apply to the Graduate Division as special non-degree students. Two letters of reference should be sent to the department from people who are familiar with the applicant's academic or professional record. Applicants must have earned a BA, BS, or a professional degree; have maintained a minimum GPA of 3.0 in the four semesters prior to admission; and have had at least three years of professional practice prior to admission.

Certificate in Planning Studies

The Certificate in Planning Studies allows students pursuing a master's or doctoral degree in another area to become acquainted with planning skills and activities. Students enrolled in graduate programs in architecture, economics, engineering, geography, political science, public health, social work, and sociology are among those eligible. Students are encouraged to use the certificate program to increase their competence in planning as it relates to their major area of study.

Certificate students are required to take five courses offered by the department and complete the requirements for a master's degree in their area of study. The required courses are PLAN 600, 601 or 605, and 751. The remaining two courses are to

be selected from among the following courses by the certificate student in consultation with the faculty member responsible for directing the planning studies certificate program: PLAN 601 or 605 (whichever was not taken as a required method course); 602 or 603; and one of 610, 620, 630, or 640, or one elective course.

Successful completion of the program leads to a graduate degree in the student's chosen field and a Certificate in Planning Studies. Consideration for admission to the certificate program requires filing of an application form available from the department.

Women's Studies

College of Social Sciences

Social Science 722
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-7464
Fax: (808) 956-9616
Web: www2.soc.hawaii.edu

Faculty

R. Dawson, PhD (Director)—women and literature
M. Chesney-Lind, PhD—criminology
T. Arámbula Greenfield, EdD—science and education
K. Ferguson, PhD—feminist theory
S. Hippensteel, PhD—psychology
M. Koikari, PhD—gender across cultures

Affiliate Faculty

J. Burk, PhD—drama
D. Ladd, PhD—history
L. Ruch, PhD—sociology
V. Wayne, PhD—English
M. B. Yue, PhD—East Asian languages and literatures

Degree and Certificate Offered: BA in liberal studies (women's studies), Certificate in Women's Studies

The Academic Program

Women's studies (WS) is an interdisciplinary program that examines women in society, culture, science, and history, as individuals and groups, with bodies and minds. With a faculty trained in a variety of fields of study, the program examines the role of gender in shaping history, psychology, anthropology, sociology, political theory, literature, art, drama, education, law, medicine, and biology. It offers students an encounter with the important questions feminist research raises.

In order to analyze the construction of gender and the complexity of women's lives, the curriculum is divided into the following four clusters of related courses:

1. "Words and Images" considers how women have been represented and how women have represented themselves in philosophy, literature, art, language, etc.;
2. "Mind and Bodies" examines sex as a biological category and gender as a social category, looking at reproduction, health, and personality, as well as rape and violence against women;
3. "Roles and Institutions" connects the experiences of individual women to the operations of larger social institutions, including marriage, politics, work, education, and religion; and
4. "Gender Across Cultures" studies the similarities and differences among women across racial, economic, ethnic, and regional lines. A cross-cultural perspective is central to other areas as well, but it is so crucial to women's studies that it requires a separate emphasis.

Women and men from all colleges at the Mānoa campus take women's studies courses because of its interdisciplinary nature and its ties to other fields of study. Five WS courses meet the General Education Core requirements; many others are cross-listed with other departments. Women's studies offers a flexible major through the Liberal Studies Program, allowing students to pursue either a specialized or a general course of study. Women's studies is a uniquely promising avenue of self-understanding, as well as a means of connecting research on women to other academic interests. Those who understand the workings of gender in personal lives and social order can better pursue a variety of careers. The women's studies program at the Mānoa campus offers a unique opportunity to study similarities and differences—racial, economic, ethnic, and regional—among women here and around the world, past, present, and future.

Advising

Students who are pursuing a general course of study through the Liberal Studies Program meet with the program director for advising. Those students who are studying specific areas of women's studies are matched with professors who are experts in the students' areas of interest. The professors advise the students about major requirements and the best combination of classes for the students to take, given their interests.

Undergraduate Study

Bachelor's Degree

Interested students should refer to the "Liberal Studies" section within the Colleges of Arts and Sciences, or consult with the Liberal Studies Program, Bachman Annex 13-9, (808) 956-7297.

Certificate in Women's Studies

Students earning a women's studies certificate (the equivalent of a minor) broaden their knowledge of the field by taking a structured array of courses drawn from the key components of women's studies. Students must complete 15 credits in women's studies by taking one course each from three of the four subfields offered in the women's studies curriculum. The two remaining courses needed for the certificate may be WS 151, WS 405, or courses chosen from any of the subfields.

Zoology

College of Natural Sciences

Edmondson 152
2538 McCarthy Mall
Honolulu, HI 96822
Tel: (808) 956-7315
Fax: (808) 956-9812
E-mail: lori@zoology.hawaii.edu
Web: www2.hawaii.edu/~zoology

Faculty

- *S. R. Haley, PhD (Chair)—reproduction, development, histology
- *G. A. Ahearn, PhD—cellular and comparative physiology
- *S. Atkinson, PhD—reproductive biology, endocrinology, behavior
- *J. H. Bailey-Brock, PhD—invertebrate zoology, reef ecology, Polychaetes
- *C. L. Brown, PhD—endocrinology, embryology and aquaculture
- *S. Conant, PhD—ornithology, ecology, behavior, conservation biology
- *I. M. Cooke, PhD—cellular neurophysiology, neurosecretion
- *H. G. de Couet, PhD—molecular genetics and cytoskeleton
- *L. A. Freed, PhD—evolutionary and behavioral ecology, ornithology, conservation biology
- *E. G. Grau, PhD—comparative endocrinology, environmental physiology
- *D. W. Greenfield, PhD—ichthyology, systematics, community ecology
- *M. G. Hadfield, PhD—reproduction and development of invertebrates
- *D. K. Hartline, PhD—quantitative neurophysiology and simulation of simple networks
- *K. N. Holland, PhD—physiology, behavior, ecology of aquatic organisms

- *P. J. Jokiel, PhD—coral reef biology, biogeography and ecology
- *R. A. Kinzie III, PhD—coral reef biology, marine ecology, limnology
- *G. S. Losey Jr., PhD—marine animal behavior
- *J. D. Parrish, PhD—community ecology, fishery biology
- *R. L. Radtke, PhD—fish population dynamics and calcification
- *E. S. Reese, PhD—behavior, ecology, sociobiology
- *S. Robinow, PhD—molecular biology and development
- *J. S. Stimson, PhD—population ecology, marine ecology
- *A. D. Taylor, PhD—population, theoretical, and insect ecology
- *C. Womersley, PhD—environmental physiology, biochemical adaptation, parasitology

Cooperating Graduate Faculty

- W. W. L. Au, PhD—marine bioacoustics and echolocation
- R. E. Brock, PhD—inshore fishery resources, anchialine ponds
- R. G. Gillespie, PhD—evolution, ecology, conservation biology
- T. D. Humphreys, PhD—cellular, molecular, biochemical, developmental biology in marine organisms
- K. Y. Kaneshiro, PhD—systematics, evolution, insect behavior
- M. J. McFall-Ngai, PhD—symbiotic association between animals and prokaryotes
- P. E. Naeffhigal, PhD—behavior and sensory processes of marine mammals
- G. K. Roderick, PhD—population biology, genetics and evolution

Affiliate Graduate Faculty

- A. Allison, PhD—vertebrate zoology
- R. Cowie, PhD—evolutionary biology, biogeography, ecological genetics, snails, termites
- J. E. Randall, PhD—ichthyology
- R. Richmond, PhD—coral reef biology
- C. Simon, PhD—evolutionary biology, systematics

Degrees Offered: BA in zoology, BS in zoology, MS in zoology, PhD in zoology

The Academic Program

The zoology (ZOOL) department at the University of Hawai'i at Mānoa offers undergraduate programs leading to bachelor of science and bachelor of arts degrees and a zoology minor and graduate programs that offer master of science and PhD degrees. Of particular note is the department's emphasis on tropical marine biology and evolutionary biology. There are few places in the United States where these emphases can be pursued more productively or in a more practical setting. Students can acquire a broad background for a career

in marine biology. The BS degree is particularly suited for students preparing for graduate training in zoology and related fields and for those seeking immediate employment in zoology-related research and application markets. It provides the broadest scientific background at the undergraduate level. Students preparing for pre-professional programs (premedical, pre-dental, pre-physical therapy, pre-veterinary medical) should consider the BA in zoology degree. It provides greater flexibility in pursuing the broad liberal arts education encouraged by professional schools. The courses applied toward the zoology major may then be selected with those programs in mind.

Undergraduate Study

Prospective majors should consult a departmental adviser.

BA Degree

Requirements

- BIOL 172/172L
- BIOL 265/265L
- BIOL 270/270L
- CHEM 161/161L and 162/162L (or CHEM 171/171L)
- CHEM 272/272L and 273/273L
- BIOC 441 or ENBI 402 (biochemistry lab not required)
- MATH 205, 215, or equivalent college-level calculus

Students must take an additional 20 credit hours, including:

- ZOOL 490
- Three laboratory courses from the following areas:
 - Developmental (ZOOL 330/330L or 420/420L)
 - Physiology (ZOOL 430/430L, 431, 432/432L, BIOL 406/406L or 407/407L)
 - Ecology and Behavior (ZOOL 306/306L, 439/439L, or 470/470L)
 - Genetics (BIOL 375/375L)
 - Morphology and Taxonomy (ZOOL 320/320L, 340/340L, 416/416L, 465/465L, or 475/475L; ENTO 263, 461, or 462)

Zoology courses at the 200 level carry no major credit. MATH 206 or 216 and a year of college physics are strongly recommended for students planning graduate study.

BS Degree

Requirements

Students must complete 77 to 80 credit hours, including:

- BIOL 172/172L
- BIOL 265/265L
- BIOL 270/270L
- BIOL 375/375L
- CHEM 161/161L and 162/162L
- CHEM 272/272L and 273/273L
- BIOC 441 or ENBI 402 (labs not required)
- PHYS 151/151L, 152/152L; or PHYS 170/170L, 272/272L
- MATH 205 and 206 or 215 and 216
- ZOOL 320/320L, or 475/475L, or ENTO 263
- ZOOL 430/430L
- ZOOL 490
- ZOOL 499 (4 credit hours)

Also required are 9 credits of zoology electives (300 level or above in ZOOL or approved BIOL courses), 6 credits in science electives (300 level or above in approved courses in natural sciences), and one semester experience as an undergraduate teaching intern in an approved instructional laboratory.

Minor

Requirements

- BIOL 172/172L
- BIOL 265/265L, or BIOL 270/270L (Students are advised that selecting only one of the bridging courses [BIOL 265, or 270] may preclude access to some upper division zoology courses.)
- At least 11 credit hours from the following courses, including one upper division lab course. Both BIOL 265/265L and 270/270L count toward the 11 credits but do NOT satisfy the requirement for an upper division lab course.
 - Developmental biology (ZOOL 330/330L or 420/420L)
 - Genetics (BIOL 375/375L)
 - Physiology (BIOL 406/406L, 407/407L; ZOOL 430/430L, 431, or 432/432L)
 - Ecology and behavior (ZOOL 200/200L, 306/306L, 439/439L, or 470/470L)
 - Morphology and taxonomy (ZOOL 320/320L, 340/340L, 416/416L, 465/465L, or 475/475L)

ZOOL courses numbered 300 and above and BIOL 490 can be applied toward the required 11 credit hours.

Graduate Study

The department offers programs of graduate study and research leading to the MS and PhD degrees. The major strengths of the graduate program in zoology are in the areas of animal behavior; comparative endocrinology and physiology; cellular, molecular, and developmental biology; and evolution and ecology. Especially strong programs have developed in areas that utilize the resources of Hawai'i's unique island setting, including developmental biology, marine biology, and ecology, evolution and conservation biology. Much of the research in the department emphasizes the animals of Hawai'i: marine invertebrates, terrestrial arthropods, fishes, and birds.

Graduate students in zoology may join three interdisciplinary graduate specializations: the Cellular, Molecular and Neuro-Sciences (CMNS) Program; the Ecology, Evolution, and Conservation Biology (EECB) Program; and the Marine Biology (MB) Program. The department also hosts the Hawai'i Cooperative Fishery Research Unit and has active affiliations with the Hawai'i Institute of Marine Biology, the Kewalo Marine Laboratory, the Békésy Laboratory of Neurobiology, and the Center for Conservation Research and Training.

Recipients of the MS degree usually teach, pursue careers in research or government service, or pursue further graduate training. Those with the PhD ordinarily seek teaching positions in colleges and universities or research careers in university, government, or private laboratories.

A brochure listing research interests and publications of the members of the zoology graduate faculty, as well as describing admissions and program requirements and opportunities for financial aid, is available on request from the department; this information also is available on the World Wide Web (www2.hawaii.edu/~zoology). The following sections summarize the admissions and program requirements, but the department brochure should be consulted for complete details.

Admissions

Students are admitted to the graduate program only in the fall semester; the undergraduate and graduate studies; and letters of recommendation from three persons who can appraise the student's aptitude for graduate study. An applicant also must be sponsored by a member of the graduate faculty who has indicated his

or her willingness to advise the student; the applicant should communicate with prospective faculty sponsors well in advance of the application deadline.

Intended candidates for the MS or PhD degrees in zoology are expected to present a minimum of 18 credit hours of undergraduate course work in zoology and/or biology and to have completed at least three semesters of chemistry (inorganic and organic), one year of physics, and at least one course each in calculus and botany. Deficiencies in undergraduate preparation must be rectified within the first year, without graduate credit. A course in biochemistry or molecular biology is required of all students, but it may be taken for graduate credit.

General Requirements

To ensure that students have broad competence in zoology, they must take a diagnostic examination at the start of their first semester. This examination seeks evidence of competence at the level of the undergraduate major (for MS students) or the master's degree (for PhD students) in the areas of subcellular-cellular, organismic, and supraorganismic zoology; students scoring at the 90th percentile or higher on any of these sections of the GRE biology test are exempted from the corresponding section of the diagnostic exam. Students who do not perform satisfactorily on the diagnostic examination will be required to take remedial course work, which must be completed within two years.

Master's Degree Requirements

Thesis (Plan A) and non-thesis (Plan B) programs leading to the MS degree in zoology are available. In addition to the thesis, Plan A requires a minimum of 24 credit hours of course work and 6 credit hours of ZOOL 700 (thesis). The 24 credit hours must include at least 12 credit hours of 600- or higher-level course work, including 1 credit hour of ZOOL 691B and 1 credit hour of ZOOL 691C. The 24 credit hours may include up to 6 credit hours from related departments and up to 2 credit hours of ZOOL 699.

All graduate students are required to take at least one graduate seminar or topics course each year.

Plan B is a non-thesis program and requires a minimum of 30 credit hours in 400- through 700-level courses. The 30 credit hours must include at least 6 but

not more than 16 credit hours from related departments (excluding courses cross-listed in zoology or applicable to the zoology BA degree) and at least 18 credit hours of 600- or higher-level course work. The 18 credit hours of graduate course work must include 1 credit hour of ZOOL 691B, 1 credit hour of ZOOL 691C, and at least 2 but not more than 5 credit hours of ZOOL 699. A research paper based on original scientific work is required.

Doctoral Degree

Applicants to the PhD program ordinarily will have completed the master's degree, but exceptionally well-qualified applicants without the master's degree may be admitted directly into the PhD program. Students enrolled in the master's program also may apply for admission into the PhD program without completing the master's degree.

Requirements

Admission to candidacy requires evidence of reading ability in an approved foreign language; this requirement may be satisfied by completion of a language requirement equivalent to that for the bachelor's degree at the University of Hawaii at Mānoa by appropriate certification by a UHM language department, by attaining a score of at least the 80th percentile on the Educational Testing Service foreign language exam, or by completion of an acceptable foreign language requirement in completing a graduate degree at another accredited institution. An oral comprehensive examination must be passed within one year of admission to candidacy; this examination will emphasize the student's research area but may cover any facet of zoology. All PhD candidates are required to have some teaching experience.

The research project culminating in the dissertation is the most important part of the PhD degree program. The dissertation is to be an original contribution based on independent research, carried out under the guidance of the adviser and dissertation committee. The completed dissertation is defended at a public final examination, conducted by the dissertation committee and including a public research seminar by the candidate.

Further Information

Further information about the graduate program in zoology, including full details of admissions and program requirements, may be obtained from the department or at www2.hawaii.edu/~zoology.