



Contents

Colleges of Arts & Sciences..... 86

Degrees, Minors and Certificates Offered	87
General Information	88
Accreditations and Affiliations.....	88
Scholarships and Awards	88
A&S Honor Societies	88
Student Organizations	88
Undergraduate Programs.....	88
Requirements for Undergraduate Degrees from the Colleges of Arts and Sciences.....	88
General Education Core Requirements	89
UH Manoa Graduation Requirements.....	89
A&S Degree and College Requirements.....	89
A&S Major Requirements.....	89
Multiple Majors/Degrees, and Minors.....	89
Requirements That May Be Double-Dipped	90
Graduate Programs.....	90
Professional Programs.....	91

College of Arts and Humanities..... 91

Administration	91
College Certificate	91
Islamic Studies Undergraduate Certificate.....	91
Academy for Creative Media.....	92
American Studies	92
Art and Art History.....	95
Communicology	97
History	98
Music.....	100
Philosophy	103
Religion	105
Theatre and Dance.....	107

College of Languages, Linguistics & Literature..... 112

Administration	112
Instructional and Research Centers.....	112
Center for Biographical Research.....	112
Center for Interpretation and Translation Studies	112
Center for Language and Technology.....	113
National Foreign Language Resource Center	114
East Asian Languages and Literatures.....	114
English.....	116
Indo-Pacific Languages and Literatures.....	118

Languages and Literatures of Europe and the Americas.....	120
Linguistics	123
Second Language Studies	125
English Language Institute.....	128
Hawaii English Language Program.....	128

College of Natural Sciences..... 129

Administration	129
College Certificate	129
Mathematical Biology Undergraduate Certificate.....	129
Astronomy.....	130
Biology	132
Marine Option Program	134
Botany.....	135
Chemistry	138
Information and Computer Sciences	140
Library and Information Science	143
Marine Biology.....	144
Mathematics.....	145
Microbiology.....	147
Physics.....	149
Zoology	151

College of Social Sciences..... 151

Administration	151
College Certificates.....	151
International Cultural Studies Graduate Certificate.....	151
Telecommunications and Information Resource Management Graduate Certificate.....	152
Anthropology	152
Communication	155
Economics	157
Ethnic Studies	160
Geography.....	161
Journalism	162
Peace Studies.....	163
Political Science.....	165
Psychology.....	167
Public Administration.....	169
Public Policy Center.....	170
Sociology.....	171
Urban and Regional Planning	173
Women's Studies.....	176

Degrees, Minors, and Certificates

The Colleges of Arts and Sciences offer undergraduate and graduate degrees, minors, and certificate programs in the following areas. Changes in programs and degrees approved after December 2017 may not be reflected in this listing.

Field	Degree or Certificate
College of Arts & Humanities	
American Studies (p. 92)	Min, BA, MA, PhD
Art and Art History (p. 95)	U Cert, Min, BA, BFA, MA, MFA
Communicology (p. 97)	Min, BA, MA
Creative Media (p. 92)	BA
Dance (p. 107)	Min, BA, BFA, MA, MFA
Historic Preservation (p. 99)	G Cert
History (p. 98)	U Cert, Min, BA, MA, PhD
Islamic Studies (p. 91)	U Cert
Museum Studies (p. 96)	G Cert
Music (p. 100)	Min, BA, BEd, BMus, MA, MMus, PhD
Philosophy (p. 103)	U Cert, Min, BA, MA, PhD
Religion (p. 105)	U Cert, Min, BA, MA
Theatre (p. 107)	Min, BA, MA, MFA, PhD
College of Languages, Linguistics & Literature	
Chinese (p. 114)	U Cert, Min, BA ⁹ , MA ² , PhD ²
Classics (p. 120)	U Cert, BA
East Asian Languages and Literatures (p. 114)	MA ² , PhD ²
English (p. 116)	Min, BA, MA, PhD
Filipino (p. 118)	U Cert ⁶ , Min, BA ⁷
French (p. 120)	U Cert, BA, MA ³
German (p. 120)	U Cert, BA
Hindi (p. 118)	U Cert ⁶ , BA ⁵
Ilokano (p. 118)	U Cert ⁶ , Min, BA ⁷
Indonesian (p. 118)	U Cert ⁶ , BA ⁵
Indo-Pacific Languages (p. 118)	U Cert ⁶
Japanese (p. 114)	U Cert, Min, BA, MA ² , PhD ²
Khmer (Cambodian) (p. 118)	U Cert
Korean (p. 114)	U Cert ⁹ , Min, BA ⁹ , MA ² , PhD ²
Languages and Literatures of Europe and the Americas (p. 120)	MA ³
Latin America and Iberian Studies (p. 120)	U Cert
Linguistics (p. 123)	BA ⁴ , MA, PhD
Philippine Language and Literature (p. 118)	BA ⁷
Russian (p. 120)	U Cert, BA
Samoan (p. 118)	U Cert ⁶ , BA ⁵
Sanskrit (p. 118)	U Cert ⁶ , BA ⁵
Second Language Studies (p. 125)	BA, MA, G Cert ¹² , PhD
Spanish (p. 120)	U Cert, BA, MA ³
Tahitian (p. 118)	U Cert ⁶
Thai (p. 118)	U Cert ⁶ , BA ⁵
Vietnamese (p. 118)	U Cert ⁶ , BA ⁵

- The MS and PhD in botanical sciences are offered in botany.
- The MA and PhD in East Asian languages and literatures are offered in Chinese, Japanese, and Korean.
- The MA in Languages and Literatures of Europe and the Americas is offered in French and Spanish.
- Students can receive a BA in interdisciplinary studies in environmental studies, European cultural studies, Indo-Pacific languages, linguistics, peace studies, and public affairs and policy studies. In addition, students can design their own majors utilizing this program.
- The BA in interdisciplinary studies for Indo-Pacific languages has several concentrations: Hindi, Indonesian, Samoan, Sanskrit, Thai, and Vietnamese.
- The Certificate in Indo-Pacific Languages is offered in Filipino, Hindi, Ilokano, Indonesian, Khmer, Samoan, Sanskrit, Tahitian, Thai, and Vietnamese.
- BA in Philippine Language and Literature with concentration in Filipino or Ilokano
- The Department of Economics coordinates the Graduate Certificate in Ocean Policy.
- The Undergraduate Certificate in Chinese and BA in Chinese in East Asian Languages and Literatures has a concentration in Chinese Language Flagship. The Undergraduate Certificate in Korean and BA in Korean in East

Field	Degree or Certificate
College of Natural Sciences	
Astronomy (p. 130)	Min, BA, MS, PhD
Astrophysics (p. 130)	Min, BS
Biochemistry (p. 132)	BA, BS
Biology (p. 132)	Min, BA, BS
Botany (p. 135)	Min, BA, BS, MS ¹ , PhD ¹
Chemistry (p. 138)	Min, BA, BS, MS, PhD
Computer Science (p. 140)	Min, BS, MS, PhD
Ethnobotany (p. 135)	BS ¹⁰
Information and Computer Sciences (p. 140)	BA
Library and Information Science (p. 143)	G Cert, MLISc
Marine Biology (p. 144)	BS, MS ¹¹ , PhD ¹¹
Marine Option Program (p. 134)	U Cert
Mathematical Biology (p. 129)	U Cert
Mathematics (p. 145)	Min, BA, BS, MA, PhD
Microbiology (p. 147)	Min, BA, BS, MS, PhD
Molecular Cell Biology (p. 147)	BS
Physics (p. 149)	Min, BA, BS, MS, PhD
Zoology (p. 151)	Min, BA ¹⁰ , BS ¹⁰ , MS, PhD
College of Social Sciences	
Anthropology (p. 152)	Min, BA, MA, PhD
Clinical Psychology (p. 166)	G Cert
Communication (p. 155)	BA, MA, G Cert, PhD
Conflict Resolution (p. 162)	G Cert
Disaster Management and Humanitarian Assistance (p. 173)	G Cert
Economics (p. 157)	Min, BA, MA, G Cert, PhD
Ethnic Studies (p. 160)	U Cert, BA
Geography (p. 161)	Min, BA, MA, PhD
Journalism (p. 162)	BA
Ocean Policy (p. 160)	G Cert
Peace Studies (p. 163)	U Cert, BA ⁴ , G Cert
Planning Studies (p. 172)	G Cert
Political Science (p. 165)	Min, BA, MA, PhD
Psychology (p. 167)	BA, BS, MA, PhD
Public Administration (p. 169)	G Cert, MPA
Public Affairs and Policy Studies (p. 170)	BA ⁴
Sociology (p. 171)	Min, BA, MA, G Cert, PhD
Telecommunications Information Resource Management (p. 151)	G Cert
Urban and Regional Planning (p. 173)	G Cert, MURP, PhD
Women's Studies (p. 176)	U Cert, BA, G Cert

Asian Languages and Literatures has a concentration in Korean for Professionals.

- There is no admittance to the BA and BS in Zoology degrees effective Spring 2013. There is no admittance to the BS in Ethnobotany degrees effective Fall 2015.
 - The MS and PhD in marine biology are offered in the Marine Biology Graduate Program (College of Natural Science/SOEST).
 - The Advanced Graduate Certificate in Second Language Studies has a track in Spanish Applied Linguistics.
- BA—bachelor of arts
BFA—bachelor of fine arts
BMus—bachelor of music
BS—bachelor of science
G Cert—graduate certificate
MA—master of arts
MFA—master of fine arts
Min—minor
MLISc—master of library and information science
MMus—master of music
MPA—master of public administration
MS—master of science
MURP—master of urban and regional planning
PhD—doctor of philosophy
U Cert—undergraduate certificate

General Information

The Colleges of Arts and Sciences (A&S) consist of four colleges that offer an integrated curriculum leading to baccalaureate and graduate degrees, minors, and certificates in their respective colleges. Each college includes an administrative unit, an advising unit, and a number of academic departments and programs. Information about the individual A&S colleges follows this shared introduction.

The primary mission of UH Mānoa and the Colleges of Arts and Sciences is an excellent education, providing students with a comprehensive learning experience in a vibrant academic climate.

UH Mānoa undergraduates take many of their first UH Mānoa courses in the Colleges of Arts and Sciences as they undertake the General Education Core curriculum that is part of all bachelor degrees offered on the campus. This liberal arts curriculum stresses the integration of knowledge to enhance students' understanding of life, the human condition, and the world in which we live. The curriculum also entails critical thinking, which enables students to evaluate arguments, ideas, and theories, and to develop creative and meaningful applications of what they learn. The curriculum gives students the tools of inquiry, enabling them first to identify important questions and then to seek, analyze, and interpret possible answers to issues of their lives, world, and universe. The curriculum also provides opportunities to develop students' artistic and creative imaginations and their oral and written communication skills so that they can effectively present their ideas, thoughts, and feelings. Since values guide human actions, the curriculum allows students to examine their own values and learn about those of others in order to help students understand themselves and others around the world.

Students who earn their degrees in one of the Colleges of Arts and Sciences will find that an ideal education, based in the liberal arts, prepares students for productive lives and careers, enlightened citizenship, and lifelong learning. The colleges enhance students' learning opportunities by promoting active participation.

Accreditations and Affiliations

All academic programs are reviewed and evaluated regularly by campus and external faculty committees. Some academic programs, because of the nature of the discipline, are also accredited or certified by national organizations. Check with individual academic departments and programs for their accreditation status or affiliation with national or international organizations.

Scholarships and Awards

The Colleges of Arts and Sciences and their departments provide scholarships and awards to exceptional students. For a selective list of scholarships, see "Tuition, Fees, and Financial Aid." If you wish specific information on prizes or scholarships offered through the Colleges of Arts and Sciences, contact the appropriate department.

A&S Honor Societies

Honor societies in the Colleges of Arts and Sciences include Golden Key National Honour Society (undergraduate), Lambda Delta (freshmen), Mortar Board (seniors), Phi Beta Kappa

(liberal arts and sciences), Phi Eta Sigma (freshmen), and Phi Kappa Phi (general scholarship).

Student Organizations

Societies and clubs associated with many departments within the Colleges of Arts and Sciences give students opportunities to explore a field from an informal perspective, get acquainted with other students with similar interests, and learn of the options available upon graduation. The Colleges of Arts and Sciences highly recommend active student involvement in these associations for the academic and professional enhancements they provide. Check with your major department's advisor for information.

Undergraduate Programs

The Colleges of Arts and Sciences offer Bachelor of Arts (BA), Bachelor of Fine Arts (BFA), Bachelor of Music (BMus), and Bachelor of Science (BS) degrees in 56 different majors. In addition, the Colleges of Arts and Sciences offer 30 minors and 44 different certificates. Detailed program information is available from departments and advising offices.

Throughout their time at UH Mānoa, A&S students should meet with both their college and major advisors to discuss their educational plans.

Students interested in an A&S major should declare their major no later than the end of their sophomore year by submitting a Declaration of Major form to the appropriate advising office. Some majors, such as those in the performing arts, languages, and the sciences, should be declared as soon as possible, preferably during the freshman year, because they require courses that must be taken in a specific order. Information on specific majors, minors, and certificates is available through the respective academic departments and their websites.

Admission Requirements

Admission requirements for the Colleges of Arts and Sciences are the same as those for UH Mānoa. Some majors and programs, however, have additional admission requirements (see departments' sections).

Steps to Graduation

1. **Complete the five requirement areas for undergraduate degrees** as described in the following section and remain in good academic standing (see "UH Mānoa Graduation Requirements" under "GPA").
2. **File for graduation one to three semesters in advance** by following the instructions provided by the relevant advising office.
3. **Pay the UH Mānoa diploma fee** in order to receive a diploma.

Requirements for Undergraduate Degrees from A&S

A&S degrees and a liberal arts education offer a broad-based and integrated perspective on the world and human experiences; better self-understanding; societal, civic, and global knowledge; an independent and inquiring mind; a desire and capacity for life-long learning; and valuable transferable skills.

Students are encouraged to explore connections between disciplinary fields, engage in co-curricular activities, and develop unique combinations of majors, minors, certificates, and electives.

A&S students must fulfill the following five areas of requirements: UH Mānoa General Education Core; UH Mānoa Graduation; A&S Degree; A&S College; and A&S Major. When selecting courses and making plans, students should refer to their respective “Bachelor Degree Program Sheets” and “Sample Four Year Academic Plans” on the OVCAA bachelor degree program sheets website (www.manoa.hawaii.edu/ovcaa/programsheets/).

General Education Core Requirements

A&S students must fulfill the UH Mānoa General Education Core, which consists of **Foundations** and **Diversification** requirements. Some of the courses that fulfill these Core requirements may be double dipped with other requirements (see “General Education”).

The minimum course grade to fulfill Core requirements is a D (not D-). These requirements must be taken for a letter grade, unless the course is offered only with the CR/NC grade option.

UH Mānoa Graduation Requirements

A&S students must fulfill the UH Mānoa Graduation requirements, which consist of **Focus**, **Hawaiian or Second Language** (HSL), **credit**, and **grade point average** (GPA) requirements (see “General Education” and “Undergraduate Education”).

The minimum course grade to fulfill Focus and HSL requirements is a D (not D-). These requirements must be taken for a letter grade, unless the course is offered only with the CR/NC grade option.

BMus students concentrating in voice may fulfill the HSL requirement by completing the first years of two different languages. This substitution must be approved by the department chair. All other A&S students must meet the stated HSL requirement.

Credits

- Students must earn a minimum of 120 total applicable credits, of which at least 45 credits must be upper division (300-level and above) and at least 30 credits must be completed in residence at UH Mānoa. Natural Sciences majors should contact their advising office for information on their upper division requirement.
- Students must complete their academic work and apply for a degree in a timely manner (see “Excess Credit Policy”).

Grade Point Average (GPA)

- To graduate, students must earn at least a 2.0 GPA (C average) for all UH Mānoa registered credits and must not be on academic action (i.e., probation, suspension, dismissal). Some majors or programs have specific GPA requirements (see departments’ sections). Students with a cumulative GPA lower than 2.0 will be placed on academic action.

A&S Degree and College Requirements

The Colleges of Arts and Sciences offer Bachelor of Arts (BA), Bachelor of Fine Arts (BFA), Bachelor of Music (BMus), and Bachelor of Science (BS) degrees, each of which has specific requirements as listed below. Courses used to fulfill these requirements can double dip with UH Mānoa General Education Core, UH Mānoa Graduation, and A&S Major requirements.

Bachelor of Arts (BA), Bachelor of Fine Arts (BFA) and Bachelor of Music (BMus)

- One of the courses approved to fulfill the UH Mānoa General Education Core “FQ” requirement.

Bachelor of Science (BS)

- Calculus I: MATH 215, 241, or 251A (these courses also satisfy the UH Mānoa General Education Core “FQ” requirement)
- Calculus II: MATH 216, 242, or 252A
- Chemistry: CHEM 161/161L and 162/162L, or 171/171L, or 181A/181L
- Physics: PHYS 151/151L and 152/152L, or 170/170L and 272/272L
(These Chemistry and Physics lecture courses also satisfy the UH Mānoa General Education Core “DP” requirement, and these lab courses also satisfy the UH Mānoa General Education Core “DY” requirement.)

Note: Many introductory science and mathematics courses require an assessment examination to determine appropriate placement. Information about assessment exams appears each semester in UH Mānoa’s *Guide to Registration* or Placement Exams and Course Placement at manoa.hawaii.edu/records/register/place_exams/.

Credit Maximums*

Practicum courses: 12 credits

Directed reading and research (-99) courses: 9 credits

Activity courses (such as KRS): 8 credits

*A&S students can take as many credits in these areas as they would like, but only credits up to these maximums apply to the total 120 credits needed for graduation.

A&S Major Requirements

A&S major requirements further develop liberal arts skills and offer students specialization in an academic field of study. Major requirements contribute to the ideal liberal arts education, which prepares students for productive lives and careers, enlightened citizenship, and lifelong learning.

Major requirements are explained in the department sections in this *Catalog* and on department websites.

The minimum course grade to fulfill major requirements is a C (not C-). These requirements must be taken for a letter grade, unless the course is offered only with the CR/NC grade option.

A&S students should meet regularly with their advisor to ensure their progress and to graduate on time.

Multiple Majors/Degrees and Minors

A&S students are encouraged to consider applying for additional majors/degrees, minors, certificates, or a combination. Pursuing additional academic fields of study can benefit students in many ways, including the opportunity to discover relationships across disciplines, develop diverse perspectives, strengthen one’s appreciation for the acquisition of knowledge in more than one academic field, and enhance one’s ability to problem solve and communicate in a variety of settings.

Multiple Majors/Degrees

To be eligible, applicants for multiple majors/degrees and minors must be:

REQUIREMENTS THAT MAY BE DOUBLE-DIPPED

This double-dip chart applies only to A&S degrees/majors on a 2002-2003 core year or later.

Requirements	Foundations	Diversification	Hawaiian or Second Language	Focus	Major*	Second Major*	Minor	Certificate
Foundations	--	NO	NO	NO	YES	YES	NO	NO
Diversification	NO	--	NO	YES	YES	YES	NO	NO
Hawaiian/Second Language	NO	NO	--	YES	NO	NO	NO	NO
Focus	NO	YES	YES	--	YES	YES	YES	YES
Major*	YES	YES	NO	YES	--	NO	NO	NO
Second Major*	YES	YES	NO	YES	NO	--	NO	NO
Minor	NO	NO	NO	YES	NO	NO	--	NO
Certificate	NO	NO	NO	YES	NO	NO	NO	--

*Assumes A&S majors

- enrolled as a classified student in an A&S College;
- in good academic standing (have a cumulative GPA of 2.0 or higher); and
- able to complete all requirements and still graduate in a timely manner.

To apply for multiple majors/degrees, students should visit their College advising office for instructions and the application form. Applicants will need to submit:

- an application form (UHM-3);
- an academic plan showing timely graduation; and
- a brief but formal written statement explaining why the student would like to pursue multiple majors.

Second Major Option

Students who have already completed and graduated with a baccalaureate degree and wish to add just another major (as opposed to an entire second baccalaureate degree) should enroll as a Post-Baccalaureate Unclassified (PBU) student. Students interested in pursuing the post-baccalaureate Second Major Option should meet with an undergraduate advisor in the relevant department to request permission and to identify remaining requirements for the major.

Second Baccalaureate Degree

Students who have already completed and graduated with a baccalaureate degree and wish to add another degree (with major as well as General Education requirements) should apply as a second degree student.

Priority for admission into any A&S baccalaureate program is given to students seeking their first undergraduate degree. Applicants must meet all admission requirements for the degree program to which they are applying, and applications must be received by the Office of Admissions by established deadlines.

Applications for a second baccalaureate degree will be considered only if there is a demonstrable difference in curricula and objectives between the student's previous degree and the one to which the student is applying. Course work used

towards a major/minor/certificate in the first degree cannot be used to satisfy requirements for the second degree unless specific courses are required by both.

Students must earn a minimum of 30 credits in courses taken at UH Mānoa *after admission as a second baccalaureate degree candidate* while continuously enrolled in the colleges. For more information, see the appropriate college advising office of the intended second degree program.

Minors and Certificates

In addition to the major concentrations that are part of every bachelor degree, students may choose to pursue one or more minors and/or certificates in an area of personal interest. Minors and certificates signify that a student has completed a defined body of work in a particular department or program.

Minors are part of the undergraduate degree and are conferred by UH Mānoa's Office of the Registrar when students graduate.

The Board of Regents has granted specified programs and departments the right to confer certificates, and certificates can be conferred as soon as the student completes the program's requirements. Some certificates are only for graduate students.

A&S Colleges offer minors in 30 disciplines and certificates in 44 disciplines. Most minors and certificates require a minimum of 15 credits of upper division course work, completed with a grade of C (not C-) or better and with an overall GPA of 2.5 or higher. Information on specific minors and certificates can be obtained from the appropriate department or program.

To add a minor or certificate, students submit a "Certification of Minor" form.

Graduate Programs

Information regarding graduate programs and admission is in the "Graduate Division" section of the *Catalog*. Check each department's section for information about their specific program(s) and requirements.

Professional Programs

Pre-professional students, i.e., students who plan to pursue careers in professional fields such as Education, Engineering, Law, Medicine, Social Work, etc., often need extra course work, extracurricular activities, exams, and preparation and should seek academic advising as early as possible.

For almost all professional schools, a liberal arts education such as that offered in the Colleges of Arts and Sciences provides an essential foundation. Some professional schools admit undergraduate students in transfer; others require that students complete a baccalaureate degree before being admitted. Most professional schools also have specific prerequisites that students must complete before applying.

Pre-professional students should consult both the recommendations set by the appropriate national organization and the specific prerequisites of the professional schools they hope to attend.

Students interested in health and law careers should visit the Pre-Health/Pre-Law Advising Center (PAC), a walk-in resource center located in Sinclair Library 108. PAC is staffed by trained peer advisors who assist students in clarifying career goals, choosing a major, planning appropriate course work, finding opportunities to gain experience, and applying to schools.

College of Arts and Humanities

Administration

Hawai'i Hall 314
2500 Campus Road
Honolulu, HI 96822
Tel: (808) 956-6460
Fax: (808) 956-9085
Web: www.hawaii.edu/arthurm/

Dean: Peter J. Arnade
Interim Associate Dean: Thomas Brislin

Departments and programs: Academy for Creative Media, American Studies, Art and Art History, Communicology, Historic Preservation, History, Museum Studies, Music, Philosophy, Religion, Theatre and Dance

Advising

Within the context of a liberal arts education, the College of Arts and Humanities assists students in clarifying their life and career goals, developing meaningful educational plans, and preparing for productive lives, enlightened citizenship, and life-long learning. Students are expected to be active partners in the advising process by initiating contact with their advisors and by coming to advising sessions prepared.

Students at UH Mānoa have exceptional freedom in crafting their college experience. Students are able to explore connections between fields, engage in co-curricular activities, and develop unique combinations of majors, minors, and certificates. In addition to meeting all mandatory advising initiatives required by their major departments, declared A&S majors meet with their advisors throughout their career at UH Mānoa for clarification of degree requirements, individual concerns, and resolution of complex academic issues.

Advising Office

Advising Center for the College of Arts and Humanities
QLCSS 113
Honolulu, HI 96822
Tel: (808) 956-8755
Fax: (808) 956-9796
Email: advising@hawaii.edu
Web: www.manoa.hawaii.edu/advising

Degrees, Minors and Certificates

Bachelor's Degrees: Bachelor of Arts (BA), Bachelor of Fine Arts (BFA), Bachelor of Music (BMus)

Master's Degrees: Master of Arts (MA), Master of Fine Arts (MFA), Master of Music (MMus)

Doctoral Degrees: Doctor of Philosophy (PhD)

College Certificate

Islamic Studies Undergraduate Certificate

The purpose of this certificate is to increase understanding of Islam as a world religion through critical analysis of primary and secondary materials, to foster knowledge about the complexity among Islamic societies and their diverse cultural expressions, and to explore the role of Islam and Muslims in present and past world affairs.

The Islamic Studies certificate is housed within the College of Arts and Humanities, the participating departments including Art and Art History, History, Philosophy, and Religion.

Minimum prerequisites for acceptance into the program for undergraduates are sophomore or higher standing with a minimum GPA of 2.5 and the completion of at least one introductory course within one of the four participating departments with a grade of B or better. For non-UH Mānoa students, the prerequisite is an AA or BA degree (or equivalent) that included some humanities component or relevant work experience. Non-UH Mānoa students who do not wish to enroll in a degree program may register for the courses through Outreach College.

Completion of the Islamic Studies Certificate requires 15 credit hours:

- Three required courses: HIST 354, PHIL 330, and REL 209. It is recommended that REL 209 be taken first.
- Two electives selected from: ART 491B, 492B, 493, HIST 301, 302, 355, 432, and REL 352. (One course in Arabic language may be used as one of the electives.)
- And a final research project in association with an elective class.

Advanced undergraduates with a GPA of 3.5 or above may, with instructor consent, use credit from the following graduate classes: ART/ASAN 792, HIST 662, or PHIL 730.

For more information, contact the undergraduate chair in the Department of Philosophy.

Honor Societies

Honor societies at UH Mānoa in the College of Humanities include Golden Key National Honour Society (undergraduate), Lambda Delta (freshmen), Mortar Board (seniors), Phi Alpha Theta (history), Phi Beta Kappa (liberal arts and sciences), Phi Eta Sigma (freshmen), Phi Kappa Phi (general scholarship), and Pi Kappa Lambda (music).

Academy for Creative Media

College of Arts and Humanities
Crawford 210
2550 Campus Road
Honolulu, HI 96822
Tel: (808) 956-7736
Fax: (808) 956-6662
Email: acm@hawaii.edu
Web: acm.hawaii.edu

Faculty

D. Boulos, MEd (Chair)—animation
M. Booth, MFA—documentary, critical studies
T. Brislin, PhD—media ethics; critical studies
L. Flanary, MFA—screenwriting, indigenous filmmaking
V. Hereniko, PhD—critical studies, cinematic and digital productions, screenwriting
A. Misawa, MFA—cinematic and digital production
J. Moffett, MFA—screenwriting, cinematic & digital production
G. Wang, MFA—post production

Degree Offered: BA in creative media

The Academic Program

The Academy for Creative Media (ACM) emphasizes storytelling theories, skills, and application across multiple platforms of digital media and within a context of cultural and aesthetic values. ACM empowers students to tell their own original and authentic stories of Hawai'i, the Pacific, and Asia. At the academy students develop 21st century literacy skills grounded in the latest film/video and animation techniques and tools.

ACM offers an exciting curriculum specializing in three different paths or tracks. The Digital Cinema track offers students several options within video production, post-production, directing, acting, producing and writing. The Animation Track provides unique opportunities in character animation including traditional hand-drawn techniques, digital paperless animation, 3D computer graphics and video game design. The Critical Studies track provides a solid foundation in the study and aesthetics of film with a focus on indigenous film and storytelling.

ACM facilities include a state of the art animation and post production computer lab with Cintiq tablet-monitors, 3D printing and virtual reality workstations. ACM digital cinema equipment offers an array of production possibilities including access to the high-end Arri Alexa camera system.

More information including academic planning guidelines and program information can be found at the ACM website at: acm.hawaii.edu.

Undergraduate Study

Bachelor's Degree

Students have the flexibility to design an academic program around a core of ACM courses and electives including a variety of UH Mānoa departments offering courses in film and media studies. Students work in close consultation with faculty to develop a program that reflects the development of academic, writing, creative, and critical thinking skills.

Requirements

To apply to become a major in Creative Media, students must:

- Have completed or be enrolled in ACM 255 Cinema and Digital Media (with a minimum grade of B), and have completed 12 or more UH Mānoa credit hours or 24 transfer credits with an overall 2.5 GPA or higher;
- Be enrolled in the Colleges of Arts and Sciences;
- Complete and submit an application form, acm.hawaii.edu/forms/.

To complete the creative media major, students must design a detailed and acceptable academic plan, under the guidance of an ACM faculty advisor, consisting of 36 credit hours that emphasizes one of the three ACM tracks, includes the required core of ACM courses, and is supplemented with elective courses. Six credit hours of electives may be taken from departments outside of ACM.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Required Courses

- ACM 255
- ACM 310 or 316
- ACM 350 or 355
- 9 credits from any of the following: ACM 352, 360, 380, 382, 385, 460, 480, 482, 485, and 490
- 12 credit hours from one of three ACM degree tracks

Computer Hardware and Software Requirements

The curriculum of the Academy for Creative Media requires students to have access to a laptop computer. Hardware and software specifications can be found at acm.hawaii.edu/computer-requirements/.

Advising

Introductory information on the academy, including guidelines for academic planning, can be found at acm.hawaii.edu. All students accepted for the major are assigned a faculty advisor. Advising is mandatory to design the student's academic plan, and for any subsequent changes.

American Studies

College of Arts and Humanities
Moore 324
1890 East-West Road
Honolulu, HI 96822
Tel: (808) 956-8570
Fax: (808) 956-4733
Email: amstuh@hawaii.edu
Web: manoa.hawaii.edu/amst/

Faculty

- *W. Chapman, PhD (Chair)—historic preservation
- *E. Colwill, PhD—Atlantic history, gender and sexuality, African diaspora, literary and cultural studies, slavery and colonialism
- *J. Eagle, PhD—film/media, gender studies, U.S. cultural history
- *V. Gonzalez, PhD—American empire, tourism and militarism, gender and sexuality, ethnic and cultural studies
- *N. Kahanu, JD—public humanities and Native Hawaiian programs
- *K. Kosasa, PhD—visual and cultural studies, museum studies, critical pedagogy
- *L. J. Mariano, PhD—Filipino American studies, diaspora studies, Asian American studies
- *B. McDougall, PhD—indigenous studies, literary studies

- *D. Ogawa, PhD—intercultural and Japanese American studies
- *R. Perkinson, PhD—Southern and Western history, race and class, crime and punishment, American empire
- *K. Sands, PhD—religion in America, religion and law, women in religion, Christian history, theory of religion
- *D. Stannard, PhD—social and cultural history, race and racism, colonialism and genocide
- *J. Stanton, PhD—culture and arts
- *M. Yoshihara, PhD—U.S. cultural history, U.S.-Asian relations, Asian American studies, literary and cultural studies, gender studies

Affiliate Graduate Faculty

- A. Kikumura-Yano, PhD—Japanese-American studies, Asian American studies, museum studies
- K. Yamazato, PhD—American literature and culture

Degrees and Certificates Offered: BA (including minor) in American studies, MA in American studies (including dual AMST/MLISc MA), PhD in American studies, Graduate Certificate in Historic Preservation, Graduate Certificate in Museum Studies

The Academic Program

Since its inception in the 1930s, American Studies (AMST) has offered an integrated multidisciplinary exploration of the historical and contemporary American experience. This involves the study of American popular and high culture; environmental issues; institutional structures, including political and economic institutions; systems of thought and belief; and gender, ethnic, racial, and cross-cultural relationships. A combination of historical, literary, social-scientific, and other methodological approaches is used. In addition to such traditional aims, American studies at UH Mānoa also explores the role of Hawai‘i, the Pacific, Asia, and, to a lesser extent, other parts of the world within the American experience, an objective that imparts a cross-cultural dimension to its program and differentiates it significantly from most other programs in the field.

At the undergraduate level, American studies offers a balanced general education experience, as well as excellent preparation for both advanced study in the field and professional studies ranging from law to travel industry management. Advanced degrees are intended primarily as preparation for college and university-level teaching, but recipients are also engaged in such activities as journalism, library management, business administration, and government service. A dual MA can be taken in cooperation with the Library and Information Science Program. In addition to regular degrees, graduate certificates are offered in historic preservation and museum studies.

Affiliations

The department is affiliated with the American Studies Association, American Association of Museums, Hawai‘i Museums Association, National Council of Preservation Education, and National Trust for Historic Preservation.

Advising

The undergraduate advisor advises all undergraduate majors, and the graduate chair advises all graduate students.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete 30 credit hours, including:

- 9 credit hours of AMST core courses, including AMST 383, 483, and 484
- 12 credit hours of AMST electives, of which at least 9 must be upper-division AMST courses
- 9 remaining credit hours may include upper division courses in either AMST courses and/or allied humanities and social sciences courses (no more than 3 credit hours of 499 may be counted). Allied courses must be approved by the undergraduate advisor or be listed in the “pre-approved” allied course list on the department website.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor Requirements

Students must complete:

- 15 credit hours of 300- or 400-level American studies electives

Graduate Study

Application Requirements

Applicants for graduate programs should present an academic record indicating a broad range of study in the humanities and the social sciences with an emphasis on American culture. In addition to the admission requirements of Graduate Division, the applicant should have a copy of his or her latest GRE scores, Statement of Objectives, and letters of recommendation sent directly to the department. Each letter of recommendation should have the “Waiver of Access to Confidential Letters/Statements” form attached to it. Graduate applicants are also required to submit a writing sample, preferably a paper that was written for a graduate course. Applications for graduate admission are considered for either fall (September-December) or spring (January-May) semester. Application deadlines for local and mainland applicants are: **February 1** for fall; **September 1** for spring. Application deadlines for foreign applicants are: **January 15** for fall; **August 1** for spring. There is no summer admission to advanced degree programs in Graduate Division. There is an application fee.

Proficiency in a foreign language is not required unless it is necessary for dissertation research. Students having a special career interest in Asia may select courses offered in the Asian studies program to satisfy some degree requirements in American studies.

Courses for the graduate program are to be selected from among the courses listed in the back of the *Catalog*, from appropriate American studies graduate courses and upper division and graduate courses in related fields. Consent of the departmental graduate chair is required for enrollment in all undergraduate courses and all graduate courses in other fields. The courses listed in the back of the *Catalog* are numbered and grouped as follows: Master's Plan B/C Studies; 600–609, introductory courses; 610–689, fields of study courses; 690–699, special topics courses; and 700–800, thesis and dissertation research. AMST 699V, 700V, and 800V are offered each semester; AMST 600, 601, and another graduate course to be

specified by the graduate chair are offered annually, and most other 600-level courses are offered once every three years.

Master's Degree

MA candidates are expected to possess the BA degree and have a background knowledge of American culture.

Requirements

MA students may select either the Plan A or Plan B program. Students must complete 30 credit hours as follows:

Plan A (Thesis)

- 3 core courses, including AMST 600, 601, and 603
- 2 AMST graduate seminars
- 3 AMST graduate seminars or electives
- 2 Capstone (Thesis) AMST 700
- thesis defense

Plan B (Non-thesis)

- 3 core courses, including AMST 600, 601, and 603 or substitute (Students may waive AMST 603 with the permission of the graduate chair, and substitute a course in an appropriate area of specialization)
- 3 AMST graduate seminars
- 4 AMST graduate seminars or electives
- written and oral examinations in two fields

More specific requirements are detailed on the American studies website at: manoa.hawaii.edu/amst.

Doctoral Degree

PhD candidates are expected to possess the MA degree in American studies or its equivalent and should have a scholarly attainment of a high order and widespread intellectual interests. In most instances, admission to the PhD program requires applicants to possess an MA degree. However, occasionally an applicant with a BA and exceptionally strong credentials may be admitted directly into the doctoral program.

Requirements

Students must complete 45 credit hours including:

- 3 core courses, including AMST 600, 601, and 603
- 4 or more AMST graduate seminars
- 5 or more AMST graduate seminars or graduate electives in other disciplines in a chosen field of specialization (one 400-level course permitted)
- up to 9 credits of AMST 650

In individual cases and at the discretion of the graduate chair, some non-core requirements may be waived.

Students must also complete:

- A qualifying examination with written and oral components
- An oral comprehensive examination administered by the dissertation committee
- A dissertation of high quality and its successful oral defense

Certificate

Graduate Certificate in Historic Preservation

Candidates for the Certificate in Historic Preservation must possess a BA degree. The Certificate in Historic Preservation combines course work and applied experience.

Requirements

Students must complete 15 credit hours of graduate course work:

- 3 credit hours of AMST 645 Historic Preservation (cross-listed as ANTH 645)
- 3 credit hours of AMST 675, Preservation: Theory and Practice (cross-listed as ARCH 628 and PLAN 675)
- 3 credit hours of AMST 695, Historic Preservation Practicum
- 6 credit hours in field of specialization

A maximum of 6 credit hours may be applied to the Historic Preservation Certificate and to another degree, pursued concurrently, subject to approval from the director of the certificate program, the director of the concurrent graduate program, and Graduate Division. Internships are usually undertaken with local firms and organizations that have a preservation interest or with individuals who are qualified to direct independent work in preservation. The program concludes with a formal colloquium presentation. More information is available on the Historic Preservation Program's website at manoa.hawaii.edu/amst/historic-preservation/the-field/.

Graduate Certificate in Museum Studies

Candidates for the Certificate in Museum Studies must possess a BA degree. The Museum Studies Graduate Certificate Program provides an opportunity to learn about museums, acquire professional experience, and develop research skills.

Requirements

Students must complete 18 credit hours of graduate course work:

- 3 credit hours of AMST 683, Museums: Theory, History, Practice
- 3 credit hours of AMST 684, Museums and Collections
- 3 credit hours of AMST 685, Museums and Education
- 3 credit hours of AMST 686, Museum Studies Practicum
- 6 credit hours of electives

A maximum of 6 credit hours may be applied to the Museum Studies Certificate and to another degree, pursued concurrently, subject to approval from the director of the certificate program, the director of the concurrent graduate program, and Graduate Division. Internships are usually undertaken with local museums and related institutions or organizations and under the direction of a supervisor qualified to direct independent work in a museum related project. The program concludes with a formal colloquium presentation. For more information, see manoa.hawaii.edu/amst/museum-studies/about-museum-studies/.

Art and Art History

College of Arts and Humanities
Art 142
2535 McCarthy Mall
Honolulu, HI 96822
Tel: (808) 956-8251
Fax: (808) 956-9043
Email: uhart@hawaii.edu
Web: www.hawaii.edu/art/

Faculty

- *G. Chan, MFA (Chair)—photography
- *K. Lingley, PhD (Associate Chair)—Chinese art history
- *L. Andrews, PhD—Western art history
- *M. Babcock, MFA, PhD—fiber
- *R. Bengston, MFA—gallery director
- *A. Bush, MFA—graphic design
- *P. Chamberlain, MFA—electronic arts
- *C. Cohan, MFA—printmaking
- *D. Drexler, MFA—drawing and painting
- J. Ferreira, N.H. Dipl.—sculpture
- *S. Groeniger, MFA—digital imaging
- *J. Hamilton Faris, PhD—contemporary art history and theory
- *W. Kawabata, MFA—drawing and painting
- *P. Lavy, PhD—South and Southeast Asian art history
- *C. Lee, MFA—graphic design
- *R. Mills, MFA—glass, sculpture
- *S. Spangler, MFA—ceramics
- *J. Szostak, PhD—Japanese art history
- *B. Taylor, MFA—ceramics
- *D. Waite, PhD—Pacific art history

Cooperating Graduate Faculty

J. Stanton, PhD—Western art history

Affiliate Graduate Faculty

J. Feldman, PhD—Pacific art history

Degrees Offered: Undergraduate Certificate in Islamic Studies, BA in art with either a studio or Art History focus (including minor), BFA in art, MA in art history, MFA in art

The Academic Program

The Department of Art and Art History (ART) offers two separate but interrelated programs. Art history, leading to the BA, affords the opportunity to study the arts of Asia, the Pacific, and the West in a historical and cultural context. The art studio programs provide students either with a broad-based, liberal arts approach via the BA or with a more focused studio specialization leading to the BFA. The latter is considered more appropriate for students intending to pursue the MFA at the graduate level.

The department is housed in an excellent three-story facility with painting studios, photography and computer labs (Macintosh equipped for graphic design and digital imaging, PCs for electronic arts), and fully equipped printmaking, sculpture, ceramics, fiber, and glass facilities. The UH Art Gallery is a prominent feature of the department's programs. Six or seven major exhibitions are presented each year, many of which have received national recognition. Visiting artist programs supplement the regular course offerings.

Advising

Advising is mandatory for all art and art history majors. For advising, see the associate chair, Kate Lingley, in Art 142A, email: lingley@hawaii.edu.

Undergraduate Study

BA Degree

This broad-based art degree provides students with a choice of a studio focus, where a wide range of visual arts media can be explored, or an art history focus, where the visual arts are studied in a historical context.

Requirements

Studio Focus

Students must complete 42 credit hours, including:

- 6 credits of art studio core: ART 113 and 116
- 12 credits of art history: ART 175, 176, and 6 credits at the upper division level
- 24 credits of art studio: 12 credits must be upper division

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Art History Focus

Students must complete 42 credit hours, including:

- 11 art history courses (33 credit hours), including ART 175, 176, and 395
- Three studio classes (9 credit hours), selected in consultation with advisor

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BFA Degree

The BFA degree in art is designed for those students who desire a focused preparation in the visual arts or who intend to pursue an advanced degree or career in art. Areas of specialization include: ceramics, digital imaging, drawing, electronic arts, fiber, glass, graphic design, painting, photography, printmaking, and sculpture. Students are encouraged to cross media boundaries, and qualified students may opt to construct an individualized inter-media plan of study with faculty guidance and approval.

Students seeking admission to candidacy for the BFA must be a BA Art major and pass a portfolio review, which can take place only after the following requirements have been met.

1. Completion of art studio core requirements: 113 and 116.
2. Completion of art history core requirements: ART 175, 176, and 302.
3. Completion of one 200-level studio elective not in student's chosen area.
4. Completion of a minimum of 9 credit hours in chosen area with an average of B (not B-) or better.
5. Completion of 18 credits in UH Mānoa core requirements exclusive of art department courses.

All studio areas will hold an annual BFA Portfolio Review in late spring, at least one week prior to registration.

Requirements

Students must complete 63 credit hours, including:

- Seven courses in one of the 11 program areas as indicated at the time of declaration (last 9 credit hours must be completed at UH Mānoa)

- Two art studio core courses (6 credit hours): ART 113, 116
- Three art history core courses (9 credit hours): ART 175, 176, 302
- Four art history elective courses (12 credit hours)
- Five art elective courses (15 credit hours)

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

- 21 credits in art, 15 of which must be from non-introductory courses

Courses used to meet General Education Core requirements cannot be credited toward the minor.

Students interested in pursuing a teaching career in elementary and secondary art education should seek advisement from the College of Education.

Graduate Study

The Department of Art and Art History offers two master's degrees, the MA in art history—Plan A (thesis) or Plan B (non-thesis), and the MFA in studio—Plan A only.

MA in Art History

The MA in art history emphasizes the arts of Asia and the Pacific. Applicants for the degree must hold a bachelor's degree from an accredited U.S. college or university or its equivalent from a recognized foreign institution. An undergraduate major in art history is desirable, but not necessary. In support of the application for admission, all applicants are required to send three original letters of recommendation, a sample of written work (preferably an art history seminar or term paper), and General Test scores from the GRE directly to the art department prior to the application deadline. The application form for graduate admission should be sent under separate cover to Graduate Division.

Plan A Requirements:

Students must complete 36 credit hours, including:

- ART 670 Art Historical Methodology
- 9 credit hours of seminars in Asian and Pacific art history
- 6 credit hours of ART 700 or thesis

Students intending to engage in studies leading to the PhD are strongly encouraged to complete course work beyond the minimum MA Plan A requirements.

Plan B Requirements:

The non-thesis program is for students wishing to teach in community colleges or at the high school level. Required are 36 credit hours of which 18 must be taken in courses numbered above 600 including:

- ART 670 Art Historical Methodology
- 9 credit hours of seminars in Asian and Pacific art history

In either plan, up to 9 credits, with advisor's approval, may be earned in appropriate advanced courses in other UH Mānoa departments.

The more suitable plan will be mutually determined by the faculty and the student.

Students must also demonstrate a reading knowledge in a foreign language appropriate to their field of specialization,

chosen in consultation with the area advisor. For more information on the MA in art history, contact Paul Lavy, PhD, email: paullavy@hawaii.edu.

MFA Degree

The MFA is the terminal degree in studio art. The normal period of study is three years in residence. Areas of specialization include ceramics, electronic arts, fiber, glass, painting, photography, printmaking, and sculpture. Although most MFA applicants apply to one of the above media specializations for admission, students may take electives in more than one medium and are encouraged to investigate new genres.

Applicants for the MFA must present evidence of a BFA or a BA with a strong studio art and art history background. The Department of Art and Art History acknowledges that some MFA applicants may not fit traditional criteria and will thus consider exceptional bachelor's degree recipients that exhibit relevant backgrounds, strong commitment, and distinct potential in the visual arts. An applicant with a transcript of 25% or more nontraditionally graded undergraduate or graduate credit hours must submit GRE scores and course performance report forms.

Supporting material of 20 samples of original work should be submitted on a cd (still images in jpeg format, no more than 1.5 mb each and video samples in .mov format) that illustrates abilities in an area of specialization, as well as potential for development within the scope of the department's facilities and personnel. This visual material and three letters of recommendation should be sent to the Department of Art and Art History. The application form for graduate admission should be sent under separate cover to Graduate Division.

Deficient or incompatible undergraduate preparation may result in admission on a conditional basis and will require, at the discretion of the graduate faculty, additional course work.

After acceptance into the graduate program, admission to candidacy for the MFA degree will be based upon results of the graduate evaluation and a positive review of course work. Those failing must successfully pass on their second attempt or they will be dismissed from the program.

Failure to meet the requirements for continued registration or to show progress in course work will lead to probation and/or dismissal from the graduate program.

Requirements

Students must complete 60 credit hours, including:

- 24 credit hours with 6 credits each in ART 611, 612, 613, 614. Conditional or unclassified graduate students may enroll only in ART 611 for a maximum of 6 credits. Consent of instructor is required.
- 15 credits of electives
- 6 credits of two art history courses (numbered 300 or above)
- 3 credits of ART 690
- 12 credits of ART 700 thesis, including an exhibition and written documentation

Art courses numbered 300 and above and not required at the undergraduate level in the area of specialization are acceptable for graduate credit. Elective courses also may be selected from any other UH Mānoa department, provided such study is deemed useful and pertinent to the student's degree plan. MFA students wishing to take ART 699 must petition through Graduate Division to apply it toward the degree. All elective courses require appropriate preparation and the consent of the

instructor and graduate student's advisor. For more information on the MFA program, contact gradart@hawaii.edu

Communicology

College of Arts and Humanities
George 326
2560 Campus Road
Honolulu, HI 96822
Tel: (808) 956-8202
Fax: (808) 956-3947
Email: COMG@hawaii.edu
Web: manoa.hawaii.edu/communicology

Faculty

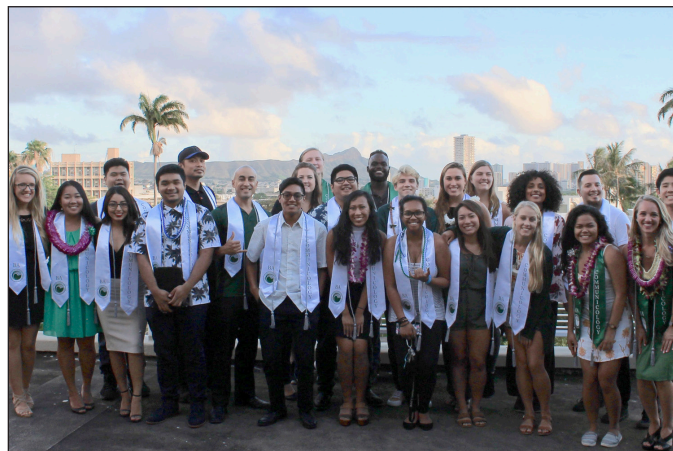
- *A. S. E. Hubbard, PhD (Chair)—nonverbal communication, conflict and relational management, deception
- *H-R. Lee, PhD (Director of Graduate Studies)—health communication, campaigns, persuasion and social influence
- *K. S. Aune, PhD—relational management, emotion
- *R. K. Aune, PhD—message and information processing, natural language processing, research methods
- *R. E. Cambra, PhD—interpersonal and instructional strategies, negotiation, intercultural communication
- *J. Gasiorek, PhD—social cognition, intergroup and intergenerational communication, research methods
- *M. S. Kim, PhD—intercultural communication, persuasion and social influence
- *E. Taniguchi, PhD—interpersonal communication, family communication, cross-cultural communication
- J. Urashima, MA—instructional communication, communication technology
- *J. Zhang, PhD—interpersonal/intergroup communication, evolutionary theory and communication, research methods

Degrees Offered: BA (including minor) in communicology, MA in communicology

The Academic Program

The Department of Communicology (COMG) has as its primary objectives the development of knowledge in and instruction concerning the process of 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 communication as well as examining the encoding and decoding processes involved in communication. The second area is relational communication, which focuses on factors that influence growth, maintenance, and termination of relationships. The third area, social influence, deals with the processing of beliefs, attitudes, and behavioral modification, including gaining compliance, conflict resolution, persuasive campaigns, and propaganda.

Communicology is predominantly a discipline of systematic, purposeful thinking and communicating. Students obtain a liberal education of considerable breadth and depth in regard to communication theory. Furthermore, they are afforded ample opportunity to develop their communicative skills by applying theory in such diverse activities as interviewing, persuasion, group discussion, organizational communication, conflict management, intercultural communication, public speaking, relational communication, deceptive communication, and



health communication. 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:

- COMG 251, 301, 302, 364, 371, and 381
- 5 upper division elective courses

COMG 301 and 302 should be taken no later than the semester after the major is declared. In residence policy: A minimum of 15 credit hours which includes COMG 302, must be taken in the Department of Communicology at UH Mānoa. Introductory courses do not count as electives. Electives must have a prerequisite, or be numbered 300 or above. Additionally, up to three (3) credit hours from any combination of COMG 399, COMG 499, and/or COMG 453 may be used to fulfill the Communicology major elective requirements.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/. Further details on the BA program is provided at manoa.hawaii.edu/communicology. Contact the Director of Undergraduate Studies for additional information at comgmaj@hawaii.edu.

Minor

Requirements

Students must complete 15 credit hours of COMG, including:

- COMG 364, 371, and 381
- 2 upper division elective courses
- Introductory courses, COMG 399, and COMG 499 **do not** count toward the minor. Electives must have a prerequisite or be numbered 300 or above and cover a specific content area.

Further details on the minor is provided at manoa.hawaii.edu/communicology. Contact the Minor Advisor for additional information at comgmin@hawaii.edu.

Graduate Study

Master's Degree

The Department of Communicology offers an innovative MA program emphasizing the central processes and functions of human communication. To that end, course work, seminars, and student research develop a cross-situational understanding of theory and research in the three areas central to the discipline: message processing, relational communication, and social influence. In addition, given our cultural and geographical advantages at UH Mānoa, the Department of Communicology excels in teaching and research in intercultural communication.

All applicants for the MA program in communicology must supplement the application and transcripts required by 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 communication 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. Applicants may be interviewed as well. A minimum TOEFL score of 100 (internet)/600 (paper) is needed for students whose native language is not English.

Further details on the MA program is provided on the department website at manoa.hawaii.edu/communicology. Contact the Director of Graduate Studies for additional information at comgrad@hawaii.edu.

Requirements

The department offers both Plan A (thesis) and Plan B/C (non-thesis: applied project or comprehensive exams) programs. The Plan A thesis program requires a minimum of 33 credit hours of graduate work, at least 27 of which must be in communicology courses numbered 600 and above, including 6 credit hours of COMG 700 Thesis Research. The Plan B applied project program requires a minimum of 33 credit hours of graduate work in courses numbered 600 and above, which includes at least 3 credit hours of COMG 600 Master's Plan B. The comprehensive exam program requires a minimum of 33 credit hours of graduate work in courses numbered 600 and above and one credit of COMG 600. Communicology courses numbered 400 to 499 and courses from allied disciplines may be counted toward the degree only with prior consent of the Director of Graduate Studies. COMG 601 and 602 are required for both Plan A and Plan B programs. Plan A also requires COMG 702 (COMG 620 does not count towards the degree).

Successful completion of Plan A requires each candidate to present an acceptable thesis and pass a final oral examination based on the thesis. Plan B requires each student either complete an applied research project or pass written comprehensive exams. Plan B candidates must also pass a final oral examination based on either the research project or the comprehensive exams.

History

College of Arts and Humanities
Sakamaki A-203
2530 Dole Street
Honolulu, HI 96822
Tel: (808) 956-8486, 956-8358
Fax: (808) 956-9600
Web: manoa.hawaii.edu/history

Faculty

- *S. J. Brown, PhD (Chair)—modern China, intellectual and cultural
- *M. J. Lauzon, PhD (Associate Chair)—early modern Europe, European intellectual
- *L. Y. Andaya, PhD—traditional Southeast Asia, Indonesia
- *D. N. Arista, PhD—Hawaiian Islands, 19th century U.S., Pacific world
- *P. Arnade, PhD—early modern European history
- *E. O. Bertz, PhD—South Asia, Indian ocean, Africa
- *D. A. Chappell, PhD—Pacific Islands, world history, Africa
- *M. L. Daniel, PhD—U.S. early American Republic, politics and race
- *E. L. Davis, PhD—middle China, religion
- *D. L. Hanlon, PhD—Pacific Islands, Micronesia, ethnography
- *M. A. Henriksen, PhD—U.S., recent America, popular culture
- *P. H. Hoffenberg, PhD—modern Europe, England, British Empire
- *K. L. Jolly, PhD—medieval Europe, Anglo-Saxon England, medieval Christianity
- *L. C. Kelley, PhD—modern Southeast Asia, Vietnam
- *C. Kim, PhD—modern Korea, Industrialism, Socialism, labor
- *J. P. Kraft, PhD—U.S., business and labor
- *M. V. Lanzona, PhD—modern Southeast Asia, Philippines, women
- *F. López Lázaro, PhD—world, Mediterranean, maritime history
- *C. K. Matteson, PhD—modern Europe, France, environmental history
- *M. T. McNally, PhD—Tokugawa Japan, social and intellectual
- *N. Njoroge, PhD—U.S., Caribbean and Latin America, race and critical theory
- *R. L. Rapson, PhD—U.S., cultural and intellectual
- *R. C. Rath, PhD—U.S., early America, Atlantic world, Native American, sensory
- *S. J. Reiss, PhD—U.S. foreign relations, Latin America and Caribbean, African
- *M. P. Romaniello, PhD—early modern Europe, Russia, Soviet Union, gender
- *J. P. Rosa, PhD—Hawaiian Islands, 20th century Hawai'i, U.S. social and cultural
- *S. Schwartz, PhD—ancient Europe, classical history, gender, law
- *N. K. Stalker, PhD—Japan, culture and gender
- *Y. Totani, PhD—modern Japan, Pacific
- *W. Wang, PhD—classical China, Ming/Qing China, politics and culture

Cooperating Graduate Faculty

B. Andaya, PhD—Southeast Asia

Degrees Offered: Undergraduate Certificate in Islamic Studies, BA (including minor) in history, MA in history, PhD in history

The Academic Program

History (HIST) is the study of change and continuity in human society over time. Drawing upon concepts and methods of many disciplines, history provides perspective on the human

condition, past and present. The discipline of history develops skills in evaluating evidence, organizing information, clarifying and structuring concepts, and writing narratives and expositions. History is a core around which liberal education can be structured. The study of history lays a foundation upon which one can develop a cultural, social, and intellectual life that enriches an understanding of the wider world.

Majoring in history is an excellent way to move into specialized study in such areas as teaching, library and information science, foreign service, medicine, law, and business. Those who plan to pursue a career as professional historians will want to continue their education and obtain the MA and PhD degrees. The Department of History of UH Mānoa offers a full range of courses in American, Asian, European, Pacific, and World history.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete eleven courses (33 credit hours) in history with a grade of C (not C-) or better, distributed as follows:

- Minimum of five courses (15 credit hours) in one of the following four fields (U.S., Europe, Asia/Pacific, Europe, or Comparative/World)
- One upper division course (3 credit hours) in each of the other three fields
- HIST 396 and 496
- One additional history course

No more than two 200-level courses (6 credits) may be used toward the history major, and no 100-level course may be counted.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

For a student to minor in history, the declaration of intent should be made as early as possible after matriculation. The student must contact the undergraduate advisor of the department and complete the appropriate forms. The minor requires the successful completion with a grade of C (not C-) or better of 15 credit hours of upper division history courses. It is possible to concentrate in a particular area of history, but it is not necessary to do so. No one specific course is required for the minor.

Graduate Study

The Department of History offers the MA and PhD degrees in the U.S. and the Americas, Asian, European, Pacific/Hawai'i, and World fields. All applicants for advanced degree programs in history are requested to supplement the application and transcripts required by Graduate Division with letters of recommendation (two for the MA, three for the PhD), preferably from professors with whom the applicant has worked; a sample of written work such as a term paper, seminar paper, or MA thesis; and the General Test scores from the GRE. These supplementary items should be sent directly to the department.

Complete details on all graduate programs in history, as well as financial aid available to prospective students, are outlined in

the departmental website, manoa.hawaii.edu/history or by email at gradhist@hawaii.edu.

Recipients of advanced degrees in history have undertaken careers as teachers of history and social studies in secondary schools, community colleges, colleges, and universities. In addition, the study of history provides an excellent background for alternative careers in museology, library and archival work, government service, historical preservation, business and marketing research, and allied research fields.

Courses for the graduate programs are to be selected from among the history courses listed in back of the *Catalog* and from graduate offerings in related disciplines as directed by the student's supervisory committee. The consent of the instructor is required for admission to all courses numbered 600 and above. Courses numbered over 600, except HIST 602 and 790, may be repeated *once* for credit.

Master's Degree

Intended candidates for the MA degree must present a minimum undergraduate preparation of 18 upper division credit hours in history or some closely allied field such as Asian studies or American studies. Students who lack this preparation or who wish to undertake study in an area of history other than that of their undergraduate preparation must make up deficiencies either before or during graduate study. In the latter case, the student will be admitted only conditionally, pending removal of the deficiencies.

The prospective MA candidate may select either Plan A (thesis) or Plan B (non-thesis). Both plans require the intended candidate to give evidence of competence in a foreign language appropriate to the field of major interest. In addition, students in the U.S. or East Asia history areas in either Plan A or Plan B must also meet seminar distribution requirements, which raise the minimum required 600-level work to 18 credit hours.

Plan A (Thesis) Requirements

Plan A requires a minimum of 24 credit hours of graduate work, at least 15 of which must be in courses numbered 600 and above (including HIST 602), plus 6 credit hours of HIST 700 Thesis Research, a written thesis, and a final oral examination, which is a defense of the thesis.

Plan B (Non-thesis) Requirements

Plan B requires a minimum of 30 credit hours of graduate work, at least 18 of which must be in courses numbered 600 and above (including HIST 602), comprehensive examinations in two fields of history (a major and a minor), a final oral examination covering those two fields of history, and submission of two major research papers from graduate seminars, one in the major field and the other in the minor field.

Doctoral Degree

Intended candidates for the PhD degree are expected to possess the MA degree in history or its equivalent. The PhD candidate must demonstrate the capability of pursuing a successful career as a professional historian by showing initiative in historical research and by giving evidence of the ability to present findings both orally and in writing.

Requirements

The candidate must prove competence by the acquisition of a broad background in general history, passing four comprehensive examinations in two broad geographic areas of history and completing an original dissertation and a final oral exami-

nation. The candidate must also demonstrate a knowledge of at least two foreign languages related to the dissertation topic; for students of American or Hawaiian history an alternative requirement may, at the discretion of the doctoral committee, be substituted for one of the languages.

Music

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Faculty

- *L. Paxton, MM (Chair)—voice performance
- *G. Arnold, PhD—music education band and brass
- *T. Bingham, MA—music education
- *J. Boeckman, DMA—music education
- *M. Felipe, DMA—choral music
- *A. Fine, PhD—musicology
- *M. Hoover, DM—voice performance
- *T. Itoh, DMA—composition/theory
- *J. Korth, DMA—piano performance
- *F. Lau, DMA—ethnomusicology
- *B. W. Lee, PhD—ethnomusicology
- *I. B. Lin, DM—strings performance
- *C. Loong, PhD—music education
- *K. McQuiston, PhD—musicology
- *J. Moulin, PhD—ethnomusicology
- *J. Mount, MM—voice performance
- *T. Osborne, DMA—composition/theory
- *J. Stepec, MM—orchestral music, conducting and strings
- *D. Womack, DMA—composition/theory
- *T. Yee, DMA—piano performance

Degrees Offered: BA (including minor) 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 on the Music Department website: manoa.hawaii.edu/music/.

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 advisor. Advising is mandatory for music majors and minors.

New Students

An orientation session for new students is held each semester during the week before classes begin. At that time, incoming students take theory, history, and piano placement tests and receive advising and approval for music courses.

Undergraduate Study

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

Specific course requirements are available on the Music Department website: manoa.hawaii.edu/music/. New and transfer students must attend orientation and consult the undergraduate chair when entering UH Mānoa.

Admission Requirements

In addition to the UH System Application form, prospective music majors must submit a Music Department Undergraduate Admission Application, recommendation form, and perform an audition. Forms and instructions are available from the department office and the department website at www.manoa.hawaii.edu/music/apply/ugrad.

BA Degree

Requirements

Major requirements include 40 credit hours in various music courses. Bachelor of Arts majors work with an advisor to emphasize general music, Hawaiian music, or musical theater.

For information on the BA degree, go to manoa.hawaii.edu/music/about-us/degrees-programs/ba/. For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BMus Degree

Requirements

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

For information on the BMUS degree, go to manoa.hawaii.edu/music/about-us/degrees-programs/bm/. For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

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 K-12 degree program is offered in conjunction with the College of Education.

For information on the BEd degree, go to manoa.hawaii.edu/music/about-us/degrees-programs/bed/. For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

The major music requirements posted here are effective Fall 2012. Students who declared their major before this date may have different requirements. Students are advised to meet with a major advisor regarding the specific requirements that apply to them.

Minor

Requirements

Students can pursue a minor in music while continuing their chosen major. The minor program requires a minimum of 15 credit hours. For further information, contact the music department office or view the website at manoa.hawaii.edu/music/about-us/degrees-programs/minor/.

Graduate Study

Entrance exams for incoming students consist of the Diagnostic Exam to test for any deficiencies and insure that students remedy them as soon as possible in their degree programs. The General Exam (master's level)/Qualifying Exam (doctoral level) is completed before candidacy for a degree.

Diagnostic Exam

Prior to enrolling for the first semester of study, each classified graduate student will take a diagnostic examination in music history (part I) and music theory (part II) to determine whether or not the general exams or qualifying exams in those areas (or specified courses in lieu of the general exams) are needed to clear pre-program deficiencies. Students are also tested in their area of concentration (part III). 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 advisor and the student in planning a program of study. Detailed information about the examination is available on request. Successful performance on specific parts of the diagnostic examination exempts the student from the equivalent parts I and II of the general examination or qualifying examination. Entering doctoral students who are continuing directly from a master's degree in UH Mānoa Music are exempt from taking parts I and II of the diagnostic/general exams, since the student has fulfilled this requirement. In Ethnomusicology and Composition, the student will also be exempt from part III. Musicology and Music Education doctoral students must take part III, the qualifying exam, upon entering the doctoral program.

The diagnostic/general/qualifying examination is offered in August (before the beginning of the fall semester), in January (before the beginning of the spring semester) and in the third week of April.

- Students who enter in the fall semester will take the diagnostic examination in August. If the student does not pass any portion of the diagnostic examination, he or she may re-take the examination in January and April or take the recommended course(s) between August and May and clear deficiencies in the first academic year of study by earning a grade of B or higher.
- Students who enter in the spring semester will take the diagnostic examination in January. If the student does not pass any portion of the diagnostic examination, he or she may re-take the examination in August and the following January or take the recommended course(s) between January and December and clear deficiencies in the first year of study by earning a grade of B or higher.

N.B. Students who enter in the spring semester will be exempt from taking the April examination and will not need to submit a petition for approval to the graduate faculty.

Dismissal from the graduate program will occur if the student does not pass any part of the diagnostic examination and

then: (1) does not pass any part of the general examination or qualifying examination in two attempts; or (2) does not take the prescribed course(s) to clear deficiencies in their first year of study; or (3) does not earn a B or better in the prescribed course(s).

Students with deficiencies are strongly advised to take the recommended course(s). Students may also wish to study on their own and re-take the examination. Keep in mind that many classes recommended to rectify deficiencies are offered only once per year. The student should consult with his or her advisor to discuss the most suitable course of action.

General or Qualifying Exams

Before being admitted to candidacy for a degree, each graduate student must pass the department's general examination/qualifying examination, which consists of three parts: music history, music theory, and the student's area of concentration. All parts of the general examination must be passed before the student earns 18 credit hours toward the degree; course work taken in excess of this limit will not be counted if the credits are earned before all three parts of the general examination are passed.

When a student does not pass any part of the diagnostic/general/qualifying examination, there are two options:

1. Exam Option. The student may repeat the unsuccessful portion of the exam the next time the examination is offered. If a student chooses this option but does not take the next examination, a failure is recorded. Any student who does not pass the diagnostic examination and does not pass the general examination/qualifying examination twice will be dropped from the program.
2. Course Option. The student may take courses to remove the deficiency and must submit the required course option form. Courses to clear pre-program deficiencies or in lieu of general or qualifying examination must be taken for grade during the first two semesters of study and passed with a grade of B (not B-) or better. These courses do not count toward graduate degrees. All deficiencies must be cleared by the end of the first year of study. Students who do not remove their deficiencies by the end of the first year of study will be dropped from the graduate program.

Any exceptions to these procedures must receive prior approval by petition to the graduate faculty. The student petitions the graduate faculty by memo, signed and dated, explaining the reason for the deferral request, no less than five weeks before the exam retest date.

Master's Degree

The department offers programs leading to the MA in music with concentrations in ethnomusicology, music education, and musicology, and to the MMus with concentrations in composition and performance (voice, piano, and selected instruments). The MA in music education is available either on-campus or online.

Admission Requirements

Applicants for admission to the master's degree program must have a bachelor's degree with a major in music or a bachelor's degree and evidence of musical background equivalent to a music major; three confidential letters of recommendation (not more than two years old) on forms provided by the music department; and, for non-native speakers of English, a TOEFL score of 500 (paper) 61 (iBT) minimum for performance or

540 (paper) 76 (iBT) for other concentrations and 600 (paper) 100 (iBT) with scores of 25 in listening and speaking for teaching assistants. Application forms are available at the music department and its website, or Graduate Division and its website. The completed forms should be submitted with two copies of all transcripts by **January 15** for the fall semester, and by **August 1** for the spring semester. (Those who decide to enroll must submit official copies of all post secondary transcripts.) In the following concentrations, students must meet additional admission requirements:

- a. Composition—Three original scores representative of various forms and media.
- b. Ethnomusicology—A personal statement of 800 words minimum (3 pages) including the purpose of study. Background in cultural anthropology is desirable and, depending on the thesis research, may be required.
- c. Music Education—BEd (music education) or equivalent, minimum of one year of full-time music teaching experience in a public or private school, a 20-30 minute videotape/DVD demonstrating current teaching expertise, and a lesson or rehearsal plan.
- d. Musicology—Sample of academic writing proficiency (a 10-page term paper in English from an upper division music history course is preferred).
- e. Performance—An audition of works representative of various musical styles. An applicant not residing in Hawai'i must submit an unedited tape recording or CD 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 UH 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.

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, he or she must petition the graduate faculty in music for approval.

More detailed information and links to relevant forms for all degree programs are posted on the department's website: manoa.hawaii.edu/music/.

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.

Degree Requirements

Students must earn a minimum grade of B- in music courses that count toward the master's degrees. Plan A requires a minimum of 30 credit hours, 22 in course work and 8 of thesis. Candidates concentrating in ethnomusicology and musicology follow this plan. An ethnomusicology thesis is usually based on fieldwork.

Under Plan A, the student arranges the oral final examination 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 thesis committee examines the student's knowledge and understand-

ing of the field of concentration, with emphasis on the content of the thesis.

Plan B also requires a minimum of 30 credit hours but does not include a thesis. Candidates in performance, music education, and composition follow this plan. Plan B students in performance must fulfill the following requirements:

1. Give a public, hour-long recital.
2. Additionally, in the recital semester the student will meet with the recital committee for a one-hour oral examination to discuss historical and analytical aspects of the works performed in the graduate recital.

Plan B students in music education must 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.

Plan B students in composition must fulfill the following requirements:

1. Composition students must compose an original work in one of the larger forms, and write an essay on a topic related to their master's studies.
2. Candidates concentrating in composition must give a public, 30-45 minute recital of original works composed during their master's studies at UH Mānoa.

The master's student must spend at least two semesters in program residency at UH Mānoa. (Full-time work or the equivalent in credit hours.)

Doctoral Program

The department offers programs leading to the PhD in music with concentrations in composition, ethnomusicology, music education, 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 (not more than two years old) on forms provided by the music department, a sample of academic writing proficiency such as recent term papers as specified in certain areas, and, for non-native speakers of English, a TOEFL score of 560 (paper), 83 (iBT) or better, and, for teaching assistants, 600 (paper), 100 (iBT) with scores of 25 in listening and speaking. Application forms are available at the music department and its website, or Graduate Division and its website. The completed forms should be submitted with two copies of all transcripts by **January 15** for entrance in the following fall semester and by **August 1** for entrance in the following spring semester. (Those who decide to enroll must submit official copies of all post secondary transcripts.)

In the following concentrations, students must meet additional admission requirements:

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 recording of at least one of the above.
2. Ethnomusicology—A master's degree in ethnomusicology or the equivalent in terms of course work and fieldwork.

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 master's degree in music education is preferred, but an equivalent background is acceptable. A minimum of two years full-time music teaching in a public or private school; three confidential letters of recommendation on the applicant's teaching ability, at least two of which must be written by the applicant's job supervisors (principal or other supervisor); and one of the following: (a) a 20-30 minute videotape or DVD demonstrating current teaching expertise, or (b) an in-person teaching demonstration; and a lesson or rehearsal plan relevant to the 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, he or she must petition the graduate faculty in music for approval. Each student will have a principal advisor who must be a member of the music department's graduate faculty. An application will be denied if it is determined that no principal advisor in the applicant's area of interest is available on the music department's graduate faculty.

Degree Requirements

This degree requires an emphasis in ethnomusicology (11 credits of specified course work) for students who are not concentrating in 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, and/or supervised college teaching experiences.

The PhD student must spend at least three semesters in program residence (full-time work or the equivalent in credit hours) at UH Mānoa and must complete the degree within seven years. The student must earn a minimum grade of B- in music courses that count toward the PhD in music.

Other 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.
4. Composition—Language appropriate to areas of research. Presentation of a full (50-60 minute) recital of works composed during the doctoral residency.

Comprehensive Exam and Advancing to Candidacy.

This exam measures 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 sufficiently prepared for this examination. This two-part exam consists of a written portion and a two-hour oral portion. A student failing this exam may retake it once, but must do so within one year. Passing this exam enables the

student to begin the dissertation process and receive an ABD certificate from UH Mānoa, indicating that all requirements of the doctorate except for the dissertation have been completed. Following the formation of a five-member doctoral committee, the comprehensive exam, and submission and approval of a dissertation proposal by the doctoral committee, the student is advanced to candidacy.

After this occurs, all that remains is fieldwork (for ethnomusicology majors only), research for and 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, consisting 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. The committee chair and outside member must be physically present at the exam, which is subject to other regulations described at the Graduate Division website: manoa.hawaii.edu/graduate/content/final-defense.

The student arranges the date of the final oral exam in consultation with the doctoral committee; it usually takes place during the semester 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 examinations, the committee scrutinizes and judges the student's knowledge and understanding of the field of concentration, with emphasis on the content of the dissertation.

Philosophy

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Faculty

- *R. Bontekoe, PhD (Chair)—hermeneutics, ethics, philosophy of law
- *T. Albertini, DPhil—Renaissance and early modern philosophy, Islamic philosophy, feminist issues in philosophy
- *A. Chakrabarti, DPhil—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. Dalmiya, PhD—epistemology, feminist philosophy
- *M. Ishida, PhD—classical American philosophy, Japanese philosophy, process philosophy, history and philosophy of mathematical logic
- T. Jackson, PhD—specialist, director of philosophy in the schools; logic, comparative philosophy, philosophy for children
- *S. Odin, PhD—Japanese philosophy, comparative philosophy, American philosophy
- *F. T. Perkins Jr., PhD—classical Chinese philosophy, early modern European philosophy, comparative philosophy

*J. Tanke, PhD—continental philosophy, aesthetics, historical ontology, social and political philosophy

*G. Tsai, PhD—ethics, social and political philosophy

Degrees Offered: Undergraduate Certificate in Islamic Studies, BA (including minor) 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:

- Logic: PHIL 110;
- Two elective courses 200-level or above;
- Two courses in the History of Western Philosophy: PHIL 211, 212, 213, or 414 (Alpha);
- Three courses in the core philosophical fields (of ethics, aesthetics, metaphysics, political philosophy, epistemology, philosophy of science: PHIL 301, 302, 304, 306, 307, 308;
- One course in Buddhist, Chinese, Indian, Islamic, or Japanese philosophy: PHIL 330 to 380, PHIL 406; and
- PHIL 449
- a minimum of 12 credits must be taken at UH Mānoa

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

Students must complete 15 credit hours of philosophy above the 100-level, and a minimum of 9 credits must be taken at UH Mānoa. A minor will have any one of the following themes: Asian philosophy; ethics and law; science and society; humanities and the arts; and history of philosophy.

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

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 the department's "Graduate Student Handbook" at uhmpsa.wordpress.com/the-graduate-student-handbook/.

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 UH Mānoa is the only institution of higher learning in the U.S. with a regular program leading to the PhD degree with areas of specialization in Islamic, Indian, Buddhist, Chinese, Japanese, and comparative philosophy. Whatever their field of specialization, graduate students intending to complete a PhD in philosophy at UH Mānoa 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. 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 resources 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 can be completed either entirely through course work or through a combination of course work and thesis preparation.

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 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, Arabic, 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: 1) history of philosophy; 2) metaphysics, epistemology, logic, and philosophy of science; and 3) 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, Arabic, classical Chinese, Japanese, Sanskrit or Pali. Language proficiency examinations will be conducted through Graduate Division and the department of UH Mānoa responsible for teaching that language.

Religion

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Faculty

- *J. Lyon, PhD (Chair)—Christianity, Hebrew Bible, New Testament, history of religion in Hawai'i
- *H. J. Baroni, PhD—Japanese and East Asian religions, Buddhism in America
- *M. A. Brown, PhD—Hawaiian religion
- *R. Lamb, PhD—South Asian religions, Asian monasticism, ethics
- *M. Mohr, PhD—Japanese and Asian religions
- *J. E. E. Pettit, PhD—Daoism, Chinese religions

Cooperating Graduate Faculty

G. D. Panisnick, PhD—Western religions

Degrees Offered: Undergraduate Certificate in Islamic Studies, BA (including minor) in religion, MA in religion

The Academic Program

In keeping with the goals of UH Mānoa, the Department of Religion takes advantage of the state's strong social and cultural ties with Asia and the Pacific and seeks to enhance those ties. Within this extraordinary multicultural milieu, the Department of Religion serves as a link between the academic community and the many Asian and Pacific religious communities that flourish in Hawai'i. Most of the major religious traditions—Buddhism, Christianity, Confucianism, Daoism, Hinduism, Islam, Judaism, Shinto, as well as Hawaiian and Polynesian religions—are represented and make Hawai'i an ideal site and context for a study of Asian and Pacific religious communities and activities.

The Department of Religion is dedicated to the cultivation of a humanistic understanding of a wide range of religious traditions, ritual practices, philosophical speculations, ethical imperatives, and institutional histories. Its investigative approach is interdisciplinary and intercultural.

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, medicine, political science, and sociology.

Requirements

Students must complete 30 credit hours in religion, including at least 18 credit hours in 300- and 400-level courses. A minimum 2.5 GPA in religion courses must be maintained for graduation. Required course: REL 300.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

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

Graduate Study

Master's Degree

The department has developed two graduate program plans leading to the MA degree: a thesis-based MA program (Plan A) and a non-thesis track (Plan B). Both Plans A and B are two-year programs.

Admission Requirements

Applicants to the MA program in religion must hold a bachelor's degree from an accredited U.S. college, university, or its equivalent from a recognized foreign institution of higher learning. Applicants should include in the Statement of Objectives an explanation of how their academic background has prepared them for study in the religion MA program.

Plan A

The thesis program provides students with an opportunity for graduate study in Asian or Polynesian religions. 30 credits are required.

Advancement to Candidacy: Candidacy may be granted after the first semester after completing 9 graduate credits plus REL 600 with a GPA of 3.0 or better (total 12 credits) and the language requirement.

Required courses (9 credits)

- REL 600 History and Theory of the Study of Religion (3)
- REL 700 Thesis Research (3, 3)

Area requirements (9 credits minimum)

Students must take at least three 600-level courses in their area of specialization (Asian or Polynesian).

Electives

Electives consist of any Religion course (400 level and above, excluding 499), other than those that fulfill program and area requirements. Two complementary graduate courses (3 credits each) from other disciplines may be accepted at the discretion of the thesis advisor and graduate chair. No more than two 400-level courses may be used to satisfy this requirement.

Language

To achieve a mastery of language at the second-year level, students are required to complete two years of a language appropriate to their field of specialization (e.g., Chinese, Hawaiian, Hindi, Japanese, Sanskrit, Samoan, Tahitian, or another Asian or Polynesian language approved by the area advisor) with a minimum B-minus grade in the fourth semester of class.

This language requirement will be waived for students demonstrating language proficiency by an equivalency exam. These exams will be set by the student's advisor and assessed by two faculty readers (one from the Department of Religion and one from the department in which the language is taught).

Language courses will not count towards the 30 credits required for an MA in religion.

Thesis (REL 700)

A maximum of 3 credits per semester for a total of 6 credits of REL 700, usually taken over two semesters is required. Students must be admitted to candidacy and must complete 12 credits before they can register for REL 700.

Completion of an original thesis, demonstrating a mastery of advanced research, analytic, and discursive skills, is required of all students in Plan A.

Each candidate must form a committee of three members of the graduate faculty, one of whom is from outside the department. Faculty reserve the right not to serve on a thesis committee.

After submission of a completed thesis to the committee for its consideration, the candidate must be present for the final oral examination on the subject of the thesis.

After all revisions as determined by the thesis committee have been incorporated and the thesis is in final form, the majority of the committee, including the chairperson, passes the student for the master's degree. A candidate who fails may be re-examined once, provided it is done within one calendar year of the initial examination.

After a candidate has taken 6 credits of 700, the candidate must register for 1 credit of 700 in subsequent semesters and in the semester of graduation.

One bound copy of the approved thesis shall go on file in the department office and must be submitted to the department office at the same time the final thesis is deposited with Graduate Division.

Plan B

The Plan B degree program provides students with a non-thesis opportunity for graduate research and study in Asian or Polynesian religions. Plan B is designed for students who wish to articulate the results of their research in innovative ways using various available technologies. In place of a thesis, the culminating requirement is a Plan B Project, an original research project as described below. 30 credits are required.

Master's Plan B Procedures

1. Preliminary conference with the graduate chair for the purpose of determining an advisor, proposed courses to fulfill the requirements, and the foreign language for the degree.
2. Candidacy for Plan B students requires a memo from the graduate chair indicating that 12 graduate credits, including REL 600, have been taken with a GPA of 3.0 or better and that the student has prepared a preliminary proposal and secured the support of two graduate faculty members from the Department of Religion to serve on their committee. Committee members will have the responsibility of approving, supervising, and evaluating the project as completed in REL 688 (Plan B Research).
3. Completion of a research project demonstrating a critical understanding of religion in a particular area of Asia or the Pacific or of a topic within the overall region. The project should reveal original insights into selected religious phenomena or area of concentration. Students will be expected to present the results of their research in innovative ways that utilize the arts, various media, or developing technologies, and thereby show their relevance to scholarly discourse. Research projects will be presented in a public forum during the student's final semester.

Required courses (6 credits)

- REL 600 History and Theory of the Study of Religion (3)
- REL 688 Plan B Research

Area requirements (9 credits)

Students must take at least three 600 level courses in a particular region of Asian or in Polynesian religions.

Electives (15 credits)

Electives consist of any religion course (400 level and above, excluding 499), other than those that fulfill program and

area requirements. Two complementary graduate courses (3 credits each) from other disciplines may be accepted at the discretion of the advisor and graduate chair. No more than two 400-level courses may be used to satisfy this requirement.

Language

To achieve mastery of a language at the second-year level, students are required to complete two years of a language appropriate to their area of specialization (e.g., Chinese, Hawaiian, Hindi, Japanese, Sanskrit, Samoan, Tahitian, or another Asian or Polynesian language approved by the area advisor) with a minimum B-minus grade in the fourth semester of class.

This language requirement will be waived for students demonstrating language proficiency by an equivalency exam. These exams will be set by the student's advisor and assessed by two faculty readers (one from the religion department and one from the department in which the language is taught). Language courses will not count toward the 30 credits required for an MA in religion.

Theatre and Dance

College of Arts and Humanities
Kennedy Theatre 113
1770 East-West Road
Honolulu, HI 96822
Tel: (808) 956-7677
Fax: (808) 956-4234
Web: manoa.hawaii.edu/liveonstage/

Faculty

- *E. Fisher, DA (Chair)—modern dance, dance history, choreography
- *G. Lizenbery, BFA (Associate Chair, Director of Dance)—modern dance, kinesiology, movement analysis
- *L. O'Malley, PhD (Associate Chair, Director of Theatre)—theatre history, dramatic literature, research
- *T. H. Baker, MFA—Hawaiian theatre, playwriting
- *M. Bisbee, MFA—scenic design
- *M. Branner, MFA—theatre for young audiences
- *J. Iezzi, PhD—Asian theatre, acting, directing, research
- *P. Kao, MFA—modern dance, choreography, improvisation
- *K. Miller, PhD—dance ethnography, visual media for dance, research, performance studies
- *P. Mitri, MFA—acting, voice, movement
- *K. Pauka, PhD—Asian theatre, acting, directing, research
- *S. Ray, MFA—acting, directing
- *A. Schiffner, MFA—creative dance and drama, pedagogy; dance/theatre teaching internships, research, theory
- *B. Shevelenko, MFA—lighting, sound, special effects, projections
- *M. Wessendorf, PhD—dramatic literature, theory, performance studies
- *E. Wichmann-Walczak, PhD—Asian theatre, acting, directing, research

Affiliate Graduate Faculty

M. Cristofori, MA, MBA—theory and dance history
A. Vallabh, PhD—culture and performance studies, dance ethnography

Degrees Offered: BA (including minor) in dance, BA (including minor) in theatre, BFA in dance, 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.

Theatre includes the study of dramatic literature and theory; acting and directing; stage, costume, and lighting design; stagecraft; playwriting; Asian theatre, Hawaiian theatre, and TYA (Theatre for Young Audiences); and performance studies. Imaginative and creative individuals interested in the disciplined, practical application of classroom theory are suitable candidates as theatre majors. Teaching and professional stage, film, and television work are typical professions of theatre 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 a wide variety of industries and professions. Other fields known to actively recruit employees with a theatre degree include: advertising, animation, architecture, arts administration, business administration, design for public spaces, fashion, graphic design, human-computer interface design (HCI), landscaping, multi-media marketing, non-profit management, public relations, themed entertainment, urban design and planning, and video game design and performance. The theatre major will benefit from a comprehensive curriculum that includes the world's most noted Asian theatre program, a nationally respected TYA program, and our Hawaiian theatre offerings.

Dance is the art of human motion. It encompasses the study of human movement as it relates to the physical sciences, music, theatre 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, production, history and criticism, and research. UH Mānoa's dance program offers comprehensive theory courses and a wide variety of dance techniques and styles. The program is considered unique with its offerings in dance culture and performance studies and Asian and Pacific dance.

Affiliations

The department belongs to the Hawai'i State Theatre Council, is an institutional member of the U.S. Institute for Theatre Technology, and participates in the Kennedy Center American College Theatre Festival. The Asian theatre 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 theatre program, undergraduates must consult each semester with the theatre undergraduate advisor. Each theatre major also chooses a faculty mentor to supervise progress and help in preparation of a graduation portfolio. Newly admitted theatre graduate students should consult for the first one or two semesters with the director of graduate studies in theatre for initial advising, after which each graduate student is expected to select from the graduate faculty a permanent advisor well-versed in the area of the student's concentration.

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

Undergraduate Study

BA in Theatre

This degree is designed for students with a broad interest in theatre and allows maximum flexibility for satisfying requirements in areas of greatest interest. Incoming students may declare a BA major in Theatre on their university application.

Students must complete 42 credit hours, determined in consultation with an advisor and based on the student's interests within theatre while fulfilling the broad-based requirements in the areas of acting, directing, theatre history, Asian theatre, theatre for young audiences, design and technical theatre production:

Course Requirements

- THEA 240, 311, 312, 411, and 412
- Two courses in Hawaiian, Asian, or Pacific theatre (one in theory/history/literature, one in performance)
- One course each in acting, voice/movement, directing or playwriting, design or technical theatre, and theatre for young audiences
- 6 credits (including at least 3 alphas) from THEA 200B, 200C, 200D, 200E, 400B, 400C, 400D, 400E
- Graduation requirements include the submission of a portfolio of student work eight (8) weeks into the student's final semester, an exit interview, and a written self-assessment of the student's tenure at UH Mānoa.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Dance

This degree is designed for students with a broad interest in dance and allows them maximum flexibility to satisfy requirements in their areas of greatest interest. Incoming students may declare a BA major in Dance on their university application.

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 advisor and based on the student's desired focus within dance, such as teaching, choreography, dance culture and performance studies, or technical theatre production.

Course Requirements

- DNCE 151, 255, 260, 360 or 361, 370 or 490, 452, or 453
- THEA 200C, 200D, or 200E
- 12 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 and at least one of these in Asian dance
- 11 credits of focus electives to be selected from:
 - DNCE 250, 360, 361, 362, 370, 371, 372, 452, 453, 459, 460, 470, 480, 490, 499, 660, 693, MUS 107, THEA 200, Asian and Pacific performance courses, related courses in ethnomusicology, Asian theatre, anthropology, Hawaiian studies, Pacific Island studies, or ethnic studies

Other Requirements

BA Dance students are required to participate in at least **one** (1) UH dance production per year (eg., student dance concerts, main stage dance concerts, as performers or crew members).

BA majors are required to register for and attend at least one technique class per semester.

Graduation requirements include the submission of a portfolio of student work, assessment essay, exit interview, and completion of a survey.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BFA in Dance

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 only. Incoming students may declare a BA major in Dance on their university application, then audition for the BFA degree during spring semester of their first year at UH Mānoa if interested in the BFA degree program.

Course Requirements

Students must complete 62 credit hours, including:

- DNCE 151, 250, 360, 361, 362, 370, 371, 372, 452, 453, 495
- 1 credit hour of DNCE 495
- 6 credit hours of DNCE 321 or higher
- 6 credit hours of DNCE 331 or higher
- 3 credit hours of DNCE 470 or 480
- 2 credit hours in two different Asian or Pacific dance performance courses and at least one of those in Asian dance
- 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 200C, 200D, or 200E

Other Requirements

BFA Dance students are required to participate in at least **two** (2) UH dance productions per year. At least one must be in a performance capacity. Prior to the senior project, BFA students must audition choreography for a fall or spring student concert by the sixth semester of the dance major. BFA majors are required to register for a technique course every semester.

Graduation requirements include the submission of a portfolio of student work, assessment essay, exit interview, and completion of a survey.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor in Dance

Course Requirements

Students must complete 15 credit hours numbered 200 level and above, including nine credit hours in courses numbered 300 or above. A maximum of 9 credit hours from dance technique courses may be designated for the minor. Dance minors should consult with the undergraduate advisor.

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. Courses must include one from performance, one from design or technical theatre, and one from history/literature. Participation in two departmental productions is required.

Theatre minors should consult with the undergraduate theatre advisor.

Graduate Study

Most graduates, especially those with PhD degrees, pursue teaching careers, but there are many career opportunities in professional theatres and dance companies, radio, television, films, and community theatres, as well as the wide variety of other fields which actively recruit those with theatre degrees.

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

Master's Degrees in Theatre

Master's degrees offered in theatre include the MA Plan A (thesis) in two areas: (a) Theatre, and (b) Performance Studies; Plan B (non-thesis), and the MFA Plan B (creative/performance).

For the MA Plan A, the candidate writes a thesis in Asian or Western theatre (history, theory, or dramatic literature), or in Performance Studies. 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 seven concentrations: acting, directing, design, and playwriting (each of these four may include Western, Asian, Hawaiian, and TYA), Asian performance, Hawaiian Theatre, and TYA.

Applicants must present an adequate undergraduate background and submit three letters of recommendation. The department expects that all incoming graduate students will have taken at least two courses in dramatic literature or theatre history, and one course in each of the following three areas: acting, directing, and design or technical theatre. 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 500/61 (paper/internet) or IELTS overall band test result of 6.00 (600/100 for TOEFL and 7.0 for IELTS for Graduate Assistantship applicants). 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 portfolios, video of acting audition material or material directed, or play scripts.

Application deadline for the fall semester is **December 15**. Spring semester application deadline is **August 15**. 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 advisor, a program appropriate for their interests (minimum of 39 credit hours). 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 theatre (excluding 690); credit for 699 may not exceed 9 credit hours. The program must include 3 credit hours in each of the following areas: research

methods (THEA 600); practicum in teaching (THEA 692); Asian theatre theory/history; Western theatre theory/history; and graduate theatre 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. MA (Thesis) students take an additional 6 credit hours in theatre history or theory; 3 credit hours in a creative area; and must complete 6 credit hours of THEA 700 Thesis Research. MA (Non-Thesis) students take 3 credit hours each of TYA, creative drama, creative movement, or Western puppetry; Asian or Western acting or directing; design/technical theatre. Students pursuing an MA (Thesis) in Performance Studies develop, with an advisor, 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, or DNCE 651); performance theory (THEA 615); seminar in performance studies (THEA/DNCE 617); theory (DNCE 653 or THEA 611); practicum in teaching (THEA 692); 3-credit course in a creative area, and 6 credit hours of THEA 700 Thesis Research. A minimum of 18 credit hours must be in courses numbered 600 to 798 (excluding 700); credit for 699 may not exceed 9 credit hours. For all MA degrees, students will take a four-hour written comprehensive examination followed by an oral examination. MA (Thesis) 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 foundation courses (3 credits in research, 6-9 credits in history and/or theory (total number depending on concentration), and 3 credits in practicum in teaching); 39 credit hours of concentration courses, including enrollment in THEA 690 Graduate Theatre Workshop, for which students receive 1 or 2 credit hours (depending upon extent of involvement) for working on a single Kennedy Theatre production, and a single or a series of culminating projects, depending on concentration, for which the student will enroll in a total of 6 credit hours of THEA 695 Creative Project; and 6-9 credit hours of electives (total number depending on concentration). 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 director of graduate studies in theatre. Students will select their elective courses in consultation with their advisors 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 advisor, 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); 3 credits of THEA 692; 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 theatre, or playwriting; 6 credits of THEA 690 Graduate Theatre Workshop (a minimum of 4 credits in acting and 1 credit in technical theatre; 1 credit may be in design, directing, playwriting, etc.), and 6 credits of THEA 695 Creative Project.

Asian Performance

For the concentration in Asian performance, students must complete 3 credits in research; 6 credits in Asian theatre history/theory; 3 credits in Western theatre history/theory; and 3 credits of THEA 692.

Students in Asian Performance-Acting also take 9 credits of Asian Acting; 3 credits in Experimental Asian acting; 3 credits in Western acting; 3 credits of Asian/multicultural directing; 3 credits of Asian/Pacific music and dance (minimum 1 credit music and 1 credit dance); 3 credits in design/technical theatre or playwriting; and 3 credits of additional creative/performance courses (may be in Asian/Pacific Music or Dance, or in Asian or Western acting or directing at the graduate level); 6 credits of THEA 690 Graduate Theatre Workshop (1 credit per semester for performing in Asian/multicultural Directing class work, and 3 credits for performing in major Asian or Western work other than Mainstage Asian productions); and 6 credits of THEA 695 Creative Project (2 credits for performing in each of 3 annual Mainstage Asian productions).

Students in Asian Performance-Directing take 6 credits in Asian acting; 10 credits in directing (6 credits Asian/multicultural, 4 credits Western); 1 credit in Asian/Pacific music; 1 credit in Asian/Pacific dance; 3 credits in design/technical theatre or playwriting; 6 credits of additional creative/performance courses in above areas or courses at the graduate level in Western acting; 6 credits of THEA 690 Graduate Theatre Workshop (minimum 2 credits in directing; 2 credits in Asian performance—acting, directing, or puppetry; 2 credits may include dramaturgy, 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 for thesis production.

Design

For the concentration in design, students must complete 3 credits in research; 6 credits in history and/or theory, Asian and/or Western; 3 credits of THEA 692; minimum 6 credits in intermediate design (400 level or above) and minimum 3 credits in advanced design (600 level), excluding other requirements below; 6 credits of THEA 657 Seminar in Design; 6 credits in creative/performance courses (400 level or above) (may include acting, directing, dance, playwriting, puppetry, or others as approved); 9 credits of THEA 690 Graduate Theatre Workshop (as approved by graduate committee chair); minimum 3 credits in Asian theatre (excluding THEA 690); 6 credits of THEA 695 Creative Project (including qualifying and final projects); and minimum 3 credits THEA 650 Professional Advancement in Entertainment Design.

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 of THEA 692; 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 theatre (in two areas—stage 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 Theatre 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.

Hawaiian Theatre

For the concentration in Hawaiian theatre, students must complete 3 credits in research; 3 credits in Hawaiian theatre history/theory; 3 credits in Pacific theatre history/theory; 3 additional credits in Western/Asian history/theory; 3 credits of THEA 692; 3 credits in Hawaiian acting; 3 credits in Hawaiian puppetry/hula ki'i; 3 credits in Hawaiian dance/hula; 3 credits in Hawaiian music/papa mele; 3 credits in voice; 3 credits in design/technical theatre or playwriting; 3 credits in directing; 3 credits in youth theatre/puppetry; 3 credits of additional creative/performance courses in above areas or courses at the graduate level; 6 credits of THEA 690 Graduate Theatre Workshop; and 6 credits of THEA 695 Creative Project. Students must demonstrate Hawaiian language proficiency either through exam or course work; students may enter program with this deficiency, working towards language requirement (HAW 302) concurrent with degree.

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/Hawaiian/Pacific and 3 credits in Western, both at 600 level or above); 3 credits of THEA 692; 9 credits in playwriting (excluding THEA 318); 3 credits in script analysis; 3 credits in contemporary dramatic literature or theatre history; 6 credits in design/technical theatre (including 3 credits in lighting design); 3 credits in acting or directing; 3 credits in movement, dance, or music; 3 credits in puppetry or youth theatre; 3 credits of THEA 690 Graduate Theatre 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.

Theatre for Young Audiences (TYA)

For the concentration in TYA, students must complete 3 credits in research; 9 credits in Asian and/or Western history and/or theory; 3 credits of THEA 692; 3 credits in creative drama/dance; 3 credits in theatre for young audiences; 3 credits in a teaching seminar; and 3 credits in a TYA seminar. Areas of specialty in the TYA concentration include acting, curriculum, directing, playwriting, and puppetry. Candidates must take 9 credits in any one of these areas along with minimum of 4 credits of Graduate Theatre Workshop (THEA 690); 2 credits of Directed Research (THEA 699); and 6 credits of Creative Project (THEA 695). An additional 12 credit hours of electives are available, although a minimum of 3 credits in Asian theatre (excluding THEA 690) are required. All TYA students complete a minimum of 10 hours per semester in community engagement.

Master's Degrees in Dance

The department's graduate offerings in dance include the MA Plan A, MA Plan B, and the MFA. For admission to the master's in dance program the GRE is not required; for foreign

students the minimum TOEFL score is 600/100 (paper/internet). The MA Plan A requires a written thesis. The MA Plan B requires a capstone project. 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. 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 sample of their choreography and performance. MA and MFA candidates must submit a significant sample of written work, such as a major paper. Application and transcripts should be sent to Graduate Division. All other material may be uploaded to the Supplemental Upload website through Graduate Division. The application deadline for the fall semester is **February 1** (January 15 for foreign applicants). The spring semester application deadline is **September 1** (August 1 for foreign applicants). All additional materials should be sent directly to Graduate Division.

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 qualifying dance) the student may be admitted to candidacy.

Dance Culture and Performance

The MA Plan A (dance culture and performance emphasis) requires a minimum of 36 credit hours, including DNCE 651, 652, 653, 654, 655, or 661 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. Language courses may be required if necessary for the student's thesis research.

Dance Education

MA Plan B (dance education emphasis) requires a minimum of 36 credit hours, including DNCE 460 or 490, 651, 652, 691, 693, and 699; 9 credit hours from DNCE 321, 331, 421, 431; 3 credit hours in 300 to 400 level Asian or Pacific dance courses; and 6 credit hours of electives (3 credits at the 600 level).

Performance and Choreography

The MFA 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; DNCE 672 (4 credit hours); DNCE 679 (2 credit hours); DNCE 691; DNCE 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 and register and attend a technique course each semester. It is expected that MFA candidates present choreography every semester.

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 theatre history, theory, or criticism, not creative or artistic work, is offered in four areas: (a) Asian theatre, (b) West-

ern theatre, (c) comparative Asian-Western theatre, and (d) performance studies. 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 at least one non-English language, 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 UH Mānoa. At the end of the second semester in residence, the graduate faculty will provide the candidate with an assessment of his or her progress to date.

Required courses in the Asian area are THEA 464, 465, 466, and 692, as well as THEA 660 if the candidate's dissertation requires field research, and at least one seminar other than THEA 660 every semester until the comprehensive exams are passed. Required courses in the Western area are THEA 600; THEA 692, plus three other 600 to 700 level courses from a departmental list of approved courses. Required courses in the performance studies area are THEA 615; DNCE/THEA 617; THEA 692; and 6 credits of 600 to 700 level courses from a departmental list of approved courses. The curriculum of the comparative Asian-Western theatre area is determined by the student's doctoral committee and must include THEA 692.

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 and by serving as teaching assistants. A high level of accomplishment in the foreign language or languages appropriate to the proposed area of research (as determined by the advisor) is also required, and language competency will be determined by examination.

Written comprehensive examinations and two and a half hours of oral comprehensive examinations are required of all candidates before embarking on the dissertation. These are given after a student has completed the language requirement. Written comprehensive exams shall consist of nine questions. The comprehensive includes questions on both Asian and Western drama and theatre and/or performance studies; further guidelines are available from the graduate advisor. The questions on the written portion are posed by the theatre 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. There is a seven-year time limit for PhD students to complete all requirements. For unusual circumstances, one extension may be granted.

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 and a sample of their research (such as a seminar paper or a master's thesis). The application deadline for admission in the fall semester is **December 15** for U.S. and foreign applicants. Spring semester application deadline is **August 15** for U.S. and foreign applicants. Requirements include a broad background in the humanities, a master's degree in theatre or its equivalent, and competence in dramatic production.

College of Languages, Linguistics & Literature

Administration

Bilger 101
2545 McCarthy Mall
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Tel: (808) 956-8516
(808) 956-9071
Fax: (808) 956-9919
Web: www.lll.hawaii.edu/

Interim Dean: Laura E. Lyons
Associate Dean: Kimi Kondo-Brown

Departments and centers: East Asian Languages and Literatures, English, Indo-Pacific Languages and Literatures, Languages and Literatures of Europe and the Americas, Linguistics, Second Language Studies, Center for Biographical Research, Center for Interpretation & Translation Studies, Center for Language & Technology, National Foreign Language Resource Center

Advising

Within the context of a liberal arts education, the College of Languages, Linguistics & Literature assists students in clarifying their life and career goals, developing meaningful educational plans, and preparing for productive lives, enlightened citizenship, and life-long learning. Students are expected to be active partners in the advising process by initiating contact with their advisors and by coming to advising sessions prepared.

Students at UH Mānoa have exceptional freedom in crafting their college experience. Students are able to explore connections between fields, engage in co-curricular activities, and develop unique combinations of majors, minors, and certificates. In addition to meeting all mandatory advising initiatives required by their major departments, declared Arts and Sciences majors meet with their advisors throughout their career at UH Mānoa for clarification of degree requirements, individual concerns, and resolution of complex academic issues.

Advising Office

Advising Center for the College of Languages, Linguistics & Literature
QLCSS 113
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Fax: (808) 956-9796
Email: advising@hawaii.edu
Web: www.manoa.hawaii.edu/advising

Degrees, Minors and Certificates

Bachelor's Degrees: Bachelor of Arts (BA)

Master's Degrees: Master of Arts (MA)

Doctoral Degrees: Doctor of Philosophy (PhD)

Honor Societies

Honor societies at UH Mānoa in the College of Languages, Linguistics & Literature include Delta Phi Alpha (German), Golden Key National Honour Society (undergraduate), Japanese National Honor Society-College Chapter (Japanese), Lambda Delta (freshmen), Mortar Board (seniors), Phi Beta Kappa (liberal arts and sciences), Phi Eta Sigma (freshmen),

Phi Kappa Phi (general scholarship), Pi Delta Phi (French), and Sigma Delta Pi (Spanish).

Instructional and Research Centers

Center for Biographical Research

Web: blog.hawaii.edu/cbrhawaii/

The Center for Biographical Research (CBR) is dedicated to the interdisciplinary and multicultural study of life writing. CBR programs include teaching, publication, and outreach activities.

In conjunction with the Department of English, CBR offers thesis advising for PhD and MA projects, and awards the Biography Prize annually for work in life writing by a UH Mānoa graduate student. The Department of English also offers a number of graduate and undergraduate courses in life writing.

CBR publishes *Biography: An Interdisciplinary Quarterly*, the premier scholarly journal in the field. Appearing continuously since 1978, *Biography* explores the theoretical, historical, generic, and cultural dimensions of life writing. CBR also sponsors the Biography Monograph series, a book publishing enterprise designed to further the study and practice of life writing in all its forms.

CBR maintains a library and resource collection and has organized, since 1988, the public lecture series Brown Bag Biography, part of the center's commitment to supporting and publicizing contributions to life writing. The center regularly hosts visiting scholars from academic institutions throughout the world. CBR is a founding partner of *Biography Hawai'i*, a television documentary series that focuses on residents whose lives have had a lasting impact on these islands. The center also manages iaba-l@hawaii.edu, the listserv and discussion forum for the International Auto/Biography Association.

Center for Interpretation and Translation Studies

Web: cits.hawaii.edu

The Center for Interpretation and Translation Studies (CITS) was established in 1988 at UH Mānoa within the College of Languages, Linguistics & Literature. The center's primary goal is to provide basic training in translation and interpretation. Emphasis is on the sociolinguistic and communication skills and techniques needed to facilitate cultural, scientific, and technical exchanges in cross-cultural and multinational settings. These skills can be used at international conferences, as well as in medical, legal, and social service settings.

Given our commitment to the community, a number of CITS courses are made available to non-UH Mānoa students through Outreach College. Generic courses are conducted in English, and any language speaker is welcome. Language-specific courses may require proof of language proficiency before enrollment. Currently interested students can receive a BA in Translation and/or Interpretation through Interdisciplinary Studies.

The Center offers a six-week, non-credit Summer Intensive Interpreter Training program (SIIT) every other year through Outreach College. This high-level certificate training program is offered in English in combination with Japanese, Mandarin, Spanish, French, Vietnamese, or Korean.

Center for Language and Technology

Web: clt.manoa.hawaii.edu

The mission of the Center for Language & Technology (CLT) is to support the informed use and integration of technology into instruction and research in the curriculum of the College of Languages, Linguistics & Literature.

The CLT fulfills its kuleana by: a) supporting the research and development of technology-based materials for language teaching and learning; b) providing faculty development opportunities for technology integration into the curricular areas of the college; c) providing professional enrichment opportunities to teaching assistants; d) providing expertise in media design, production and delivery; e) researching and supporting innovative technology tools and pedagogical approaches that are specific to the curricular areas of the college; and f) providing technology resources and services that are specific to the curricular areas of the college.

The CLT additionally provides leadership and guidance in the creation of online learning experiences. In the last few years, activities in this area have included the creation and implementation of a review process to assist online-teaching faculty in the development and maintenance of quality online courses. The CLT also supports faculty by providing expert feedback throughout the process as well as numerous opportunities for professional development in this area, with a particular emphasis on the academic areas of the college.

To fulfill its mission to support informed use of technology in instruction, the CLT provides flexible, technology-rich physical spaces that are designed with consideration of the specific academic areas of the college. Faculty can avail themselves of facilities such as broadcast-standard video and audio production suites, a state-of-the-art project development room, a high-end theater projection room, web-conferencing meeting rooms, and a smart classroom primarily intended for instructional research and special projects. Technologies available to instructors include physical and virtual technology tools. The former includes a variety of audio-visual equipment available for check out; the latter includes specialized technologies developed in-house.

The CLT regularly hosts local, national, and international events sponsored by various units in the college, collaborates with several campus units, and also conducts outreach activities to support Hawai'i's language-teaching community.

National Foreign Language Resource Center

Web: nflrc.hawaii.edu

The National Foreign Language Resource Center (NFLRC) is one of 16 Language Resource Centers across the U.S. and the only one to have been continuously funded since the inception of the original three centers established by the Department of Education in 1990. The ultimate mission of the NFLRC is to improve the learning and teaching of world languages while focusing primarily on the underserved populations of both teachers and students of the less commonly taught languages of Asia and the Pacific.

Taking advantage of Hawai'i's geographic location and drawing on the rich expertise of the College of Languages, Linguistics & Literature, the NFLRC works to improve teaching through the production and dissemination of a broad range of resources, including instructional materials, scholarly books,

and edited collections. Online resources include three e-journals, video and audio archives, and bibliographic databases.

NFLRC works closely with the Center for Language & Technology on a number of initiatives, for example, developing and researching instructional models that combine distance and face-to-face instruction and collaborating in the design and development of technologies that support those models. Throughout the year, the NFLRC hosts and co-hosts local, national, and international conferences and workshops.

East Asian Languages and Literatures

College of Languages, Linguistics & Literature

Moore 382

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Web: www.hawaii.edu/eall/

Faculty

*R. N. Huey, PhD (Chair)—classical Japanese literature (especially *waka*)

S. Chang, PhD—Korean language teaching

*S.-Y. Cheon, PhD—Korean phonology and phonetics, second language phonology, content-based instruction (CBI), and media-based instruction

*H. M. Cook, PhD—Japanese linguistics, sociolinguistics, discourse analysis and pragmatics; language socialization

S. A. Curry, PhD—Japanese language teaching

*S. Fukuda, PhD—syntax, lexical semantics and their interface phenomena in Japanese, experimental approaches to syntax and lexical semantics, syntax of understudied Asian languages (Vietnamese and Burmese), first language acquisition of syntax-lexical semantics interface phenomena in Japanese and Korean

*A. Haag, PhD—modern Japanese literature and culture, particularly cultures of the Japanese colonial empire and occupied Korea

*H.-I. Hsieh, PhD—Chinese language, linguistics, and culture; mathematical linguistics; semantics; cognitive grammar

*K. K. Ito, PhD—modern Japanese literature, particularly fiction of the Meiji period (1908-1912); cultural studies, narratology, and reception studies

T. Iwai, PhD—Japanese language teaching

*L. Jiang, PhD—syntax, semantics, syntax-semantics interface, language universals and variation, comparative linguistics, Chinese linguistics (Chinese dialects, minority languages and sign languages), language acquisition

*S. Jiang, PhD—Chinese language and linguistics, cognitive linguistics, Chinese historical syntax, Chinese dialects, language acquisition and pedagogy, technology-assisted language learning

*K. Kanno, PhD—Japanese linguistics, syntax, second language acquisition, parsing

*M. S. Kim, PhD—discourse-functional linguistics, conversation analysis, vocabulary acquisition, Korean language pedagogy

*Y.-H. Kim, PhD—modern Korean women writers; modern Korean literature; Korean culture; East Asian women writers and society

*K. Kondo-Brown, EdD—Japanese language pedagogy, second language assessment, heritage language development

- *D-K. Kong, PhD—Korean language and linguistics, language acquisition, pedagogy, assessment
 H. S. Lee, PhD—Korean language teaching
 K. Liu, MA—Chinese language teaching
 *D. R. McCraw, PhD—classical Chinese literature, especially poetry, particularly *Tang shi*, *Song shi* and *ci*, and *Qing ci*
 E. Murayama, PhD—Japanese language teaching
 M. Ogasawara, MA—Japanese language teaching
 *M. J. Park, PhD—Korean language and linguistics, pedagogy, pragmatics
 *Y. Peng, PhD—20th century Chinese literature and visual culture, Chinese film, critical theory
 G. E. Ray, MA—Japanese language teaching
 *M. Spring, PhD—applied linguistics: cross-cultural communication; issues related to developing superior level proficiency; teacher training, cultural literacy; literature: six dynasties and Tang fiction; Tang prose and rhetoric
 R. Tada, MA—Japanese language teaching
 *Y. Tateyama, PhD—pragmatics, Japanese language pedagogy, discourse analysis, translation and interpretation
 H. Uchida, MA—Japanese language teaching
 Y. Wada, MA—Japanese language teaching
 *H. Wang, PhD—Chinese syntax, semantics, and phonology; Chinese language pedagogy; teaching Chinese for professionals
 P. C-K. Woo, PhD—Japanese language teaching
 J. Wu, MA—Chinese language teaching
 *D. R. Yoshimi, PhD—Japanese second language acquisition and pedagogy; discourse analysis, pragmatics and sociolinguistics
 *M-B. Yue, PhD—20th century Chinese literary and cultural studies, visual culture and media studies, transnational Chinese writings, constructions of Chineseness and diasporic consciousness in Asian-American, exile, and immigrant writings, theories of ideology and representation, feminism, psychoanalysis, film criticism, [Inter-Asia] cultural studies

Cooperating Graduate Faculty

- G. Kasper, PhD—second-language discourse analysis, conversation analysis, pragmatics, qualitative research methods

Degrees and Certificates Offered: Certificate in Chinese, Certificate in Japanese, Certificate in Korean, Certificate in Korean for Professionals, BA (including minor) in Chinese, BA in Chinese Language Flagship, BA (including minor) in Japanese, BA (including minor) in Korean, BA in Korean for Professionals, MA in East Asian Languages and Literatures, PhD in East Asian Languages and Literatures

The Academic Program

The Department of East Asian Languages and Literatures (EALL) is the largest department of its kind in the country and offers a curriculum unparalleled in its breadth, depth, and variety of courses in Chinese, Japanese, and Korean language, linguistics, and literature.

At the undergraduate level, language skill courses help students develop a high level of proficiency in both the spoken and written aspects of the languages. There are separate BA and certificate programs to prepare American students to function in Korean in given professional fields. Other courses provide both introductory survey coverage and advanced, theme-specific investigations of the literary cultures of East Asia and the linguistic analysis of Chinese, Japanese, and Korean. Cultural awareness as well as language proficiency are further promoted through extra-curricular activities such as

student clubs, video/film showings, lectures, and study abroad programs. Our students have the opportunity to participate in study abroad programs in Hainan, China; Kobe and Machida, Japan; and Seoul, Korea. The graduate programs are designed to provide students with advanced professional training in two tracks: 1) language/linguistics, and 2) literary studies.

While most students enroll in language courses to fulfill the general education core requirement for foreign languages, there are many who plan to use Chinese, Japanese, or Korean in research or graduate studies. Those who plan to enter the work force immediately upon completing their undergraduate studies find that their language proficiency opens doors to employment in the local travel industry and other internationally oriented businesses.

Undergraduate Study

BA in Chinese

Requirements

Students must complete a minimum of 34 credit hours, including the following upper division courses:

- CHN 301, 302 or 303 or 305, 401, 402 or 404 or 405, and 461
- 6 credit hours from the following, at least one course must be taken from each of the following group:
 - (a) CHN 451, 452, 455, 456, 457, 470
 - (b) EALL 361, 362, 363B, 363C
- 9 credit hours of approved courses in Chinese language and literature

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Chinese Language Flagship Track

Requirements

Students must complete a minimum of 32 credit hours, including:

- CHN 401, 402 or 404 or 405
- CHN 461, 485, 486, 491
- 6 credit hours from the following, at least one course must be taken from each of the following groups:
 - (a) CHN 453, 455, 456, 457, or 470
 - (b) EALL 361, 362, 363B, 363C, 364, 365, 366, 473, 474, 476
- 6 credit hours from two courses taught in EALL or another department approved by the Chinese Language Flagship Program director.
- Additional 1-24 credit hours for those accepted to the Flagship Capstone Year in China.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Japanese

Requirements

Students must complete a minimum of 37 credit hours (31 credits for bilinguals), including:

- JPN 301, 302, 350, 370, 401, and 402 (bilinguals may substitute: 301 and 302 for 308, 401 for 403, and 402 for 404)
- JPN 407D or 407E

- EALL 271 and 272
- 6 credit hours in approved JPN/EALL elective courses

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Korean

Requirements

Students must complete a minimum of 36 credit hours, including:

- KOR 301, 302, 401, 402, 451, 452, and 470
- EALL 281 or 282
- 12 credit hours in approved courses

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Korean for Professionals Track

Requirements

Students must complete a minimum of 36 credit hours, including:

- KOR 401, 402, 403, and 404 [KOR 307, 308 may replace exempted KOR 401, 402]
- KOR 421, 422, 425 (6 credits), 470, 480, 485, 486, and
- 1-year overseas program year at Korea University (Additional 2-24 credits)

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Students planning to declare a minor should have completed successfully four semesters of language skill courses or their equivalent and must have a GPA of 2.0 or higher. A minimum of 15-17 credits from five courses in one of the three languages (Chinese, Japanese, Korean) will be required. At least 9 credits will be from non-language skills courses with a focus on linguistics or literature. In the case of native speakers, they will be required to take five non-language skill courses. All courses selected must have the approval of advisors in both the student's major department and the EALL department. Only courses with a C (not C-) or above will be counted. All courses must be taken within the UH System, with minimum of at least three courses taken at UH Mānoa. A detailed description of program requirements is available at the department office in Moore Hall 382.

Certificate

Certificates in Chinese, Japanese, Korean, and Korean for Professionals are offered to eligible students. A minimum of 15 credit hours from 301 or above in the language of choice must be earned with a minimum GPA of 2.5. A detailed description of the program requirements is available from the department office in Moore Hall 382.

Graduate Study

Complete details on the graduate programs are available from the department office in Moore Hall 382 and on the department's webpage. All of our graduate degree programs are academic in nature, and focus on the disciplines of linguistic and literary study. MA graduates of the programs have obtained positions as instructors in private schools, two- and four-year colleges and universities; as translators; and in various capacities in private firms and government service. PhD graduates have

obtained teaching positions at universities in the U.S. mainland, Canada, and in several Asian countries.

The MA and PhD are recognized Western Interstate Commission for Higher Education (WICHE) regional graduate programs. Residents of Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming are eligible, upon admission with a GPA of 3.50 or higher, to enroll at Hawai'i-resident tuition rates. See the "Tuition, Fees, and Financial Aid" section of this *Catalog* for more information on WICHE programs.

The MA degree is offered in three areas of concentration: Chinese, Japanese, and Korean, in two different tracks: language/linguistics and literature, with an addition of Korean for Professionals. The PhD degree is offered with concentrations in the same fields, but not in Korean for Professionals. All applicants for the MA program must have a BA in the language of their concentration or equivalent preparation and must submit a copy of their CV, three letters of recommendation, Statement of Objectives, and GRE General Test scores. The TOEFL or the IELTS is required for applicants whose first language is not English. All applicants for the PhD program must have a BA, must have earned with distinction an MA in the language or literature of their concentration, and must submit the following documents: a copy of their CV, three letters of recommendation, Statement of Objectives, GRE General Test scores, and a sample of their scholarly writing in English. The TOEFL or the IELTS is required for applicants whose first language is not English. Any newly-admitted MA and/or PhD student without a proper background in the field, is required to undergo a diagnostic evaluation to be assigned necessary courses to fulfill deficiency. For details on how to apply, visit: www.hawaii.edu/eall/.

Master's Degree

Requirements

The MA candidate may select either the Plan A (thesis) or Plan B (non-thesis) program; Plan A must have the approval of the graduate chair. The MA in Korean for Professionals is a Plan B program only.

For Plan A, students must complete a minimum of 30 credit hours, including at least 18 credit hours in the major field and 6 credit hours of thesis research. A maximum of two 400-level courses will count toward the degree.

For Plan B, students must complete a minimum of 30 credit hours, including at least 18 credit hours in the major field. A maximum of two 400-level courses will count toward the degree.

For details on the MA requirements, visit: www.hawaii.edu/eall/.

Doctoral Degree

Requirements

Each newly-admitted PhD student is required to take the qualifying exam by the third semester. He or she must take at least 24 credit courses beyond those counted towards the MA degree. At least 18 credits earned in courses numbered 600 or higher (not including 699) in order to be eligible for advancement to candidacy. Apart from having a command of English and their language of concentration, students must have knowledge of a second East Asian language equivalent to two years of study or exempted through a language placement test.

Students in the Language/Linguistics track must fulfill two scholarly papers and oral Comprehensive Exam in order to advance to candidacy. Students in the Literature track must take written Comprehensive exams in three areas (at least one of which will be outside the students' areas of 2 specialization) followed by an oral exam. After being advanced to candidacy, all PhD candidates must complete an original dissertation and pass a final oral examination in defense of the dissertation.

For details on the PhD requirements, visit: www.hawaii.edu/eall/.

English

College of Languages, Linguistics & Literature
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Fax: (808) 956-3083

Email: enghi@hawaii.edu; see list of contacts on webpage

Web: www.english.hawaii.edu

Faculty

- *S. Shankar, PhD (Chair)—postcolonial literature and theory, South Asian literatures, translation and translation studies
- *S. Allen, PhD—composition theory (subjectivity and ethics), creative nonfiction, writing pedagogies
- *C. Bacchilega, PhD—folklore, narrative, fairy-tale studies, 20th-century fiction, feminist criticism, literary theory, translation studies
- *K. Beutner, PhD—fiction and creative nonfiction
- *J. Caron, PhD—19th-century American literature, Mark Twain, comic art and literature, popular culture
- *N. Chandra, PhD—Marxism, critical theory, popular culture, comparative modernisms, childhood studies
- *R. W. Dasenbrock, PhD—modernism, literary theory, post-colonial literature, comparative literature
- *D. Desser, PhD—20th-century rhetorics, writing and difference, composition studies
- *A. Feuerstein, PhD—19th-century literature and culture, Victorian studies, animal studies, cultural studies, political theory
- *C. Franklin, PhD—contemporary women's literature, ethnic American literatures, feminist theory
- *C. Fujikane, PhD—literatures of Hawai'i, Asian American literatures, feminist/nationalist critical theory and practice
- *J. T. Gagnon, PhD—cultural rhetorics, human rights rhetoric, embodiment/embody rhetorics, decolonial theory, composition studies, relational pedagogy, and oral history
- *M. Heberle, PhD—Renaissance literature, American Vietnam literature
- *D. Higginbotham, PhD—late medieval English literature; early modern literature; literary history; Shakespeare and his contemporaries; queer theories/gender studies/feminist theories; Marxism and economic criticism; queer African literatures
- *K. Ho'omanawanui, PhD—Native Hawaiian literature, literatures of Hawai'i, folklore and mythology, children's literature, translation studies
- *C. Howes, PhD—life writing, literary theory, research methods, 19th-century literature
- *R. Hsu, PhD—modernism, ethnic literature, Asian American literature, feminist criticism

- *L. Lyons, PhD—post-colonial literatures and theory, Irish literature, cultural studies
- *P. Lyons, PhD—19th- and 20th-century U.S. literatures, literary and cultural theory, regional and settler literatures in Oceania
- *G. Man, PhD—film, narrative, 19th-century British literature
- *K. McAndrews, PhD—folklore, oral narrative, American Literature (1905–present), cultural studies in relationship to gender, humor and tourism
- *R. Morales, MA—creative writing, Pacific literature, American ethnic literature
- *J. Morse, PhD—American literature, literary history
- *G. Nordstrom, PhD—composition and rhetoric
- *G. Pak, PhD—creative writing, literature of Hawai'i and the Pacific, Asian American literature, ethnic American literature
- *D. Payne, PhD—composition and rhetoric, computer-mediated writing, collaborative learning
- *C. Santos Perez, PhD—creative writing, international poetry, indigenous literature and theory, Pacific and Chamorro studies
- *P. Quigley, PhD—environmental literature, ecocriticism, critical theory, 19th century American and British literature, cyber literature
- *J. Rieder, PhD—literary and cultural theory, science fiction, British Romanticism
- *S. Yang Ryan, MA—creative writing, Asian American literature, speculative and social protest fiction
- *T. Sammons, PhD—Renaissance and 17th-century literature, Milton, science fiction, rhetoric
- *S. Schultz, PhD—20th-century poetry in English, American literature, creative writing
- *J. Taylor, PhD—African American literature, visual culture, critical theory
- *C. Ward, PhD—critical theory, post-colonial literature, popular culture, oral and performance theory, the novel
- *J. Zuern, PhD—computer-mediated communication, comparative literature

Degrees Offered: BA (including minor) in English, MA in English, PhD in English

The Academic Program

The Department of English encourages students to develop their critical reading, writing, and creative skills through study of a variety of literatures in English, composition and rhetoric, and creative writing. The department recognizes the unique diversity of cultures in Hawai'i and employs a variety of approaches, including multicultural and Asia Pacific perspectives, to address this uniqueness. Students work directly with faculty in relatively small classes. The department participates actively in UH Mānoa's Honors Program and its Study Abroad Semester and offers professional internships for interested students in the senior year.

The goals of the undergraduate English program are: (a) to offer a comprehensive range of courses in literary and cultural studies, composition, rhetoric, and creative writing; (b) to develop students' critical thinking and reading skills; and (c) to develop students' interests and abilities in rhetoric and writing across a variety of genres. Many of our courses recognize Hawai'i's geographical and cultural location in the Pacific.

The graduate program enriches students' knowledge of literature, composition and rhetoric, creative writing, and cultural studies. MA students are asked to take approximately half of their course work in a specific concentration so that they begin to develop an area of expertise while broadening their under-



standing of other areas of study. The MA thesis or final project at the end of the program gives them the opportunity to do extended research and writing on a topic of their own choosing.

The doctoral program prepares students to become professionals in the field. Required courses are not its focus; rather, it offers students considerable latitude in course selection and requires disciplined, independent work on examinations and the dissertation. Candidates completing the program should have the skills and experience to function as critics, scholars, and writers in an area associated with the profession of English.

Undergraduate Study

Bachelor's Degree

The Department of English offers the BA degree with informal emphases in American, British, and Pacific literatures; composition and rhetoric; and creative writing.

Requirements

One FW and one ENG 270–273 course are prerequisites for upper-division English courses. Majors must complete 33 credit hours of upper division courses, as follows:

Level Requirements

- at the 300 level:
 - A. ENG 320, Introduction to English Studies; this course is foundational and should be taken in the student's first or second semester of upper division English work; 3 credits
 - B. 5 300-level courses are recommended in addition to ENG 320; 15 credits. Several of these courses should be in areas prerequisite to/preparatory for specific courses at the 400 level
 - at the 400 level (ENG 320 and one 300-level course are prerequisite to most *Studies* courses):
 - C. Single Author (440 Single Author; 442 Chaucer; 445 Shakespeare; or 447 Milton); 3 credits
 - D. 2 additional elective courses; 6 credits. At least one 400-level course must be a designated *Studies* course or ENG 491
 - at the 300 or 400 level:
 - E. 2 elective courses; 6 credits
 - No more than two upper division English large enrollment courses may be counted toward the major
- Total: 33 credits

Breadth Requirements

Breadth of Field: the five 300-level courses in addition to ENG 320 must come from at least two different categories:

- Composition/Language/Rhetoric (300, 302, 303, 306, 307, 308, 311)
- Creative Writing (311, 313)
- Genre (360, 361, 362, 363, 364, 366, 369)
- Literature and Culture (372, 373, 374, 375, 376, 380, 381, 382, 383, 384, 385)
- Literature of Hawai'i and the Pacific (370, 371, 378)

Historical Breadth: of the nine courses in addition to Introduction to English Studies, one must be pre-1700, one 1700-1900, and one after 1900.

Only courses in which a student receives a C or better may be counted toward the major.

For a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Non-English Department Course

With the consent of the student's advisor or the director of the undergraduate program, one appropriate three-credit upper division course from outside English may be counted as a major elective.

Advising

Advising is mandatory for majors; new majors will be assigned an advisor when they meet with the director of the undergraduate programs for their required orientation session. Schedule a session on www.english.hawaii.edu.

Minor

English offers a fifteen-credit minor for students who wish to emphasize a specific aspect of English studies without completing the actual major. Beyond the two required courses, the minor may focus on literary studies, creative writing, cultural studies, or rhetoric and composition.

One FW and one ENG 270–273 course are prerequisites for upper-division English courses. All UH Mānoa courses applied to the English minor will come from the Department of English or cross-listed courses. Appropriate upper division transfer credits may apply toward the minor.

The minor consists of:

1. ENG 320, Introduction to English Studies. This course is foundational and should be taken in the student's first or second semester of upper division English work; 3 credits
2. Single author course (440 Single Author; 442 Chaucer; 445 Shakespeare; or 447 Milton); 3 credits
3. 300-level ENG elective; 3 credits
4. 400-level ENG elective; 3 credits
5. 300- or 400-level ENG elective; 3 credits

No more than one upper division English large enrollment course may be counted toward the minor. Only courses in which a student receives a C or better may be counted toward the minor.

Graduate Study

The department offers the MA in English with four concentrations: literary studies in English, composition and rhetoric, creative writing, and cultural studies in Asia/Pacific. It offers the PhD in these and other areas, for the doctoral program is sufficiently flexible to allow students to develop individualized

courses of study. Students applying for the MA are expected to have a bachelor's degree in English or a closely related field. PhD applicants normally will have completed the MA in English. All applicants must submit an application, transcripts, three letters of recommendation, GRE General Test scores, a comprehensive statement of professional goals and objectives, and a critical writing sample. Also, applicants interested in the creative writing concentration must also submit a creative writing sample. Application deadlines are **December 1** for the PhD program and **January 1** for the MA program. Complete information on the application process is provided on the department's website.

Courses for the MA and PhD are to be selected from the list of English (ENG) courses, although advanced courses in other disciplines may be substituted with the prior approval of the graduate director.

Master's Degree

Graduates of the MA program in English have taught in secondary schools, community colleges, and universities. Some have pursued doctoral work; others have combined their work in English with another professional field (e.g., business, law, library studies). Still others have found employment in writing, editing, or research-related fields.

Plan A (Thesis) Requirements

Plan A is applicable only to students admitted to the Creative Writing concentration. Students complete 33 credits:

- 27 credit hours of course work:
 - ENG 625D and ENG 625B, C, or E
 - 9 credits of course work in creative writing and 12 credits outside of creative writing.
 - One course must be pre-1900
 - One course must have substantial Hawai'i/Asia/Pacific content
- 6 credits of work on the MA thesis

Students must also achieve intermediate level knowledge of one foreign language.

Plan B (Non-thesis) Requirements

Plan B is applicable to students in the Literary Studies in English, Composition and Rhetoric, and Cultural Studies in Asia/Pacific concentrations. All Plan B students complete 33 credits—30 credits of course work and 3 credits of work on the MA final project. One course must have substantial Hawai'i/Asia/Pacific content. All students must also achieve intermediate level knowledge of one foreign language.

- Requirements for students in Literary Studies in English: ENG 625B and ENG 625C, D, or E; 9 credits minimum in LSE. One course must be pre-1700.
- Requirements for students in Composition and Rhetoric: ENG 625C and ENG 625B, D, or E; ENG 605, 705, and 709; 12 credits minimum in other concentrations. One course must be pre-1900.
- Requirements for students in Cultural Studies in Asia/Pacific: ENG 625E and ENG 625B, C, or D; 9 credits minimum of course work in CSAP and 12 credits minimum in other concentrations. One course must be pre-1900. 3 credits may be taken outside of the English department with the permission of the concentration advisor.

Concentration-specific program requirement sheets are available on the English Department website.

Doctoral Degree

Since the PhD program offers diverse courses and the opportunity to specialize in a range of different areas, graduates may pursue careers from among several professions, including teaching, research, and writing.

Requirements

PhD candidates must fulfill the residency requirement and are required to take seven graduate-level courses in the Department of English; two courses, normally at the 400 level or above, in a field outside of English but related to the student's research interests; one course with substantial content in Asia/Pacific at the graduate or 400- level, in or out of the English department, while in residence at UH Mānoa. They must pass three area examinations and a comprehensive examination and demonstrate competence in two languages other than English (one of which, if appropriate to the candidate's research, may be a computer language) or in one language at an advanced level of proficiency. Candidates will be required to complete an original scholarly or creative dissertation representing a substantial contribution to the discipline of English, suitable for publication, and a final oral examination on the dissertation.

Indo-Pacific Languages and Literatures

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Faculty

- S. D. O'Harrow/Doceo (Chair)—Vietnamese language, philology and civilization, Sino-Vietnamese
- A. S. Agcaoili, PhD—Philippine literature and culture, creative writing: poetry, fiction, drama, Ilokano language and literature, philosophy of language, literary relations, literatures of exile and diaspora
- P. C. Arboleda, PhD—Philippine literature, creative writing, Ifalig orature and Philippine folklore, gender studies, literary theory, and Southeast Asian traditional culture
- S. Bhatawadekar, PhD—Hindi, Urdu language, foreign and heritage language teaching, pedagogy, curriculum and material development and program building; South Asian cinema and culture; film adaptation of literature, Hindi and Buddhist religious philosophies and their reception in the West; German-Indian comparative philosophy
- E. I. Danielson, MEd—language learning and teaching in Samoan, pedagogy, traditional literature, oral traditions and culture
- D. A. Domingo, MEd—Ilokano language learning and teaching; language and multimedia
- I. Gasmen, MA—Filipino (Tagalog) language learning and teaching; language and multimedia; educational communication, distance education
- Y. Hoonchamlong, PhD—Thai linguistics, language learning and teaching, information technology in language research and language learning

- J. R. Knutson, PhD—Sanskrit and Bengali, Sanskrit literature and literary theory, ancient and early medieval history and literary history of South Asia, Early Middle Bengali poetry, comparative premodern poetry and poetics
- U. Kozok, PhD—Indonesian language and literature, prehistory and paleography of Island Southeast Asia, Sumatran philology
- F. Lesa, PhD—language learning and teaching, Samoan
- J. F. Mayer, PhD—language learning and teaching, language in society, Samoan
- L. C. Pagkalinawan, PhD—Filipino (Tagalog) language learning and teaching, Filipino linguistics; Philippine literature, creative writing, sociolinguistics
- C. Sak-Humphry, PhD—Khmer language, linguistics and literature; development of Khmer language teaching materials, linguistics research on Old Khmer inscriptions (Pre-Angkor to Angkor period)
- M. F. Simanu-Klutz, PhD—Samoan language learning and teaching, pedagogy, traditional literature and forms of entertainment, intersections of oral traditions and cultural history, creative writing

Degrees and Certificates Offered: Undergraduate Certificate in Indo-Pacific languages (Filipino, Hindi, Ilokano, Indonesian, Khmer, Samoan, Sanskrit, Tahitian, Thai, or Vietnamese); BA in Philippine Language and Literature; BA in interdisciplinary studies (concentration in Hindi, Indonesian, Samoan, Sanskrit, Thai, or Vietnamese); minor in Filipino and Ilokano Language and Culture

The Academic Program

Indo-Pacific Languages and Literatures (IPLL) provides instruction in the languages of the Indo-Pacific area to a broad spectrum of students at UH Mānoa. The department's coverage of these languages is unique in the U.S.: This department is the only one to offer programs of study in four Polynesian languages, most of the national languages of Southeast Asia, as well as classical and modern Indian languages as well as Arabic, Urdu, and Persian. Beyond language, the department offers courses in the literatures and cultures of the area, including literature in translation of South and Southeast Asia, Polynesia, and the Philippines. Opportunities are available for study abroad in certain areas. The department at UH Mānoa provides an opportunity without parallel elsewhere in the country for students to acquire an in-depth knowledge of the languages and cultures of that part of the world that encompasses more than 25 percent of the Earth's population and an unusual diversity of peoples.

All the department's elementary- and intermediate-level language courses may be used to fulfill the Hawaiian or second language requirement for all bachelor's degrees at UH Mānoa. Students of Indo-Pacific languages and cultures can also enhance their opportunities to find a career in international relations; provide service to the community in such fields as social work, public health, nursing, medicine, and law; perform research on Asia and the Pacific; and develop cross-cultural awareness and understanding in Hawai'i's multicultural environment.

Language offerings include Arabic, Cambodian (Khmer), Chamorro, Filipino, Hindi, Ilokano, Indonesian, Maori, Persian, Samoan, Sanskrit, Tahitian, Thai, Tongan, Urdu, and Vietnamese. For additional languages and topics, see Indo-Pacific languages (IP) courses listed at the back of the *Catalog*.

Undergraduate Study

Certificates

On recommendation of the Department of Indo-Pacific Languages and Literatures, UH Mānoa confers certification of achievement in Filipino, Hindi, Ilokano, Indonesian, Khmer, Samoan, Sanskrit, Tahitian, Thai, and Vietnamese.

Requirements

15 credit hours beyond the intermediate level in the language of choice, including:

- 6 credit hours in continuing language study
- 9 credit hours in language, literature, or structure courses selected to complement the major field of study

A 3.0 GPA in courses leading to the certificate is required.

BA in Philippine Language and Literature (with concentration in Filipino or Ilokano)

The program has the following objectives: prepare students for future careers in community service and education; prepare students for advanced research and/or graduate studies in various fields in the humanities and social sciences; and ultimately, serve students of Filipino ancestry by providing them with a better understanding of Philippine culture and proficiency in a Philippine language.

To view the Bachelor Degree Program Sheets with Filipino and Ilokano concentrations, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Requirements

A minimum of 30 credit hours, made up of 24 credits in required language and literature courses in Filipino or Ilokano

- 15 credits language skill courses: 301, 302, 401, 402, 451
- and 15 credits upper division electives on language, literature, and culture

Minor in Filipino

Students completing the program would have both oral and written competence in Filipino as well as cultural content sufficient for use in professional careers, graduate work or research, and field work.

Requirements

A minimum of 15 credit hours from five non-introductory courses in Filipino and Philippine culture is required.

- at least 9 credits culture and literature courses
- 6 credits language skill courses

Minor in Ilokano

Students completing the program would have both oral and written competence in Ilokano as well as cultural content sufficient for use in professional careers, graduate work or research, and field work.

Requirements

A minimum of 15 credit hours from five non-introductory courses in Ilokano language and culture is required.

- at least 9 credits culture and literature courses
- 6 credits language skill courses

Honors and Awards

Samuel H. Elbert Graduate Scholarship

Offered to encourage graduate-level research and study for students specializing in Pacific Island language and related fields, this scholarship provides an award of up to \$5,000 per semester to students registered in graduate programs at UH Mānoa.

Amos P. and Edna Lee Leib Scholarship for Graduate Study of Literature of the Pacific

Offered to support graduate students pursuing the study of literature of the Pacific.

Ilokano BA Scholarship

The scholarship provides academic recognition to an undergraduate student in the College of Arts and Sciences pursuing a Bachelor of Arts in Philippine Language and Literature with Concentration in Ilokano.

Roshan Institute Graduate Fellowship for Persian Linguistics, Language Acquisition and Applied Linguistics

Offered to support graduate students pursuing the study of Persian, Roshan Cultural Heritage Institute provides two renewable Graduate Fellowships for outstanding PhD students in Persian Linguistics, Language Acquisition, and Applied Linguistics.

Roshan Institute Student Fellowship for Persian

Offered to support undergraduate and graduate students pursuing the study of Persian, Roshan Cultural Heritage Institute provides two annual non-renewable fellowships of up to \$5,000 for graduate students.

Jack Haven Ward Graduate Scholarship

Promoting the study of Tahitian (first priority) and any other language of French Polynesia or Balinese.

Languages and Literatures of Europe and the Americas

College of Languages, Linguistics & Literature
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Faculty

- *P. M. Chandler, PhD (Chair)—second language acquisition, applied Spanish linguistics, Portuguese language
- *L. V. Aranda, PhD—U.S. Latino literature, translation
- *C. D. Beaulieu, PhD—Latin American (Andean) anthropology, household archaeology
- *L. Bousquet, PhD—20th and 21st century French literature and culture, French Oceania, history of the novel
- J. M. Debrah, MA—French language instruction
- I. Fitzgerald, MA—Spanish language instruction
- K. A. Galante, MA—Spanish language instruction
- *M.-C. Garneau, PhD—19th- and 20th-century French literature, oral genres, Italian

- *C. R. Gerhardt, PhD—20th-century German literature, culture, and film
- *M. González-Lloret, PhD—second language acquisition, technology and language instruction, Spanish linguistics, pragmatics
- L. N. Hamasaki, MA—classical language instruction
- *D. Harris-McCoy, PhD—Greek and Latin literature, intellectual history, magic and divination
- K. Hammerich, MA—German language instruction
- A. B. Hawajski-Waters, MA—German language instruction
- *K. A. Hoffmann, PhD—17th-century French literature, critical theory, theatre, interdisciplinary studies
- J. M. Huss, MA—French language instruction
- *A. Kostetskaya, PhD—Russian *fin-de-siècle* literature and culture, conceptual integration and blending theories, Russian and German war film
- L. E. Kou, MA—Spanish language instruction
- *R. J. Littman, PhD—Greek literature, ancient history, ancient medicine, Biblical studies, Egyptian archaeology
- *J. L. Logan, PhD—Spanish American literature and cultural studies, women's studies
- R. H. Mamiya Hernandez, MA—Spanish and Portuguese language instruction
- R. H. Nylen, MA—Spanish language instruction
- *M. E. Overstreet, PhD—pragmatics, discourse analysis, sociolinguistics, psycho-sociolinguistic perspectives on categorization
- *B. J. Quintana, PhD—Spanish classical theater, colonial and post-colonial studies, Mexican culture
- S. C. Reemelin, MA—Spanish and Portuguese language instruction
- *H. Roman, PhD—18th-century French literature
- *N. R. Schweizer, PhD—18th-century German classicism, Germans in Hawai'i, Europeans in the Pacific
- *N. Ségal, PhD—French and Francophone women's studies, translation theory and practice, 20th- and 21st-century trauma narratives
- *E. M. Thau, PhD—contemporary Spanish literature, film, cultural studies
- J. C. Tomé, MA—Spanish language instruction

Degrees and Certificate Offered: Certificate in Classics, Certificate in French, Certificate in German, Certificate in Russian, Certificate in Spanish, Certificate in Latin American and Iberian Studies; BA in Classics, BA in French, BA in German, BA in Russian, and BA in Spanish; MA in French, MA in Spanish

The Academic Program

The Department of Languages and Literatures of Europe and the Americas (LLEA) is divided into five divisions: Classics (ancient Greek, Latin, and Sanskrit), French/Italian, German, Russian, and Spanish/Portuguese/Latin American and Iberian Studies. Language instruction at the beginning and intermediate levels is offered in French, German, Greek, Italian, Latin, Portuguese, Russian, and Spanish. Advanced courses in composition, conversation and linguistics are offered in French, German, Russian and Spanish. Courses in the literatures of France, the Francophone world, German-speaking countries, Italy, Latin America, Russia, Spain, and Wales are offered in the original language, as are courses in the literatures of ancient Greece and Rome. Cultural studies courses that use a strong interdisciplinary approach and critical interpretive perspectives to consider the politics of representation, culture, and identity include Hispanic Cultural Studies, U.S. Latino Culture and Literature, Indigenous Peoples of Latin America, Latin Ameri-

can Cultural Perspectives, Spanish Cultural Perspectives, Freaks and Monsters, the Ethics of Otherness, French Civilizations, French Culture for Americans, French and Italian Literature as Film. Courses designed to acquaint students from other fields with the traditions and cultures of Europe and the Americas are also available, both in English and in the target language and in advanced courses in specialized topics: Europeans in the Pacific, French and German Civilization, and Russian Arts and Culture.

LLEA believes that the study of film allows for an array of interdisciplinary considerations ranging from the aesthetics and politics of representation to the socioeconomics of production and distribution. It enriches students' literacy concerning visual arts, narrative, sound, movement and space, at the same time that it provokes their questioning of ethical, critical, social, and moral assumptions. LLEA offers a wide range of courses focusing on the aesthetic and historical development of film in Europe and Latin America: History of World Film, International Film Criticism, Francophone, German, Italian, Latin American, Russian, and Spanish Film.

The department promotes language proficiency and cultural awareness through its sponsorship of student organizations, films, lectures, scholarships, and Study Abroad programs. Currently, the department supports programs in France (Angers, Annecy, Paris); Florence, Italy; Berlin, Germany; Vladivostok, Russia; and several sites in the Spanish-speaking World.

Undergraduate Study

Bachelor's Degree

A minimum GPA of 2.5 in courses counted toward the major is required of all students earning their major in this department. At least half the credits required for the major must be taken at UH Mānoa.

BA in Classics

- 30 credit hours of course work
 - 3 credit hours from LLEA 122, 123, 124, 151; GRK 101, 102; LATN 101, 102; SNSK 181, 182
 - 6 credit hours from either Option A LLEA 327 and 328, or Option B LATN 201 and 202, or Option C GRK 201 and 202, or Option D SNSK 281 and 282
 - 18 credit hours from the following list of elective courses
 - Of these 18 credits, 15 must be at the 300-level or above
 - 12 of the 18 credits can be substituted with GRK, LATN, or SNSK courses at the 300-level or above ANTH 381, ART 373, HIST 331, 332, 333, 334, 335, 362, 431, 434, LLEA 301, 302, 305, 306, 323, 324, 325, 326, 329, PHIL 211, 212, 414B, 414C, REL 200, 201, IP 300/HIST 301, IP/REL 373, IP/REL 374
 - 3 credit hours of LLEA 499

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in French

- 33 credit hours of FR courses above the 200 level
 - FR 312, 331 or 332
 - Two 400-level courses, including one in literature[†]
 - French and French-Related Electives (21 credits) include FR 300+, FR400+.

When 405, 458, and 459 (or 6 credits of 460) are all taken, together they count as one 400-level literature course while continuing to count as 9 credits of elective credit toward the major. 6 elective credits at the 300+ or 400+ level may be earned in a related area by advisor approval: LLEA335, HIST 445, etc. On completing the major, students will be able to demonstrate a speaking and reading knowledge of classic French authors in the original, their individual writing styles both in prose and in poetry, and their place in the context of French culture. Students will develop competence in writing. They will also have the opportunity to read works of Franco-phone literature and to familiarize themselves with Franco-phone and French-speaking cultures around the world, from Africa and Canada to Tahiti and the Pacific Rim.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

[†]Six credits of FR 458-459 or 460 and FR 405 may be counted as one literature course. FR 499 may be counted as literature with advisor approval if course content is appropriate.

BA in German

- 30 credit hours of GER courses above the 200 level
- 6 credit hours from LLEA 320, 340, 342, or 416 may be taken

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Russian

For a language emphasis:

- 24 credit hours of RUS courses above 202
- 9 credit hours from LLEA (or other approved department) Russian-related courses

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Spanish

- 33 credit hours of SPAN courses above the 200 level
 - SPAN 301[†] or 310
 - SPAN 303[†]
 - 351^{††} or 352B or 352C[†]
 - SPAN 361 or 362 or 371 or 372
 - Seven electives from all SPAN 300-400 level courses; two must be 400-level[†]

[†]Language skill courses (SPAN 301 to 303) are normally limited to nonnative speakers of Spanish. Native and near-native speakers should consult a department advisor to determine what courses they may take.

^{††}Recommended courses for prospective teachers: SPAN 330, 400, 403, 451, and 452

^{††}Recommended courses for prospective graduate students: SPAN 330, 351, 352, 451, 452, and two 400-level literature courses

Approved study abroad in a Spanish-speaking country is recommended for all students completing the major and the certificate.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Certificate

A minimum GPA of 2.5 in courses counted toward the certificate is required of all students earning their certificate in this department. At least half the credits required for the certificate must be taken at UH Mānoa.

Certificate in Classics, French, German, Russian, or Spanish

Upon recommendation of the appropriate division chair of the Department of Languages and Literatures of Europe

and the Americas, UH Mānoa confers Certificates in Classics, French, German, Russian, and Spanish. Students must complete 15 credit hours of courses numbered 300 and above. For the Certificate in Classics, students may complete 12 credit hours of Greek or Latin courses numbered 300 and above, plus GRK 101-102 for those emphasizing Latin and LATN 101-102 for those emphasizing Greek. For the Certificate in German, one course may be taken from LLEA 320, 340, or 342.

Certificate in Latin American and Iberian Studies

The Certificate in Latin American and Iberian Studies provides a systematic program of study in English for students interested in the arts, traditions, values, histories, religions, socioeconomic systems, and mythologies of Latin America and the Iberian Peninsula. It combines studies on literature, history, anthropology, film, and cultural studies for a richer and more comprehensive understanding of the peoples and heritage of Latin America and Iberia. Its interdisciplinary nature treats issues of colonization, imperialism, race, ethnicity, class, neoliberal practices, aesthetics, popular culture, and globalization as they have been played out within the Spanish, Portuguese, and Latin American context.

The requirements for the Certificate in Latin American and Iberian Studies are:

- sophomore standing or consent
- 15 credit hours
- LAIS 360 (Alpha) Studies in Culture: (B) Latin America, or (C) Iberian Peninsula (should be taken the first semester in the program; it may be taken concurrently with one of the electives)
- at least one from LAIS 360B, 362, 363, 366, 368/ANTH 368, 372, 468/HIST 478, 478/ANTH 478, HIST 479
- at least one from LAIS 360C, 361, 365, 380, 495, HIST 350, 448

Graduate Study

Master's Degree

LLEA has designed MA programs that combine the study of language and literature with other forms of expressive culture in their permutations in the specific geographic regions of Europe, the U.S., Latin America, the Pacific Basin, and Africa. Graduate students are offered the following opportunities: an MA degree in French or Spanish; graduate teaching assistantships on a competitive basis; preparation for a PhD program and a career in teaching. Former students have found careers in government and foreign service; editing, publishing, and translation; law, business, and international banking; fashion, the arts, and travel industry.

Admission Requirements

In addition to meeting the requirements of Graduate Division, applicants must have the following:

1. A major or its equivalent in French or Spanish with a minimum GPA of 3.0 (B); applicants in French should also have taken a course in French phonetics;
2. For Spanish, the competence equivalent to two years of study at the college level in a second foreign language; applicants in French who plan to go on to a doctoral program are strongly encouraged to develop reading competence in an additional language;
3. For French and Spanish, an acceptable accent and fluency.

Applicants with minor deficiencies may be accepted provisionally, but course work taken to make up deficiencies may not be counted toward satisfaction of the degree requirements. Applicants accepted provisionally are expected to complete any deficiencies by the end of the first year of study.

Additional Requirements

All students are required to satisfy the remaining specific requirements and to pass the comprehensive examinations in their area of concentration.

Students who select Plan A (thesis) in their area of concentration must present a thesis proposal, including justification of the topic and a bibliography, for approval by the thesis director and two members of the thesis committee before the end of the second semester of work. The completed thesis must be presented to the thesis committee at least four weeks before the Graduate Division deadline. Graduate Division requires all theses to be written in English.

French Requirements

Candidates in French may select Plan A (thesis) or Plan B (non-thesis). Candidates in both plans are required to take 30 credit hours. A minimum of 18 credits must be earned in courses numbered 600 and above, including 15 credits in French and at least one graduate seminar. All candidates must take either FR 409 or FR 661. Up to 6 credit hours of LLEA 600-level courses may also be included, in which candidates in French are expected, whenever possible, to read French language texts in the original. Candidates selecting Plan A (thesis) must complete 6 credit hours of LLEA 700 (Thesis Research). All candidates must pass a final comprehensive examination, covering the major periods and genres of French literature and including the history of the language.

Spanish Requirements

Candidates in Spanish may select Plan A (thesis) or Plan B (non-thesis). Candidates in both plans are required to take 30 credit hours. A minimum of 18 of these credits must be numbered 600 and above, including at least one graduate seminar. Candidates selecting Plan A (thesis) must complete 6 credit hours of LLEA 700 (Thesis Research). Spanish graduate assistants are also required to take a course in language teaching methodology approved by the Spanish graduate faculty (e.g., SPAN 658 [Seminar in Spanish Applied Linguistics] or LLL 455 [Second Language Learning and Teaching Methodology]). Plan A students must also pass a final Area Exam (either Peninsular or Latin American literature) in the area not covered by the thesis. Plan B students may opt to do (a) a Scholarly Paper and pass an Area Exam, or (b) pass a final comprehensive exam in literature (Peninsular and Latin America) and in one additional focus area (language, film studies, U.S. Latino Studies, or cultural studies). The comprehensive exam is based on the minimum reading list and is tailored to fit the background and course work of the individual candidates.

Advanced Graduate Certificate in SLS/Spanish Applied Linguistics

This track allows graduate students to specialize in Spanish applied linguistics. The program is flexibly tailored to the academic and professional goals of the individual student and includes courses in English and Spanish in several departments. Up to 9 credits that are counted toward the AGC SLS/Spanish may be counted toward another degree. For more information

see www.hawaii.edu/sls/graduate/agc/agc-spanish-applied-linguistics/.

Requirements

- Two graduate courses in Spanish linguistics or applied linguistics topics
- Two graduate courses in SLS (second language analysis, second language use, second language learning, second language education, research methods)
- One graduate course relevant to the Scholarly Paper.
- At least one course should be a 700-level seminar.

Exit requirement: Scholarly Paper, typically a publishable research paper. The Scholarly Paper will be based on a study in Spanish applied linguistics. In accordance with the requirements of Graduate Division, the Scholarly Paper will be written in English. It will be assessed by a graduate faculty member in Spanish and a graduate faculty member in SLS.

Linguistics

College of Languages, Linguistics & Literature
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Email: linguist@hawaii.edu
Web: www.ling.hawaii.edu

Faculty

- *K. Deen, PhD (Chair)—language acquisition (emphasis on experimental approaches); experimental morphosyntax; acquisition of understudied languages, particularly Bantu languages and languages of South East Asia; bilingualism; second language acquisition
- *A. L. Berez, PhD (Graduate Chair)—language documentation; language archiving; Athabascan languages; Papuan languages; geography and languages; discourse; intonation; functional approaches to grammar
- *V. B. Anderson, PhD—phonetics; prosody; experimental linguistics; phonetic and phonological universals; endangered and underdocumented languages; animal communication; speech technology
- *R. A. Blust, PhD—historical linguistics; Austronesian linguistics and culture history; field methods; lexicography; endangered and underdocumented languages
- *K. K. Drager, PhD—sociolinguistics; phonetics; experimental linguistics; language variation and change; language and identity
- *G. M. Holton, PhD—language documentation; historical linguistics; Austronesian languages; Na-Dene languages; Papuan languages, linguistic typology; archiving; language revitalization
- *B. J. McDonnell, PhD—language documentation; Austronesian linguistics; syntax; phonology; corpus linguistics
- *W. D. O'Grady, PhD—syntactic theory and description; experimental syntax; language acquisition; Korean and Jeju; heritage languages; language revitalization
- *A. J. Schafer, PhD—psycholinguistics; experimental linguistics; sentence comprehension and production (including Korean, Japanese, Austronesian languages, underdocumented languages, and in language learners/bilinguals); sentence prosody; information structure; psycholinguistic approaches to language documentation and conservation

*R. J. Turnbull, PhD—phonology; phonetics; psycholinguistics; experimental linguistics; prosody; intonation; computational linguistics; network science; predictability; the mental lexicon

Emeritus Faculty In Residence

- B. W. Bender, PhD—general linguistics, morphology, Micronesian linguistics
- D. Bickerton, PhD—language variation, pidgins and creoles, language and literature
- L. R. Campbell, PhD—language documentation, historical linguistics, endangered languages and language revitalization, typology, field methods, American Indian languages
- M. L. Forman, PhD—general linguistics, ethnographic linguistics, Philippine studies
- A. V. Lyovin, PhD—typology, Sino-Tibetan, historical linguistics
- A. M. Peters, PhD—language acquisition: prosody, emergence of grammatical morphemes, crosslinguistic issues
- A. J. Schütz, PhD—descriptive linguistics, field methods, lexicography, Fijian and other Melanesian languages; history of linguistics in the Pacific
- D. L. Stampe, PhD—computational linguistics, phonology and prosody, holistic typology and drift, Munda languages

Cooperating Graduate Faculty

- P. Arboleda, PhD—Philippine folklore, gender and literature, Philippine ethnolinguistic groups, translation and digital animation
- R. Bley-Vroman, PhD—applied linguistics; syntax; second language acquisition theory; computational linguistics; natural language processing; corpus linguistics, machine translation
- J. D. Brown, PhD—language learning and teaching, language testing
- H. M. Cook, PhD—Japanese linguistics; sociolinguistics; discourse analysis and pragmatics
- E. Drechsel, PhD—ethnolinguistics; American Indian languages
- S. Fukuda, PhD—syntax; lexical semantics; syntax-lexical semantics interface phenomena and their acquisition; experimental syntax; Japanese linguistics
- T. Grüter, PhD—morphosyntax and semantics; developmental psycholinguistics; language processing (using eye-tracking methods); bilingualism
- C. Higgins, PhD—macro- and micro-sociolinguistics, qualitative research methods, conversational analysis, code-switching
- Y. Hoonchamlong, PhD—Thai linguistics (syntax, discourse, semantics), Tai/Thai dialectology, language learning and teaching, internet technology in language research and language instruction, translation
- G. Kasper, PhD—languages and social interaction; socially grounded approaches to second language acquisition
- C. Sak-Humphry, PhD—Khmer language, linguistics and literature
- B. Schwartz, PhD—linguistics theory and second-language acquisition and analysis; Universal Grammar; child second-language acquisition
- N. Silva, PhD—Hawaiian politics, indigenous politics
- H. M. Sohn, PhD—Korean linguistics; grammaticalization
- J. C. Woodward Jr., PhD—sign languages

Affiliate Graduate Faculty

- P. J. Donegan, PhD—phonology and phonetics; vowel systems; acquisition; variation and change; typology; Austroasiatic languages
- Y. Ostuka, DPhil—syntax; minimalist program; Tongan and Polynesian languages; Austronesian languages; endangered and underdocumented languages of Polynesia; language planning in Polynesia

Degrees Offered: BA in interdisciplinary 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 how language works—how it is acquired, how it is used, how it is represented in the brain, how it changes over time, and so on. Major subfields are phonetics, phonology, morphology, syntax, semantics, discourse analysis, pragmatics, historical linguistics, sociolinguistics, psycholinguistics (including developmental psycholinguistics), neurolinguistics, mathematical and computational linguistics, and ethnographic linguistics.

Linguistics is relevant to many endeavors, including cognitive science, 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) and Asian languages. It also has special strengths in language acquisition, psycholinguistics, sociolinguistics, and language documentation and conservation.

Our program is recognized as being among the top twenty-five in the U.S.

Advising

All faculty in the department participate in the advising of students majoring in linguistics. Undergraduates majoring in linguistics under the Interdisciplinary Studies program are advised initially by the undergraduate advisor. Graduate majors are advised by the chair of the graduate field of study or by one of the language documentation faculty. Students are later assigned to specific faculty members for advising according to their special interests.

Undergraduate Study

Bachelor's Degree

Students may obtain a BA degree with a linguistics major at UH Mānoa through the Interdisciplinary Studies program. See manoa.hawaii.edu/undergrad/is/. In this program, with the guidance of a faculty advisor, students create for themselves a major that may combine the study of linguistics with related disciplines, such as anthropology, second language studies, or psychology, or with the study of one or more foreign languages. Students majoring in linguistics in this way may include some or all of the MA core of courses in their BA program, and are thus able to do more advanced work, should they continue with an MA.

Graduate Study

The faculty represents a variety of theoretical viewpoints. The various faculty members are especially well 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, experimental phonetics, psycholinguistics, sociolinguistics, and cognitive linguistics.

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 may also be useful. Students entering 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. Both the MA and the PhD degrees are offered.

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. 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 listed above, will involve the inclusion of faculty members from other fields of study on students' program committees. Students should make known their interests to the graduate chair as early as possible so that appropriate advisors 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 guidelines 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. Courses bearing the 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

The department offers MA Plan A and Plan B programs. In addition to the university-wide residence requirements 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 (9 credit hours) and a minimum of 21 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 plus a final project near the end of course work. The required 30 hours of course work must be taken for a letter grade (not CR/NCR or Audit), of which 18 hours must be at the 600-level or above, including 3 hours of a 700-level seminar. Students may choose between three "streams": Linguistic Analysis, Experimental Linguistics, and Language Documentation and Conservation. For all streams there is a Core List from which different numbers of courses are to be selected. For details, see our MA manual, via ling.hawaii.edu/wp-content/uploads/MAManual.pdf.

Doctoral Degree

Requirements

All students in the PhD program are required to complete a minimum of 33 credit hours of course and seminar work at UH Mānoa (exclusive of LING 800) beyond those counted towards the MA degree. Courses in phonology (LING 621), grammar (LING 622), and two Methods courses are required of all PhD students.

All PhD candidates must demonstrate competence in one language other than their native language.

PhD students must present two professionally written papers, pass a comprehensive examination, and pass a final oral examination in defense of the dissertation.

For details, see our PhD manual, via ling.hawaii.edu/wp-content/uploads/PhDmanual.pdf.

Second Language Studies

College of Languages, Linguistics & Literature
Moore 570
1890 East-West Road
Honolulu, HI 96822
Tel: (808) 956-8610
Fax: (808) 956-2802
Web: www.hawaii.edu/sls

Faculty

- *G. Crookes, PhD (Chair)—classroom teaching, classroom-centered research, materials and syllabus design
- *C. Higgins, PhD (Graduate Chair)—macro- and micro-sociolinguistics, qualitative research methods, discourse analysis, code-switching
- *J. D. Brown, PhD—language testing, research methods, curriculum design
- *R. Day, PhD—teacher education, teaching of reading, vocabulary, materials development, literature
- *E. Gilliland, PhD—writing studies, adolescent literacy, teacher education, qualitative research methods, discourse analysis
- *T. Grüter, PhD—morphosyntax and semantics, developmental psycholinguistics, language processing, bilingualism
- *G. Kasper, Dr. phil.—language and social interaction, qualitative research
- *K. Kyle, PhD—corpus studies, second language acquisition
- *G. LaFlair, PhD—corpus linguistics, language assessment, quantitative research methods
- *B. D. Schwartz, PhD—linguistic theory and second language acquisition, second language analysis, second language processing, child second language acquisition
- *D. Zheng, PhD—cognition and instruction, second language technology and pedagogy, bilingual education, instructional media
- *N. Ziegler, PhD—second language acquisition, interaction, corrective feedback, task-based language teaching, synchronous computer mediated communication, Maritime English (English as a lingua franca, English for specific purposes in the commercial shipping industry)

Emeritus Faculty

- T. Hudson, PhD—language testing, reading, methods and materials, English for specific purposes, research methods

Cooperating Graduate Faculty

- H. Cook, PhD—Japanese sociolinguistics, discourse analysis, language socialization and pragmatics
- K. Kanno, PhD—Japanese SLA, pedagogical grammar, language analysis
- K. Kondo-Brown, PhD—heritage language learning, assessment, Japanese language learning
- W. O'Grady, PhD—syntax, first and second language acquisition, Korean
- A. J. Schafer, PhD—sentence comprehension and production across languages (including Korean, Japanese, and Austronesian languages); sentence prosody; information structure; psycholinguistic approaches to language documentation and conservation

Affiliate Graduate Faculty

- J. M. Birmes, PhD (Emeritus)—cognitive anthropology, human communication, decision-making, conversation analysis, Southeast Asia
- E. Hauser, PhD—conversation analysis
- S. McKay, PhD—English as an international language, SL methods and materials, macro-sociolinguistics
- H. T. Nguyen, PhD—interactional competence, classroom discourse, conversation analysis
- J. Norris, PhD—language program evaluation
- L. Ortega, PhD—second language acquisition
- P. Robinson, PhD—cognitive second language acquisition, task-based language learning

Degrees Offered: BA in second language studies, MA in second language studies, PhD in second language studies, Advanced Graduate Certificate in Second Language Studies (SLS), Advanced Graduate Certificate in SLS-Spanish Applied Linguistics

The Academic Program

The SLS department's programs prepare students for professional and academic careers in second language and multilingual settings, including but not limited to language education. Through course work and independent research, students acquire a broad knowledge base and familiarity with a range of research approaches and an understanding of ethics and professionalism in second language studies.

Employment opportunities have expanded nationally and internationally to include various types of educational and occupational institutions. In addition to language education and administration at all levels, employment opportunities extend to such domains as publishing, test development for international agencies, and language training programs for businesses.

The department, whose MA program dates back to 1961, is regarded as one of the most prestigious second language programs worldwide. Offerings comprise a wide range of general and specialized courses. SLS faculty members are well respected nationally and internationally through their research, publications, and leadership roles at national and international levels. The department has excellent library resources. It attracts top-quality students and maintains a variety of services and activities that stimulates a high level of student satisfaction and collaboration, including post-graduation employment advice and assistance.

SLS faculty members (J. D. Brown, G. Kasper, and R. Schmidt) have served on the executive boards of the American Association for Applied Linguistics and the Teachers of English to Speakers of Other Languages International Association. Department faculty are also past and present editors of the international journals *Applied Linguistics* (G. Kasper) and *Reading in a Foreign Language* (R. Day, T. Hudson), and have been actively involved in the organizing boards of the Second Language Research Forum and the Pacific Second Language Research Forum.

Undergraduate Study

Bachelor's Degree

The Bachelor of Arts degree program in second language studies provides students with a comprehensive understand-

ing of a wide range of issues related to how second and foreign languages are learned, taught, and used in local and global contexts. This program, in accord with the values of SLS graduate degree programs, takes the broad view that plurilingual and pluricultural societies have greater success at communication in and across languages, which enables mutual understanding and appreciation, conflict resolution, and negotiation of values.

The program addresses theory, research, and practice, and helps prepare students to become second language specialists who understand the nature of second language learning and use in diverse circumstances, and are able to act upon related challenges that emerge in a variety of settings. The BA in SLS also serves as an excellent preparation for entry into a variety of language-related graduate programs.

Requirements

Students must complete 33 credit hours of upper division courses, including:

- 24 credit hours of required courses: SLS 302, 303, 408, 430, 441, 480(alpha), 485, and 490
- 9 credit hours of elective courses: 300-499 courses from SLS, or 300-499 courses from other departments (as approved by the SLS BA advisory committee).

For more information about the BA degree in SLS, see www.hawaii.edu/sls/ba/ and contact the department's undergraduate coordinator. Newly declared majors should make appointments with the SLS coordinator as soon as possible.

Graduate Study

The department offers an MA degree in second language studies, an Advanced Graduate Certificate in second language studies, and a PhD degree in second language studies. The MA and PhD degree programs are recognized Western Interstate Commission for Higher Education (WICHE) regional graduate programs. Residents of Alaska, Arizona, California, Colorado, the Commonwealth of Northern Mariana Islands, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming are eligible, upon admission with a GPA of 3.50 or higher, to enroll at Hawai'i resident tuition rates. See the "Tuition, Fees, and Financial Aid" section of this *Catalog* for more information on WICHE programs.

Master's Degree

The main goal of the Master of Arts degree program is to serve the needs of prospective and practicing teachers, administrators, and researchers in the area of second and foreign language studies. Attention is given to the areas of second and foreign language acquisition, applied psycholinguistics, second language use, second language research, bilingual education, curriculum development, and teacher education, among others.

The program emphasizes theory as well as practice. In addition to the courses dealing with approaches to language teaching, materials, and testing, core courses are concerned with the linguistic, psychological, and sociological aspects of language and language learning. The core courses, which are primarily theoretical, are designed to provide an essential foundation on which the more practically oriented courses can build.

The MA in SLS does not result in teaching certification. Contact the College of Education for information regarding State of Hawai'i teacher certification.

Entry into the MA program is possible in both the fall and spring semesters. The GRE is required for all MA in SLS applicants whose first language is English or who are exempt from taking the TOEFL or IELTS. Most applicants whose first language is not English are required to take the TOEFL or the IELTS.

Application materials are required for both the Graduate Division and for the Department of Second Language Studies. For details about how to apply, see: www.hawaii.edu/sls/graduate/ma/ma-admissions/.

Requirements

All students in the MA program, whether Plan A, Plan B, or Plan C, are expected to have experience in second or foreign language learning (two years of college study or equivalent). Students who have not had such experience before entering the program are required to take at least a semester of language study, which does not count toward the 36-credit MA.

Plan A (Thesis) Requirements

- Four core courses (12 credits): SLS 441, 600, 650, 660
- One core seminar (3 credits): SLS 730, 750, 760, or 775
- Five electives approved by the advisor (15 credits)
- SLS 700 thesis research (6 credits)

Plan B (Non-thesis) Requirements

- Four core courses (12 credits): SLS 441, 600, 650, 660
- One core seminar (3 credits): SLS 730, 750, 760, or 775
- Seven electives approved by the advisor (21 credits)
- Submission of an acceptable scholarly paper

Plan C Requirements

Plan C is an individually planned program for established language scholars who wish to pursue an additional degree. For admission requirements, contact the Graduate Chair.

Specialization

As an option, the 36-credit MA program allows students to concentrate in a particular area of specialization. Each specialization requires a distinct selection of four courses from among various electives, as well as a related core seminar. Five areas of specialization are available:

- Critical second language studies
- Language assessment, measurement, and program evaluation
- Language and social interaction
- Language education ("English" can be designated)
- Second language acquisition

For further information about these specializations and the MA program, see: www.hawaii.edu/sls/graduate/ma/.

Advanced Graduate Certificate

The Advanced Graduate Certificate program in second language studies provides advanced training to those who already have a graduate degree (master's or doctorate) in applied linguistics, foreign languages, ESL, or related fields. The program is specifically aimed at those who wish to re-specialize or to update their training to include recent developments in the field. Applicants must have completed an MA or PhD degree in an appropriate field, or they must be a continuing student in an MA or PhD program in an appropriate field at UH Mānoa before entering the certificate program. Graduate students enrolled in other programs at UH Mānoa are permitted to apply for the certificate while they concurrently complete another

graduate degree. For specific information and guidelines on the AGC application process, see: www.hawaii.edu/sls/graduate/agc/.

The course of study typically lasts about two semesters and includes 15 credits (five courses) and a research paper (scholarly paper) to be produced during the program. Transfer credits are not applicable toward graduate certificate requirements. However, up to six UH Mānoa PBU credits may be applied. Students who complete the graduate certificate in SLS will obtain knowledge and skills in second language studies with possibilities including second language analysis, learning, pedagogy, and use, in utilization of research findings, and application of research methods.

As a culminating activity in the program, students are required to submit a paper that demonstrates the student's ability to conduct independent, high-quality scholarly research. This paper must be new research (i.e., different from prior graduate work) conducted under the supervision of the program's faculty.

Advanced Graduate Certificate in SLS-Spanish Applied Linguistics

This track allows graduate students to specialize in Spanish applied linguistics. The program is flexibly tailored to the academic and professional goals of the individual student and includes courses in English and Spanish in several departments. Up to 9 credits that are counted toward the Advanced Graduate Certificate SLS-Spanish may be counted toward another degree. For more information, see: www.hawaii.edu/sls/graduate/agc/agc-spanish-applied-linguistics/.

Doctoral Degree

The PhD program in second language studies at UH Mānoa was established in 1988. The graduate faculty of the PhD program comprises all members of the SLS faculty, as well as faculty members of the Departments of Anthropology, East Asian Languages and Literatures, and Linguistics.

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; interlanguage; processes of comprehension and production.
3. Second language use—Studies of social functions of second and foreign languages; pidgins, creoles, and dialect variation; roles of social and geographical contexts; pragmatics; discourse analysis; cross-cultural and interethnic communication; sociopolitical factors; language policy and planning.
4. Second language pedagogy—Research into learners' language needs (including immigrant needs); formulation of needs-based curriculum objectives and syllabi; task-based and content-based language teaching; computer-aided instruction; program administration; evaluation and language assessment; critical pedagogy.

The basic requirement for admission into the PhD program is the completion of an MA in second language studies, applied linguistics, or second or foreign language education. Applicants

with graduate degrees in related disciplines such as anthropology, education, modern languages, linguistics, and psychology are also welcome.

Entry into the PhD program is possible in both the fall and spring semesters. The GRE is required for all PhD program applicants. Most applicants whose first language is not English are required to take the TOEFL or the IELTS. Additionally, those required to take the TOEFL or IELTS have the following minimum scores to work as a teaching graduate assistant (GA): 600 TOEFL PBT; 250 TOEFL CBT; 100 TOEFL iBT, with subtest scores 25 listening and 25 speaking; 7.0 IELTS.

Prospective PhD students are automatically considered for a graduate assistantship at the time of application. Each year, four years of guaranteed funding are offered to the four most qualified applicants to the PhD in SLS program, pending availability of funds.

Application materials are required for both the Graduate Division and the Department of Second Language Studies. For details about how to apply, go to: www.hawaii.edu/sls/graduate/phd/phd-admissions/.

Requirements

Students work closely with their advisors 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 PhD students' MA training is at least one graduate-level course in each of the four areas of specialization. Beyond basic preparation, each doctoral student's program must include a minimum of two graduate-level courses in three of the four areas of specialization and a minimum of two graduate-level courses in research methods. At least two seminars (700-level) are required.

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

Students must also document and reflect on substantial, diverse learning experiences in two languages other than their first language. This requirement is fulfilled by submitting a 3- to 5-page reflective essay during the first two years of study and before advancement to candidacy. Examples of substantial and diverse language learning experience include the following:

- Attaining L2 competence for functioning successfully in an L2 academic context
- Completing a primary, secondary, or higher education degree in a language other than the first language
- Growing up with two or more languages
- Teaching a language (or in a language) other than the first language
- Engaging in research that involves the analysis of data in another language

For further information about the PhD program, see: www.hawaii.edu/sls/graduate/phd/.

English Language Institute

College of Languages, Linguistics & Literature
Moore 570
1890 East-West Road
Honolulu, HI 96822
Tel: (808) 956-8479
Fax: (808) 956-2802
Email: uhmeli@hawaii.edu
Web: www.hawaii.edu/eli

The English Language Institute (ELI) is located in the Department of Second Language Studies. The ELI's primary purpose is to provide English instruction for international and immigrant students or others, whose native language is not English, to facilitate their academic studies at UH Mānoa. The ELI program is only for students who have been admitted to UH Mānoa.

All potential ELI students admitted to UH Mānoa are referred to ELI to determine if they must take the ELI placement test before registering for UH Mānoa courses. If a student does not fulfill this obligation, ELI will place a hold on the student's registration. The ELI placement test is generally offered two or three times at the beginning of each semester. Information about the testing dates and times can be found on the ELI website or the UH Mānoa registration homepage. Students can sign up for ELI placement tests online or in person at Moore 570 prior to the testing date.

ELI Exemptions

Students are exempt from taking the ELI placement test if they meet any of the following conditions: (a) the student is a native speaker of English; (b) the student has received a score of 100 or better on the internet-based TOEFL, a score of 250 or better on the computer-based TOEFL, or a score of 600 or better on the paper-based TOEFL (taken within the last 2 years); (c) the student has received a score of 7.0 or better on the IELTS (taken within the last 2 years); (d) the student has received a score of 151 or better on the critical reading section of the GRE; (e) the student has received a score of 540 or better on the critical reading section of the SAT; (f) the student has received a combined score of 48 on the reading and English sections of the ACT and neither subscore (reading or English sections) is lower than 21; (g) graduate students who have received within the last five years a bachelor's degree or an advanced degree from an accredited/recognized college in the U.S., United Kingdom, Canada (except Quebec), New Zealand, Singapore, Australia, or Ireland; (h) the student has an Associate of Arts or Associate of Science/Natural Sciences degree from a community college within the UH System; (i) the student has obtained the equivalent of 60 transferable semester credits with a GPA of 2.0 or better, all earned in classroom settings at regionally accredited colleges or universities in the U.S., or from colleges or universities whose academic standing is recognized by UH Mānoa and where English is the primary language of instruction; or (j) the student has completed six years of full-time schooling with English as the medium of instruction at a middle school, high school, college, or university in Australia, Canada (except Quebec), Ireland, New Zealand, the United Kingdom, or the U.S. (including American Samoa) Documentation of all six years is required.

These exemption criteria apply at the time students are admitted to UH Mānoa. An exemption on the basis of one of these criteria may be automatically granted by UH Mānoa, or it may be granted by the ELI office if the student can provide the appropriate documentation, including official transcripts or test results.

Assignment to ELI Courses

All other potential ELI students who have been admitted to UH Mānoa must take the ELI placement test before they can register for courses. Placement into ELI courses or exemption from ELI courses will be based on the test results. Students pursuing online degrees should contact the ELI director for further information. All ELI courses must be completed within the first year of study at UH Mānoa. Students who do not complete ELI course work as planned may not be allowed to graduate.

Relationship to Other Course Work

ELI courses are equivalent to 3-credit courses when considering a student's course load. Students placed into ELI courses need to reduce the number of additional credit courses they can take and should expect to make slower progress in their regular UH Mānoa studies. This is an especially important factor in some graduate programs and should be considered carefully by students whose time or financial support is limited.

Hawai'i English Language Program

College of Languages, Linguistics & Literature
Makai Campus 13-1
1395 Lower Campus Road
Honolulu, HI 96822
Tel: (808) 956-6636
Fax: (808) 956-5100
Email: eslhelp@hawaii.edu
Web: manoa.hawaii.edu/eslhelp

The Hawai'i English Language Program (HELP), located in the Department of SLS, is a noncredit, intensive academic English skills program for students who wish to improve their English language proficiency for academic, business, or professional pursuits. HELP offers a pathway into the UH System for students who need to sharpen their academic English skills before starting credit course work at UH Mānoa or in another American college or university. HELP students who complete two terms at the highest level may receive conditional admission to UH Mānoa without a TOEFL score, after which they may take the ELI placement exam to see if further English preparation is needed. HELP has four levels to meet the needs of students from beginning to advanced.

HELP is also an ESL teacher training center and offers customized teacher training workshops to groups, as well as the globally recognized Certificate in English Language Teaching to Adults (CELTA) certification course.

Admission to HELP is open to individuals 17 or older who have completed high school or its equivalent. There are four 8-week sessions each year beginning in January, March, August, and October. HELP also offers 6-week summer programs in May and July.

See manoa.hawaii.edu/eslhelp/ for more information.

College of Natural Sciences

Administration

Keller 201
2565 McCarthy Mall
Honolulu, HI 96822
Tel: (808) 956-6451
Fax: (808) 956-9111
Web: natsci.manoa.hawaii.edu

Dean: Aloysius G. Helminck
Interim Associate Dean: Andrew D. Taylor

Departments and programs: Biology, Botany, Chemistry, Information and Computer Sciences, Library and Information Science, Marine Option Program, Mathematics, Microbiology, Physics and Astronomy, Zoology

Advising

Within the context of a liberal arts education, the College of Natural Sciences assists students in clarifying their life and career goals, developing meaningful educational plans, and preparing for productive lives, enlightened citizenship, and life-long learning. Students are expected to be active partners in the advising process by initiating contact with their advisors and by coming to advising sessions prepared.

Students at UH Mānoa have exceptional freedom in crafting their college experience. Students are able to explore connections between fields, engage in co-curricular activities, and develop unique combinations of majors, minors, and certificates. In addition to meeting all mandatory advising initiatives required by their major departments, declared Arts and Sciences majors meet with their advisors throughout their career at UH Mānoa for clarification of degree requirements, individual concerns, and resolution of complex academic issues.

Advising Offices

Web: www.hawaii.edu/natsci/advising

Keller Hall Room 214
Edmondson Hall Room 216
Honolulu, HI 96822
Tel: (808) 956-5911
Fax: (808) 956-9111
Email: cnsadvis@hawaii.edu

Degrees, Minors and Certificates

Bachelor's Degrees: Bachelor of Arts (BA), Bachelor of Science (BS)

Master's Degrees: Master of Arts (MA), Master of Library and Information Science (MLISc), Master of Science (MS)

Doctoral Degrees: Doctor of Philosophy (PhD)

College Certificate

Mathematical Biology Undergraduate Certificate

The purpose of the certificate is to induce students to pursue the interdisciplinary study of biology and mathematics together with research. The course work will be similar to, but less than, that required to receive a minor in mathematics or biology. However, the students will also have to do a substantial amount

of research in addition to the course work. The emphasis in the certificate is different, however, in that the majority of the work is interdisciplinary.

Students will be considered accepted into the Mathematical Biology Certificate Program upon formal request for acceptance and completion of either MATH 304 or 305 with a grade of C or better. To receive the certificate, students must complete 15 credits of approved course work with no grade below a C and attain a GPA of 2.5 in the collection of courses used to satisfy the certificate requirements. Due to the interdisciplinary nature of the certificate, 6 credits of required electives will differ depending on a student's major. Courses used towards the certificate can only be double-dipped with focus requirements.

Participation in an interdisciplinary Mathematical Biology research project is required. These projects must be substantial, requiring at least the effort of a 3 credit 400-level course; examples include a senior honors research project, summer Research Experiences for Undergraduate programs, and the Undergraduate Biology and Mathematics Research Program; students are advised to discuss their projects with an advisor from the Mathematical Biology Certificate Coordinating Committee before commencing. A research report based on this research project must be submitted to and approved by the committee. Students are expected to present their research to an approved symposium or conference. Students may enroll for 3 credits of MATH 499, BIOL 499, HON 496 or other approved course so long as the project is approved by the Mathematical Biology Certificate Coordinating Committee.

Prerequisites to the Certificate

- BIOL 171 (lab not required)
- CHEM 161 or 171 (lab not required)
- year of calculus (MATH 215/216, MATH 241/242, MATH 251A/252A)
- electives may have additional prerequisites

Requirements for the Certificate (15 credits)

- Required courses (9 credits): MATH 304, 304L, 305, 305L, MATH/BIOL 490 (capstone); Math majors may replace MATH 304 or 305 by a 3 credit course covering their research project, as described above.
- **Certificate Electives** (6 credits):
 - Math majors: BIOL 172 (lab not required) and one additional biology course approved by the committee;
 - Life science majors: two courses selected from MATH 243/253A, 301, 302, 303, 307, 311, 371, 373, 402, 403, 407, 414, 471, or 472. Life science majors may replace one of these courses by a 3 credit course covering their research project, as described above;
 - Other majors: at least 6 credits of electives approved by the Committee.

Honor Societies

Honor societies at UH Mānoa in the College of Natural Sciences include Beta Phi Mu (library science), Golden Key National Honour Society (undergraduate), Lambda Delta (freshmen), Mortar Board (seniors), Phi Beta Kappa (liberal arts and sciences), Phi Eta Sigma (freshmen), Phi Kappa Phi (general scholarship), Sigma Pi Sigma (physics), and Sigma Xi The Scientific Research Society (sciences).

Astronomy

College of Natural Sciences
2680 Woodlawn Drive
Honolulu, HI 96822
Tel: (808) 956-7087
Fax: (808) 956-7107
Undergraduate Program:
Email: undergrad@ifa.hawaii.edu
Web: manoa.hawaii.edu/astronomy
Graduate Program:
Email: gradchair@ifa.hawaii.edu
Web: gradprog.ifa.hawaii.edu

Faculty

R. McLaren, PhD (IFA Interim Director—infrared astronomy)
*K. Meech, PhD (Graduate Chair)—planetary astronomy
*J. Barnes, PhD (Undergraduate Chair)—theoretical astronomy
*C. Baranec, PhD—exoplanets, adaptive optics
A. C. A. Boogert, PhD—astrochemistry
*F. Bresolin, PhD—stellar astronomy
*S. J. Bus, PhD—asteroids
*K. Chambers, PhD—extragalactic astronomy
*M. R. Chun, PhD (Associate Director, IFA Hilo)—adaptive optics
*M. S. Connelley, PhD—instrumentation, star formation
*A. S. Cowie, PhD—interstellar matter
*L. L. Cowie, PhD—extragalactic astronomy
*H. Ebeling, PhD—galaxy clusters
*R. R. Gal, PhD—extragalactic astronomy, outreach coordinator
*S. R. Habbal, PhD—solar and heliospheric physics
*N. Haghighipour, PhD—extrasolar planets
*D. N. B. Hall, PhD—infrared astronomy
*K. Hodapp, PhD—infrared astronomy
*E. M. Hu, PhD—extragalactic astronomy
*D. Huber, PhD—stellar astronomy
*R. Jedicke, PhD—asteroids
*J. R. Kuhn, PhD—solar astrophysics
*H. Lin, PhD—solar physics
*M. Liu, PhD—stellar astronomy
*E. Magnier, PhD—star formation, large-scale surveys
*R. H. Mendez, PhD—stellar astronomy
N. Raja, PhD—computer support
*J. Rayner, PhD—star formation, instrumentation
*B. Reipurth, PhD—star formation
*D. B. Sanders, PhD—infrared and millimeter astronomy
*N. Schorghofer, PhD—planetary science
B. Shappee, PhD—extragalactic astronomy
*I. Szapudi, PhD—cosmology
X. Sun, PhD—solar physics
*D. Tholen, PhD—planetary science
*J. Tonry, PhD—extragalactic astronomy
*R. B. Tully, PhD—galaxies and cosmology
J. van Saders, PhD—stellar and substellar astronomy
*R. Wainscoat, PhD—asteroids
*J. P. Williams, PhD—submillimeter astronomy

Emeritus Faculty

A. M. Boesgaard, PhD—stellar spectroscopy
C. Faclas, PhD—instrumentation
J. T. Jefferies, DSc—solar physics
R-P. Kudritzki, PhD—stellar astronomy
A. N. Stockton, PhD—extragalactic spectroscopy

A. T. Tokunaga, PhD—infrared astronomy
G. Wynn-Williams, PhD—infrared astronomy

Affiliate Graduate Faculty

G. Hasinger, PhD
A. Howard, PhD
J. Lu, PhD

Degrees Offered: BA (including minor) in astronomy, BS (including minor) in astrophysics, MS in astronomy, PhD in astronomy

The Academic Program

Astronomy (ASTR) is the branch of science that studies the structure and development of the physical universe beyond Earth. It includes the study of planets and other objects of the solar system; the sun and stars and their evolution; the interstellar medium; the nature and dynamics of star clusters, galaxies, and clusters of galaxies; and the study of the nature and history of the universe itself—of the physical cosmos taken in its largest extent in space and time. Astronomy provides humanity with a fundamental understanding of both the universe and our place in it.

The mountains of Hawai'i are sources of wonder and inspiration. Astronomers worldwide recognize that summit access is an extraordinary privilege, to be shared with others who approach these mountains with respect and reverence. The observatories on Maunakea and Haleakala, collaboratively established by 11 nations, are dedicated to the discovery and international dissemination of astronomical knowledge, and the academic programs offered by the Institute for Astronomy exist to insure that students at UH Mānoa have full and equal access to this knowledge. These programs stand on a foundation of basic research in cosmology, galaxies and large-scale structure, stellar formation and evolution, interstellar material, our own and other planetary systems, astrobology, solar astronomy, and technologies for adaptive optics, infrared detectors, and submillimeter astronomy. In support of its mission of education and research, the Institute for Astronomy operates dedicated facilities on Maunakea and Haleakala and has guaranteed access to all major telescopes on these mountains.

Undergraduate Study

The undergraduate astronomy and astrophysics curricula provide students with a strong background in the application of fundamental physics to astronomical phenomena, as well as practice designing and carrying out projects in observational astronomy. This serves to train students in the core practices of science, applicable to careers in research and in astronomy-related fields. The BA in Astronomy provides a flexible program for students interested in astronomy who also have a wider range of career goals. The BS in Astrophysics is a rigorous program for students who plan to pursue graduate studies in astronomy, astrophysics, or physics and are aiming at a long-term research career.

Advising

Academic advising is mandatory for all undergraduate astronomy and astrophysics majors. Contact undergrad@ifa.hawaii.edu for assignment to an advisor. Note that in order to complete the program in 4 years, astronomy and astrophysics students must begin the study of calculus in either the first or the second semester of the freshman year.

BA Degree in Astronomy

Requirements (C [not C-] grade minimum)

Students must complete 48 credit hours in ASTR, PHYS, and related courses, including:

- ASTR 210, 300/300L, 301, 320, 399 (2 credits), 494
- PHYS 151/151L, 152/152L, 485 (170/170L, 272/272L, 274/274L may be substituted for 151/151L, 152/152L; if so 274 also satisfies one of the non ASTR electives below.)
- Three courses, including at least 3 credits at 300-level or higher, and 3 credits at 400-level, from ASTR 110, 120, 130, 140, 150, 280, 281, 380, 399, 426, 430, 494 (110-150 only count if taken before 210; 399 may be taken for a maximum of 5 credits; 399 or 494 credits taken to fulfill core requirements cannot also be counted towards elective requirements)
- Four courses, including at least 3 upper-division credits, from CHEM 272, ECON 321, EE 160, GG 101 (or 170), any GG course at 200-level or higher worth at least 3 credits, ICS 111, ICS 211, MATH 243, 244, PHYS 274, any MATH or PHYS course at 300-level or higher worth at least 3 credits
- CHEM 161/161L and 162/162L or 171/171L or 181A/181L
- MATH 241, 242 (251A, 252A may be substituted for 241, 242. 215, 216 may be substituted for 241, 242 with consent from advisor.)
- Recommended languages: German, French, or Japanese.

Upon approval of an astronomy program advisor and chair, the elective requirements may be modified to accommodate a special emphasis or interdisciplinary program that is appropriate for a major in astronomy.

For a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/. For an easy-to-read summary of the requirements, see www.ifa.hawaii.edu/undergradprog/BA-AstronomyMap-links.pdf.

BS Degree in Astrophysics

Requirements (C [not C-] grade minimum)

Students must complete 62 credit hours in ASTR and PHYS courses, including:

- ASTR 241, 242, 300/300L, 301, 399 (4 credits), 423, 494 (2 credits, 1 per semester)
- PHYS 170/170L, 272/272L, 274/274L, 310, 311, 350, 450, 480, 485
- Two courses from ASTR 320, 423, 426, 430
- Two courses from PHYS 400, 460, 481, 490
- CHEM 161/161L and 162/162L or 171/171L or 181/181L
- MATH 241, 242, 243, 244, 311 or 307 (251A, 252A, 253A may be substituted for 241, 242, 243, 244. 215, 216 may be substituted for 241, 242 with consent from advisor.)

Recommended languages: German, French, or Japanese.

Upon approval of an astrophysics program advisor, the elective requirements may be modified to accommodate a special emphasis or interdisciplinary program that is appropriate for a major in astrophysics.

For a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/. For an easy-to-read summary of the requirements, see www.ifa.hawaii.edu/undergradprog/BS-AstroPhysicsMap-links.pdf.

Minor in Astronomy

The minor in astronomy prepares students with the essential core of theoretical and observational courses of the BA Astronomy degree. This minor can provide an exciting and useful complement to a wide range of bachelor's degree programs, including biological sciences, computer science, and other professional degrees that already require introductory physics and calculus.

Students must complete the following courses with grades of C (not C-) or better:

- ASTR 210
- ASTR 300, 300L, and 301
- At least 3 credit hours of additional non-introductory ASTR course(s) at the 200-level or above

Minor in Astrophysics

The minor in astrophysics prepares students with the essential core of theoretical and observational courses of the BS Astrophysics degree. This minor can provide a fulfilling and career-broadening complement to most bachelor's degree programs in the physical sciences, earth sciences, and engineering that already require calculus-based physics.

Students must complete the following courses with grades of C (not C-) or better:

- ASTR 241 and 242
- ASTR 300, 300L, and 301
- At least 3 credit hours of additional ASTR course(s) at the 300-level or above

Graduate Study

The astronomy graduate program is designed for students who want to obtain a doctorate in astronomy and go on to careers in academia or research institutions. A masters in astronomy is also available. For students entering with a bachelor's degree, the first two years of study cover the same material required for a MS degree, so most students aiming for the PhD receive a MS degree along the way.

Applicants to the Astronomy Graduate Program typically have a bachelor's degree in physics, astronomy, or a related field. A strong background in physics is essential for successful astronomy students. We require the GRE General Test, and the subject test in physics.

Applicants who already hold a masters degree from another institution are also eligible for admission and may enter our PhD program on an accelerated track. In addition, these students have the option to be based at any of the Institute for Astronomy branches (Manoa, Maui, or Hilo) immediately upon entering the program. Placement at the IfA-Maui or IfA-Hilo facilities is contingent upon funding for an assistantship and applicants are encouraged to contact potential research advisors during the admissions process.

In selecting applications for entry to the astronomy program, we pay attention to high academic achievement, especially in physics, and to the letters of recommendation. Research experience in any scientific field at the undergraduate level is extremely valuable as preparation for graduate study in astronomy.

Master's Degree

The program offers both the Plan A (thesis) and Plan B (non-thesis) MS degrees, but almost all students opt for the Plan B program as it dovetails better with the requirements of qualification for PhD candidacy. The only real advantage of the Plan A master's is that it can be completed within four semes-

ters; it is therefore of interest to those students who want to get a terminal master's degree in the minimum time.

Requirements

All MS students must take 30 credits of graduate level astronomy courses unless substitution is approved by the graduate chair. They must include ASTR 633 (Astrophysical Techniques) and at least three credits of ASTR 700-level seminars. Plan A students must complete a thesis in accordance with UH Mānoa regulations, while Plan B students must pass the final examination (which is also the PhD qualifying examination) and satisfactorily complete at least one directed research project as judged by the qualifying exam committee.

Doctoral Degree

Besides the course work required for the MS degree, PhD students are expected to undertake two directed research projects during their first two years, and present the results to the faculty both as a written report and an oral presentation. Students must pass the Qualifying Exam Assessment (which also serves as the Plan B MS degree final exam) by the end of their 5th semester in the astronomy graduate program.

Requirements

Students entering the program with a master's degree in a related field may advance to PhD candidacy after completing one year of course work with a minimum of 6 credits per semester (3 credits of astronomy graduate-level course work and at least three credits of ASTR 700-level seminars), successful completion of one ASTR 699 research project, and passing the Qualifying Exam Assessment.

All students must pass the comprehensive exam, which takes the form of an in-depth review of the dissertation proposal, and achieve PhD candidacy by the end of their 6th semester in the astronomy graduate program. Finally, students must research, write, and defend a dissertation on a subject approved by their committee.

Biology

College of Natural Sciences

Edmondson 216

2538 McCarthy Mall

Honolulu, HI 96822

Tel: (808) 956-8303

Fax: (808) 956-4745

Email: biology@hawaii.edu

Undergraduate Advising Email: bioadvise@hawaii.edu

Web: manoa.hawaii.edu/biology/

Faculty

*H. G. de Couet, PhD (Chair)—molecular cell biology, development biology, evolution

*J. H. Bailey-Brock, PhD—invertebrate zoology, reef ecology, Polychaetes

*K. M. Bennett, PhD—bioimaging, physiology, biophysics

*M. Butler, PhD—evolution ecology, adaptive radiation, functional morphology, biomechanics

B. Chong, PhD—evolution, genomics, and symbiosis

*K. Cole, PhD—ichthyology, behavioral ecology, reproductive biology, morphology and morphogenesis, microgravity biology

*M. A. Hixon, PhD—marine ecology and conservation biology

*C. L. Hunter, PhD—conservation biology, coral reef ecology, biology and ecology of marine invertebrates

S. D. Kraft-Terry, PhD—academic advising and assessment

*P. B. J. Marko, PhD—biogeography, evolution and conservation

*A. L. Moran, PhD—marine ecology and evolution

*M. Porter, PhD—evolution and ecology of vision, crustacean phylogenetic

*F. A. Reed, PhD—population genetics

*A. D. Taylor, PhD (Interim Associate Dean)—population and community ecology, applied statistics

*R. Thomson, PhD—evolutionary biology and phylogenetics

*T. Tricas, PhD—marine animal behavior

*L. Watling, PhD—impacts of humans on benthic environments; crustacean biology

*C. Z. Womersley, PhD—environmental physiology, biochemical adaptation, parasitology

*A. N. Wright, PhD—population ecology, community ecology, conservation biology

*M. Yoshizawa, PhD—evolutionary developmental biology, neuroscience, quantitative genomics

Cooperating Graduate Faculty in Zoology

R. Alegado, PhD—bacterial pathogenesis, microbial evolution and ecology

B. Bowen, PhD—phylogeography and conservation genetics of marine vertebrates

R. Cowie, PhD—origins and determinants of biological diversity in Pacific islands

M. Donahue, PhD—spatial population dynamics; marine community ecology; habitat selection, scaling of ecological processes

D. Duffy, PhD—conservation biology, sea birds

E. Franklin, PhD—marine ecology coral reefs, fish and fisheries, invasive species, restoration ecology

R. Gates, PhD—molecular biology, developmental genetics, cell biology, physiology and ecology of corals

D. K. Hartline, PhD—quantitative neurophysiology and simulation of simple networks

B. S. Holland, PhD—conservation biology of Native Hawaiian tree snails

K. N. Holland, PhD—physiology, behavior, ecology of aquatic organisms

K. Y. Kaneshiro, PhD—systematics, evolution, insect behavior

M. O. Lammers, PhD—marine bioacoustics

P. Lenz, PhD—neuroecology of zooplankton sensory systems

M. McFall-Ngai, PhD—animal-bacterial symbioses, molecular design of tissues that interact with light

M. Medeiros—evolutionary biology, ecology of infectious pathogens

R. Richmond, PhD—invertebrate zoology, conservation biology

E. Ruby—microbe-host signaling, comparative genomics and population biology

R. Toonen, PhD—molecular genetics of marine organisms

J. Yew—chemical communication of insects, neurobiology of chemosensory perception, mass spectrometry methods for natural product chemistry

Affiliate Graduate Faculty in Zoology

R. Allison, PhD—systematics, biogeography and ecology

C. Birkeland, PhD—conservation biology regarding coral

A. Friedlander, PhD—marine ecology, marine conservation biology

P. E. Nachtigall, PhD (Emeritus)—behavior and sensory processes of marine mammals

Degrees Offered: Undergraduate Certificates in Mathematical Biology and in Marine Option Program, BA (including minor) in biology, BS in biology, BS in marine biology, BA (including minor) in zoology, BS in zoology, MS in zoology, PhD in zoology

The Academic Program

The Department of Biology (BIOL) provides an academic home to students who wish to pursue a broad training in the biological sciences. It offers a BA degree and a BS degree in biology, a BS degree in marine biology, a minor in biology, an MS in zoology, and a PhD in zoology.

Biology is of fundamental importance in a science or liberal arts education, as it provides students with a keener insight into and a deeper appreciation of the many facets of living systems. Most students plan to use their training as preparation for professional work, such as aquaculture, biotechnology, biological research, dentistry, marine biology, medicine, optometry, park services, pharmacy, and teaching. Our graduates have an outstanding record of acceptance in advanced degree programs at dental, medical, pharmacy, and graduate schools. Many of our graduates also become teachers after obtaining a post-baccalaureate teaching certificate at the College of Education.

The biology curricula are designed to provide students with a strong background in the principles of biology and with rigorous upper division instruction in a number of basic areas. This combination of breadth and in-depth instruction allows students to develop the intellectual foundations and the skills necessary to deal with the specific biological concerns of today and the flexibility to meet the needs of the various professions. From this base, our graduates can pursue future specialization with confidence.

Advising

Undergraduate student advising is mandatory. Prospective majors should visit manoa.hawaii.edu/biology/advising or contact bioadvise@hawaii.edu to meet with an advisor to design a curriculum that satisfies program requirements.

Undergraduate Study

BA Degree in Biology

Requirements (C [not C-] grade minimum)

- BIOL 171, 172, 275, and 375 plus laboratories
- BIOL 305
- ZOOL 480
- One course from each of the following areas:
 - Biochemistry or Molecular Biology (BIOC 441; BIOL 402 or 407)
 - Physiology (BOT 420; MICR 431; PHYL 301; ZOOL 430)
 - Morphology and Biodiversity with laboratory (BOT 420; MICR 351/351L/ PEPS 363/363L/ ZOOL 320/320L or 475/475L)
- 3 credit hours in approved upper-division biology elective courses

Related Requirements (C [not C-] grade minimum)

- CHEM 161, 162, 272 plus laboratories and 273
- PHYS 151 and 152 or 170 and 272 plus laboratories
- MATH 215 or 241 or 251A

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS Degree in Biology

Requirements (C [not C-] grade minimum)

- BIOL 171, 172, 275, and 375 plus laboratories
- BIOL 305
- ZOOL 480
- One course from each of the following areas:
 - Biochemistry or Molecular Biology (BIOC 441; BIOL 402 or 407)
 - Physiology (BOT 420; MICR 431; PHYL 301; ZOOL 430)
 - Morphology and Biodiversity with laboratory (BOT 420; MICR 351/351L/ PEPS 363/363L/ ZOOL 320/320L or 475/475L)
- 9 credit hours in approved upper-division biology elective courses

Related Requirements (C [not C-] grade minimum)

- CHEM 161, 162, 272 plus laboratories and 273
- PHYS 151 and 152 or 170 and 272 plus laboratories
- MATH 215 and 216 or 241 and 242 or 251A and 252A
- ECON 321 or NREM 310 or SOCS 225 or MATH 243 or 304 or 372 or 373 or 472

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS Degree in Marine Biology

Requirements (major of 2.5 GPA or higher)

- BIOL 171, 172, 265, 275, and 375 plus laboratories
- OCN 201
- BIOL 301 plus laboratory
- BOT 480
- ZOOL 475 plus laboratory
- MICR 401 plus laboratory
- 4 credits of directed research in approved disciplines or BIOL 403
- BIOL 404
- 9 credit hours in approved courses

Related Requirements (major of 2.5 GPA or higher)

- CHEM 161, 162, and 272 plus laboratories
- PHYS 151 and 152 or 170 and 272 plus laboratories
- MATH 215 and 216 or 241 and 242 or 251A and 252A
- ECON 321 or NREM 310 or SOCS 225 or MATH 373 or MATH 472

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA Degree in Zoology

There is no admittance to the BA in Zoology effective Spring 2013. Degrees must be completed by Spring 2018.

Requirements

- BIOL 171/171L and 172/172L
 - BIOL 265/265L
 - BIOL 275/275L
 - CHEM 161/161L and 162/162L
 - CHEM 272/272L and 273
 - BIOC 441 or BIOL 402 (cross-listed PEPS 402 or MBBE 402) (biochemistry lab not required)
 - MATH 215 or 241, 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 420/420L)
 - Physiology (ZOOL 430/430L, BIOL 407 or 408/408L)
 - Ecology and Behavior (ZOOL 306/306L, 439/439L, or 470/470L)
 - Genetics (BIOL 375/375L)
 - Morphology and Taxonomy (ZOOL 320/320L, 340/340L, 465/465L, or 475/475L; PEPS 363)
 - Non-laboratory courses applicable toward (20 credits): ZOOL 399, 499
 - ZOOL courses numbered 300 and above

Zoology courses at the 200 level carry no major credit. MATH 216 or 242 and a year of college physics are strongly recommended for students planning graduate study.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor in Biology

Requirements (C [not C-] grade minimum)

Students must complete BIOL 265/265L, 275/275L, and 375/375L; and a minimum of 3 credits from the following:

- BIOL 301/301L, 331, 363, 390, 395, 401, 402, 407, 408/408L, 425, and 499
- Approved upper level botany, biochemistry, microbiology, physiology, and zoology courses

Undergraduate Certificate in Marine Option Program

The Marine Option Program (MOP) is a unique opportunity for undergraduates with an interest in the ocean. It is open to students in all fields and provides a clearinghouse for marine-oriented experiential education as well as a chance for students with common interests to meet. MOP sponsors a wide variety of marine activities, including field trips, workshops, seminars, symposia, and noncredit courses.

A certificate is awarded to undergraduates who successfully complete at least 12 credit hours of marine-related courses (including OCN 201, ORE 202, ZOOL 200, or an equivalent survey course; one 3-credit interdisciplinary ocean course; 6 credit hours of marine electives). In addition, students must complete the MOP Seminar (IS 100/BIOL 104) followed by the MOP skill project. The unique MOP skill project (worth 3 or more credits, e.g. IS 400/BIOL 400) allows students to design and conduct a personal marine or aquatic project related to their educational goals. Past projects have run from scientific research to endeavors in the arts.

Students interested in MOP or in marine careers and curricula should visit the Marine Option Program offices in Dean Hall, room 105A; tel. (808) 956-8433; email

manoamop@hawaii.edu; www.hawaii.edu/mop/; Facebook ID: uhm mop.

Graduate Study in Zoology

The Department of Biology offers programs of graduate study and research leading to the MS and PhD degrees in Zoology. The major strengths of the graduate program in zoology are in the areas of animal behavior; 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 two interdisciplinary graduate specializations; the Cellular and Molecular Biology (CMB); and the Ecology, Evolution, and Conservation Biology (EECB) Program. The department has active affiliations with Hawai'i Institute of Marine Biology, Kewalo Marine Laboratory, 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 summarizing admissions and program requirements and opportunities for financial aid, is available on request from the department; a separate graduate student handbook describes the details of program requirements and procedures. The following sections summarize the admissions and program requirements, but the department brochure and handbook should be consulted for complete details.

Admissions

Students are admitted to the graduate program only in the fall semester; the application deadline is **December 15**, manoa.hawaii.edu/graduate/admissions. Applicants must submit a completed graduate application form, the official record of performance on the GRE General Test, transcripts for all previous undergraduate and graduate studies; and letters of recommendation from three persons who can appraise the student's aptitude for graduate study. It is strongly recommended that students take the GRE Biology subject test, and include an official record of performance in their applications. 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.

Incoming graduate students are expected to have demonstrated proficiency in the biological sciences, typically by having completed a bachelor's degree in biology or other life sciences field similar to a Bachelor's of Science degree in Biology at UH Mānoa. Typical *minimum* preparatory undergraduate course work includes:

- 18 semester hours or 27 quarter hours of biology [note that 2 semesters = 3 quarters]
- 3 semesters or 5 quarters of chemistry (general and organic)
- 2 semesters or 3 quarters of physics

- 1 semester or 2 quarters of biochemistry or molecular biology
- 1 semester or 2 quarters of calculus (note that calculus is a required prerequisite for the graduate course in Biometry ZOOL 631)

General Requirements

All entering students are required to take ZOOL 691C. All graduate students are required to take at least one graduate seminar or topics course each year.

Master's Degrees

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.

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), at least 2 but not more than 5 credit hours of ZOOL 699, and at least 18 credit hours of 600 or higher level course work. A research paper based on original scientific work is required.

Doctoral Degree

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

Course Requirements

For students matriculating with a master's degree in zoology (or equivalent), there are no course requirements for the PhD degree other than the general requirements (ZOOL 691C in the first year, and at least one graduate seminar or topics course each year), and any courses required by the student's dissertation committee.

For students matriculating with a bachelor's degree, general course requirements are very similar to the requirements for students receiving a Plan A master's degree. A minimum of 24 credits are required in courses numbered 400-800. Additionally, 6 credits are required of ZOOL 800 (dissertation), for a total of 30 credit hours. Students are required to enroll in ZOOL 800 during the term in which their degree will be conferred. At least 12 of the 24 credits of required course work should be in 600-700 level courses, not counting ZOOL 699. The Department of Biology requires that 1 of the 24 course work credits include ZOOL 691C. Of the 24 required credit hours, student may include a maximum of 2 credit hours from ZOOL 699. All courses cross-listed with zoology, and all biology courses which can be counted towards a zoology BA or BS, are considered zoology courses, not courses in a related department.

Other Requirements

An oral comprehensive examination must be passed within 5 semesters of entering the program; this examination will emphasize the student's research area but may cover any facet of zoology. Upon passing the comprehensive exam, the student is advanced to candidacy for the PhD program.

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 advisor 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 biology department or at manoa.hawaii.edu/biology. Other inquiries may be sent to biology@hawaii.edu.

Botany

College of Natural Sciences
St. John 101
3190 Maile Way
Honolulu, HI 96822
Tel: (808) 956-8369
Fax: (808) 956-3923
Web: www.botany.hawaii.edu

Faculty

- *A. R. Sherwood, PhD (Chair)—systematics, evolution and biogeography of algae
- *K. A. Barton, PhD (Graduate Chair)—evolutionary ecology
- *A. S. Amend, PhD—evolutionary ecology
- *C. C. Daehler, PhD—population biology, invasive plants, plant-herbivore interactions
- *D. R. Drake, PhD—ecology and conservation
- *D. C. Duffy, PhD—conservation, restoration ecology
- *N. A. Hynson, PhD—community ecology
- *S. C. Keeley, PhD—molecular systematics, evolution in island systems
- *M. Merlin, PhD—biogeography, ethnobotany, natural history of the Pacific
- *C. W. Morden, PhD—molecular systematics and evolution of plants and algae
- *T. A. Ranker, PhD—systematics and evolution
- *C. M. Smith, PhD—physiological ecology of marine macrophytes, marine ecology, cell biology
- *T. B. Ticktin, PhD—ethnobotany, conservation
- *G. J. Wong, PhD—mating systems and biosystematics of basidiomycetes

Cooperating Graduate Faculty

- D. Borthakur, PhD—plant molecular genetics
- D. A. Christopher, PhD—gene regulation of photosynthesis, uv effects
- C. L. Hunter, PhD—reef ecology
- R. Ostertag, PhD—ecology
- J. Price, PhD—native bird and plant species hotspots with GIS, area identification for restoration of threatened and endangered species

Adjunct Faculty

- A. K. Chock, MS—Hawaiian ethnobotany

Emeritus Faculty

- D. Mueller-Dombois, PhD—ecology
- C. Smith, PhD—conservation, Hawaiian lichens

Degrees Offered: BA (including minor) in botany, BS in botany, MS in botany, PhD in botany

The Academic Program

The Department of Botany (BOT) trains students to understand and appreciate the diversity of plants, algae, and fungi that sustain the world's terrestrial, freshwater, and marine ecosystems. The curriculum provides broad-based training, from traditional field methods to the latest molecular techniques, and the program offers excellent opportunities for research experience for undergraduates and graduate students.

The department's programs take advantage of Hawai'i's unique location by offering students unparalleled opportunities to explore the botanical diversity of tropical freshwater, marine, and terrestrial ecosystems through a wide range of field and laboratory experiences. Students may focus on topics ranging from the ecology, evolution, and conservation of Hawai'i's unique ecosystems and flora, to the threats posed by invasive species, to the uses of plants by humans.

At the undergraduate level, the department offers a BA, BS, and minor degree in botany. The MS and PhD in botany are offered at the graduate level. All botany faculty members, regardless of rank, teach courses at both the undergraduate and graduate levels. Financial support for undergraduates is available via competitive tuition waivers and scholarships. Tuition waivers and teaching and research assistantships are available to graduate students. Undergraduate majors will be prepared for careers as naturalists, environmental planners, policy makers, conservation biologists, teachers, researchers, and museum or organizational directors. Recipients of advanced degrees commonly follow careers with government agencies, conservation organizations, and colleges and universities in the U.S. and abroad.

The department's website at www.botany.hawaii.edu provides glimpses into the many environments and special plants in Hawai'i, and provides further information about faculty interests and research.

Affiliations

Botanical studies are enhanced by cooperative working relationships between the department and Hawai'i Institute of Marine Biology, Harold L. Lyon Arboretum, Kewalo Marine Laboratory of the Pacific Biomedical Research Center, Pacific Cooperative Studies Unit of the National Park Service, The Nature Conservancy, State of Hawai'i Department of Land and Natural Resources, U.S. Fish and Wildlife Service, National Tropical Botanical Garden, Honolulu Botanical Garden, Herbarium Pacificum and the Department of Botany of the B. P. Bishop Museum, Hawai'i Agriculture Research Center, and Waikiki Aquarium.

Advising

An undergraduate advisor guides undergraduates through the academic program and is available to talk with prospective majors about their interests. Graduate students entering the department are assigned an interim committee of three faculty members who provide general advice. The student's committee and the graduate program chair oversee requirements and provide a link between Graduate Division and the student. Graduate students are encouraged to interact with each faculty to become acquainted with various research approaches and areas of expertise. Once a research topic has been identified, a

permanent committee will be established to provide specific assistance.

Undergraduate Study

BA Degree in Botany

The BA degree provides students flexibility to pursue a broad liberal arts education and still gain a sound foundation in botany with an area of particular interest. Courses are available in conservation, ecology, ethnobotany, evolution, form and function, systematics, and selected faculty research specialties. The courses applied toward the botany major may be selected with the student's interest area in mind.

Requirements

- Students must earn a grade of C (not C-) or higher in each course applied to the major, including required courses in Biology, Chemistry, and Physics
- 4 credits required of seminars: BOT 100, 200, 300, 400
- 19 credits of the following:
 - BOT 101/101L
 - BOT 201/201L
 - BOT 305
 - BOT 420
 - BIOL 171/171L
- Minimum 24 credits of electives (courses may not be counted toward more than one Group below)
 - At least one from Group 1: Systematics & Evolution (BOT 430/430L, 461, 462, or 480)
 - At least one from Group 2: Ecology, Conservation & Natural History (BOT 301/301L, 303, 350, 440, 444, 450, 454, or 456)
 - Other electives from the categories above or below to reach the required number of elective credits:
 - Ethnobotany (BOT 440, 442, 444, 446)
 - Miscellaneous electives (BOT 302, 399, 401, or 450)
 - 8 credits of other required courses: CHEM 161/161L, PHYS 100/100L, or higher

Prospective majors should consult the botany advisors promptly to design a curriculum that satisfies these requirements. BOT 105, 110/110L, 135, and 160 do not fulfill major requirements.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS Degree in Botany

The BS degree is designed for those students who plan a career in science with an emphasis on plants, especially those intending to do graduate studies. A full complement of basic courses in biology, chemistry, math, and physics is required in addition to botany courses. As with the BA degree, students may choose among a variety of courses to fulfill requirements for the major.

Requirements

- Students must earn a grade of C (not C-) or higher in each course applied to the major, including required courses in Chemistry, Physics, and Math
- 4 credits of required seminars: BOT 100, 200, 300, 400

- 28 credits of the following:
 - BOT 101/101L
 - BOT 201/201L
 - BOT 305
 - BOT 420
 - BIOL 171/171L
 - BIOL 275/275L
 - BIOL 375/375L
- Minimum 15 credits of electives (courses may not be counted toward more than one Group below):
 - At least one from Group 1: Systematics & Evolution (BOT 430/430L, 461, 462, 480)
 - At least one from Group 2: Ecology, Conservation & Natural History (BOT 301/301L, 303, 350, 440, 444, 450, 454, 456)
 - Other electives from the categories above or below to reach the required number of elective credits:
 - Ethnobotany: (BOT 440, 442, 444, 446)
 - Miscellaneous electives: (BOT 302, 399, 401)
 - 28 credits of other required courses: CHEM 161/161L, 162/162L, 272/272L, PHYS 151/151L, 152/152L, MATH 215 (or equivalent), MATH 216 (or equivalent)

Prospective majors should consult the BOT advisors promptly to design a curriculum that satisfies these requirements. BOT 105, 110/110L, 135, and 160 do not fulfill major requirements.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS Degree in Ethnobotany

This degree has been stopped out and we are not accepting new students.

The BS in ethnobotany provides a unique learning environment in which biological and social science theories are integrated. Study in ethnobotany will enable students to work in areas related to the conservation of biological and cultural diversity, work in natural health care businesses and practices, enter graduate school programs in ethnobotany, botany, anthropology, and related fields or enter advanced medical training programs.

Requirements

- 4 credits required seminars: BOT 100, 200, 300, 400
- 42 credits of the following:
 - BOT 101/101L
 - BOT 105
 - BOT 201/201L
 - BOT 301/301L
 - BOT 305
 - BOT 399/499
 - BOT 420
 - BOT440
 - BOT 461
 - BOT 462
 - BIOL 171/171L
 - ANTH 152
- 9 credits of electives
 - Two of either: BOT 442, 444, 446, or BIOL 440
 - One other 400 level BOT course
- 12 credits other elective courses

- Two 400-level social science courses in ANTH, GEOG, HWST, or other culture-focused courses not applied to other requirements in the Ethnobotany degree program
- Biogeography: two of either: BIOL 320, 360, 410, GEOG 309, 408, 409, 422, 426 or other biogeography course
- Other required courses: CHEM 161/161L, 162/162L, 272/272L, PHYS 151/151L, PHYS 152/152L, MATH 215 (or equivalent), and MATH 216 (or equivalent)

Minor

Requirements

Students must complete 15 credit hours in non-introductory courses with a grade of C (not C-) or higher.

For Ethnobotany:

- BOT 440 and 461
- Two of: BOT 442, 444, or 446
- One 400 level Social Science course that forms part of an ethnobotany theme with the other courses

For Evolutionary Botany:

- BOT 201/201L and 462
- Electives: BOT 420, 430, 450, 461, or 480

For Tropical Field Botany:

- BOT 453
- Electives: BOT 201/201L, 450, 454, and 461

Individual programs may be designed by the student and advisor for approval by the faculty.

Graduate Study

The department offers programs leading to MS and PhD degrees. Hawai'i's location offers unique opportunities to study the patterns and processes of evolution, ecology, and morphological and physiological variations within a geographically variable yet isolated setting. Abundant opportunities are available for research in marine, aquatic, and terrestrial environments, and faculty expertise spans a phylogenetically diverse set of organisms including land plants, algae, and fungi. The faculty is composed of a number of nationally and internationally recognized scientists in conservation, ecology, ethnobotany, and systematics.

Recipients of the MS degree often teach at the high school level, pursue careers with state or federal government agencies, or work with environmental organizations and consultancies. Those with a PhD may teach and/or conduct research in colleges and universities, work as environmental consultants, and pursue careers with environmental organizations or the government.

A listing of faculty members and their research areas and publications is available on the department website: www.botany.hawaii.edu. Applications for admission and opportunities for financial aid and support are available upon request.

At the time of application, three letters of recommendation from persons who can appraise the student's aptitude for advanced work are required. In their statement of objectives; applicants should identify a specific area of study within botany: conservation, ecology, ethnobotany, general botany, marine botany, systematics/evolution, or whole plant biology. Minimum curriculum requirements for each track are available at the department website. Applicants will be evaluated for their

level of preparation and potential to successfully complete their proposed plan of study. The application deadline is **December 15** for the following fall semester. Normally, teaching assistantships are available for the beginning of fall semester, but openings may occur mid-year.

MS and PhD students are admitted to candidacy when they have successfully completed any requirements and pre-program deficiencies identified by their committee and after they have demonstrated the ability to collect, analyze, integrate, and communicate scientific information effectively in the English language.

Because scientific findings are typically presented orally as well as in writing, all students must gain and demonstrate proficiency in the presentation of seminars. Students must complete BOT 610 to satisfy this requirement. In addition, MS Plan A and PhD students must present two public seminars: first, outlining the background of a research problem and the student's proposed research program; and second, at the conclusion of their program, describing the research results and conclusions. The latter seminar also includes a final examination by the thesis or dissertation committee. The final examination for the MS Plan B students includes the presentation of a public seminar summarizing the results of one of their directed research studies.

Master's Degree

Plan A (thesis) and Plan B (non-thesis) are separate MS programs with distinct purposes. Before admission to candidacy, the plan that a candidate intends to follow must be declared and approved. Plan A is the usual program to be taken by candidates intending a research-related career. Plan B is for students who do not intend to make research in botanical sciences their profession.

Plan A (Thesis) Requirements

For Plan A, a minimum of 30 credit hours is required. Of that, a total of 12 credit hours shall be for thesis and a minimum of 18 additional credit hours for courses approved by the candidate's committee.

Plan B (Non-thesis) Requirements

For Plan B, a minimum of 30 credit hours is required. Of that, a total of 18 credit hours shall be earned in the major field or an approved related field in courses numbered 600 and above (excluding BOT 699 and BOT 700). Of these credits, at least 6 (but not more than 9) must be for directed research in aspects of botanical sciences chosen by the candidate in consultation with his or her committee.

Doctoral Degree

The PhD program includes gaining a working knowledge in an approved foreign language or other research-tool subject, as well as passing a comprehensive examination and writing a dissertation. Suitability of the language or tool subject is determined by the graduate faculty according to the student's area of specialization, and proficiency is ordinarily determined by examination or satisfactory completion of a specific course of study.

Requirements

The comprehensive examination is a combination of oral and written parts. The exam is conducted by the candidate's committee, plus any members of the graduate faculty who wish to attend. In addition to general botany, the candidate is

examined in-depth in areas of related disciplines that have been previously agreed upon by the student and the committee.

The dissertation is expected to be an original contribution based on independent research. It is initiated by the preparation of a critical review of the literature that becomes the basis for a dissertation proposal. Dissertation research for the PhD degree is carried out in an aspect of botanical sciences for which a member of the graduate faculty of the field will accept responsibility as committee chair.

Chemistry

College of Natural Sciences
Bilger 239
2545 McCarthy Mall
Honolulu, HI 96822
Tel: (808) 956-7480
Fax: (808) 956-5908
Email: chemdept@hawaii.edu
Web: www.manoa.hawaii.edu/chem

Faculty

- *T. Apple, PhD (Chair)—physical chemistry, solid-state NMR
- *M. F. Cain, PhD—organometallic chemistry, catalysis, alternative energy processes, synthesis and ligand design
- *J. D. Head, PhD—theoretical chemistry, electronic structure determination of large molecules and clusters
- *T. K. Hemscheidt, PhD—organic and bioorganic chemistry, biosynthesis of natural products
- *J. Hyvl, PhD—organic and organometallic chemistry, catalysis
- *J. T. Jarrett, PhD—biochemistry, enzymology, structure and function of metalloenzymes
- *C. M. Jensen, PhD—inorganic and organometallic chemistry, polyhydride and dihydrogen metal complexes, homogeneous catalysts, hydrogen storage materials
- *R. I. Kaiser, PhD—physical chemistry, reaction dynamics, chemistry in extraterrestrial environments
- *K. K. Kumashiro PhD—physical chemistry, solid-state nuclear magnetic resonance of proteins and peptides
- *M. A. Tius, PhD—organic chemistry, synthesis of natural products
- *P. G. Williams, PhD—organic and natural products chemistry

Cooperating Graduate Faculty

- D. M. Jameson, PhD—fluorescence spectroscopy, protein interactions
- C. J. Simmons, PhD—inorganic chemistry, metal-dioxygen and Jahn-Teller copper complexes, structure determination by X-ray crystallography

Degrees Offered: BA (including minor) in chemistry, BA in biochemistry, BS in chemistry, BS in biochemistry, MS in chemistry, PhD in chemistry

The Academic Program

Chemistry (CHEM) stands at the crossroads between physics and biology. As biological processes are examined in ever finer detail, chemistry is increasingly called upon to provide the insights, techniques, and materials needed to understand the workings of living organisms, including ourselves. Chemistry is thus a popular major for those interested in biomedical careers. In another direction, chemistry is also essential to the search for solutions to the ecological problems created by the ever-expanding range of human activities. Chemists create new

substances with new properties that find application throughout our civilization.

As a major, chemistry provides a solid foundation of scientific knowledge and experimental skills that enables one to specialize in many directions toward careers in research, teaching, business, or professional practice. Also, because virtually all constructed things we see and use in our daily lives involve chemistry, there is a huge pool of jobs for chemists in the manufacturing industries.

Undergraduate Study

BA in Chemistry

Requirements

- 27 credit hours in CHEM courses numbered 200 and above, including CHEM 272/272L, 273/273L, 274/274L, 351, 352/352L, and either 425/425L or 445/445L
- MATH 243 (Calculus III) or 253A
- PHYS 170/170L, and 272/272L
- Recommended languages: German, French, Russian, or Japanese

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS in Chemistry

Requirements

- 41 credit hours in CHEM courses numbered 200 and above, including CHEM 272/272L, 273/273L, 274/274L, 351, 352/352L, 372 or BIOL/MBBE/PEPS 402 or BIOC 441, 425/425L, 427, and 445/445L
- A minimum of three credits from CHEM 399/399L, 601, 602, 622, 641, 642, 643, 651, 653, or 657. 399/399L may be combined to provide 3 total credits.
- MATH 243 (Calculus III) or 253A
- PHYS 170/170L and 272/272L
- Recommended non-major electives: MATH 244 and PHYS 274
- Recommended languages: German or French

To view a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Biochemistry

Requirements

- 20 credit hours or more in CHEM courses numbered 200 and above, including CHEM 272/272L, 273/273L, 274/274L, 361 or 351/352, and 372
- BIOL 171/171L, 172/172L, 275/275L, and 402
- MATH 215 or 241 or 251A and 242 or 252A
- PHYS 170/170L and 272/272L
- 11 credit hours or more, which must include one laboratory course, from the following:
 - CHEM 352L, 399/399L, 425/425L, 427, 445/445L, 462, 463L; BIOL 375/375L, 401, 407, 408, 483; MBBE 412; MICR 351/351L, 431/431L, 461/461L, 463/463L, 475/475L, 490/490L; PHYL 301/301L, 302/302L; ZOOL 430/430L, 442 (and any cross-listed version of these courses). * (Students may combine 2-3 credits of CHEM 399L that will be counted as a laboratory course

and/or 1-3 credits of CHEM 399 that will be counted as a lecture course)

*Upon approval of a Department of Chemistry advisor and the chair, the elective requirements may be modified to accommodate a special emphasis or interdisciplinary program that is appropriate for a major in Biochemistry.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS in Biochemistry

Requirements

- 25 credit hours or more in CHEM courses numbered 200 and above, including CHEM 272/272L, 273/273L, 274/274L, 361 or 351/352, 372, 462, 463L.
- BIOL 171/171L, 172/172L, 275/275L, and 402.
- MATH 215 or 241 or 251A and 242 or 252A
- PHYS 170/170L and 272/272L
- 16 credit hours or more, which must include two laboratory courses, from the following:
 - At least one course from CHEM 352L, 399/399L, 425/425L, 427, 445/445L (Students may combine 2-3 credits of CHEM 399L that will be counted as a laboratory course and/or 1-3 credits of CHEM 399 that will be counted as a lecture course. No more than 3 total credits of 399 and/or 399L may be counted towards major requirements.)
 - At least two courses from BIOL 375/375L, 401, 407, 408, 483; MBBE 412; MICR 351/351L, 431/431L, 461/461L, 463/463L, 475/475L, 490/490L; PHYL 301/301L, 302/302L; ZOOL 430/430L, 442.*

*Upon approval of a Department of Chemistry advisor and the chair, the elective requirements may be modified to accommodate a special emphasis or interdisciplinary program that is appropriate for a major in Biochemistry.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor in Chemistry

Requirements

- 17 credit hours in CHEM courses numbered 200 and above, including CHEM 272/272L, 273/273L, 274/274L, and 351

Graduate Study

The department offers MS and PhD research and study opportunities in biochemistry, inorganic, organic, and physical chemistry, with specialized research opportunities in geochemistry and marine-related chemistry.

Intended candidates for the MS or PhD must present the minimum undergraduate preparation in general, organic, analytical, and physical chemistry courses. Foreign applicants for the MS and the PhD must take the GRE General Test.

Graduate study in chemistry consists of course work, independent study, teaching, and research. A thesis or dissertation based on original research is the most important part of the master's or doctoral degree respectively. Candidates for advanced degrees are required to serve as teaching assistants for a portion of their program.

Additional details concerning MS and PhD degree requirements, as well as assistantships available to prospective students, are outlined in brochures available upon request from the department.

Master's Degree

Requirements

The candidate for the MS in chemistry (Plan A only) must complete at least 6 credit hours of CHEM 699 while completing required course work and at least 6 credit hours of CHEM 700 during the production of an acceptable thesis. The remaining 18 credit hours must be selected from acceptable graduate courses in chemistry (a minimum of 9 credit hours), mathematics, and the natural sciences, in consultation with the thesis advisor and graduate chair, and must include 1 credit hour of CHEM 691 or 692.

Doctoral Degree

Requirements

Doctoral candidates must complete a minimum of six semesters of graduate study of which at least three semesters must be in residence at UH Mānoa. Courses are selected from acceptable graduate courses in chemistry listed in this *Catalog* and from graduate offerings in related disciplines as directed by the faculty. Candidates must demonstrate mastery of core material in graduate courses in their chosen areas. Each candidate must pass a comprehensive oral examination consisting of the defense of an original research proposal written by the candidate and a résumé of the candidate's dissertation research and its current status.

The most important requirement for the PhD degree is the research project that culminates in the dissertation. Prior to beginning the second semester of study, each candidate selects one member of the chemistry graduate faculty to serve as his or her research director. The research director works with the candidate throughout his or her program and chairs the candidate's dissertation committee.

More information about the chemistry department and its programs can be found on its website.

Information and Computer Sciences

College of Natural Sciences
POST 317
1680 East-West Road
Honolulu, HI 96822
Tel: (808) 956-7420
Fax: (808) 956-3548
Web: www.ics.hawaii.edu

Faculty

- *S. P. Robertson, PhD (Chair)—human-computer interaction, digital government and digital democracy
- *L. Altenberg, PhD—evolution of complex systems, synthesis of complex artificial systems, evolutionary computation
- *K. Baek, PhD—computer vision, machine learning, bioinformatics
- *E. Biagioni, PhD—networks, systems, languages
- *K. Binsted, PhD—artificial intelligence, human-computer interaction, cognitive science, natural language processing
- *H. Casanova, PhD—high performance computing, distributed systems
- *D. Chin, PhD—artificial intelligence, natural language processing, user modeling

- *M. E. Crosby, PhD—human-computer interaction, cognitive science, augmented cognition
- *R. Gazan, PhD—social aspects of information technology
- *P. Johnson, PhD—software engineering, serious games, renewable energy
- G. Lau, MS—educational specialist
- *J. Leigh, PhD—big data visualization, virtual reality, high performance networking, human augmentics, video game design
- *D. Li, PhD—security, privacy and performance in systems, software, networks and databases
- *L. Lim, PhD—database systems, information retrieval, data mining, big data
- *C. A. Moore, PhD—software engineering, application development: software quality
- *M. B. Ogawa, PhD—educational specialist
- *D. Pavlovic, PhD—security, software, search and networks, quantum computation
- *G. Poisson, PhD—bioinformatics
- *P.-M. Seidel, DrEng habil—formal methods, computer arithmetic, computer architecture, algorithms
- *N. Sitchinava, PhD—algorithms and data structures, parallel and distributed computation, I/O- and cache-efficient computation
- *J. Stelovsky, DrTechSc—computer-hypermedia, human-computer interaction
- *S. Still, PhD—information theory, machine learning, physics of information, computational neuroscience, theoretical biology
- *D. Suthers, PhD—human-computer interaction, computer-supported collaborative learning, technology for education, socio-technical networks and online communities

Affiliate Graduate Faculty

- V. Harada, PhD—school library administration, information literacy
- S. Itoga, PhD—database system, expert system and logic programming
- D. R. Stoutemyer, PhD—computer algebra, mathematical software

Degrees Offered: BA in information and computer sciences, BS (including minor) in computer science, MS in computer science, MLISc in library and information science, PhD in computer science, and PhD in communication and information sciences (interdisciplinary)

The Academic Program

Information and computer sciences (ICS) is the study of the description and representation of information and the theory, design, analysis, implementation, and application of algorithmic processes that transform information. Students majoring in ICS will learn to use computer systems, a valuable skill which can be applied in all fields of study. Students will also learn the scientific principles and technology required to develop new computer systems and applications. The curriculum covers all major areas of computer science with special emphasis on software engineering, computer networks, artificial intelligence, human-computer interaction, bioinformatics, security science (UH Mānoa is an NSA/DHS designated Center of Academic Excellence in Cyber Defense Research), and areas uniquely suited to Hawai'i's role as a multicultural and geographical center of the Pacific.

Undergraduate Study

Bachelor's Degree

To be admitted into the program, first-year students entering UH Mānoa directly from high school must first be admitted

into the Colleges of Arts and Sciences. For continuing students, a cumulative GPA of at least 2.0 is required for admission.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BA in Information and Computer Sciences

Requirements

Students pursuing these degrees are required to submit a short proposal listing the courses they intend to take to complete their ICS major. An ICS faculty advisor must approve this proposal in writing. Samples of course proposals are available at the ICS department office.

There are three BA degree options you can choose from:

Bachelor of Arts in Information and Computer Sciences

Students must complete the following courses (51 credits):

- Core: ICS 111, 141, 211, 212, 241, 311, 314, 321, 332
- Two of (ICS 312 or 331), (ICS 313 or 361), (ICS 351 or 451), 355
- At least one ICS course at the 400-level or above,
- Four upper division (300-level or above) courses in some area of concentration. The area of concentration courses do NOT have to be from the same department and may include ICS courses as long as they meet the minimum total of 12 credit hours (Note: these courses cannot include ICS 390).

Bachelor of Arts in Information and Computer Sciences, Security Science (SecSci) Track

Students must complete the following courses (51 credits):

- Core: ICS 111, 141, 211, 212, 241, 311, 314, 321, 332
- Track: ICS 222, 355, (ICS 351 or 451)
- Four electives from: ICS 423, 425, 426, 455, 495, EE 406

Bachelor of Arts in Information and Computer Sciences, Information Technology (IT) Track

Students must complete the following courses (54 credits):

- Core: ICS 111, 141, 211, (212 or 215), 241, 311, 314, 321, 332
- Track: ICS 222, 355, (ICS 351 or 451)
- ICS 414, 415, 425, 426, 464

BS in Computer Science

Substitutions are permitted with the written approval of an ICS faculty advisor. Waiver of certain requirements, such as by Advanced Placement CS Exam, must be approved by the ICS faculty advisor. All students wishing to enroll in ICS 300- and 400-level courses must meet the prerequisite grade requirement of B (not B-) or higher in ICS 111, 141, 211, and 241 prior to registering for the course.

There are two BS degree options you can choose from:

Bachelor of Science in Computer Science

Students must complete the following courses (51 credits):

- Core: ICS 111, 141, 211, 212, 241, 311, 314, 321, 332
- Two of (ICS 312 or 331), (ICS 313 or 361), (ICS 351 or 451), 355
- At least five ICS or other approved courses at the 400 level or above

Bachelor of Science in Computer Science, Security Science (SecSci) Track

Students must complete the following courses (51 credits):

- Core: ICS 111, 141, 211, 212, 241, 311, 314, 321, 332
- Track: ICS 222, 355, (ICS 351 or 451)
- Four electives from: ICS 423, 425, 426, 455, 495, EE 406

Minor

A cumulative GPA of at least 2.0 and a grade of B (not B-) or higher in ICS 111 in computer science are required for admission.

Requirements

Students must complete ICS 211 with a grade of B (not B-) or higher, 212, and 241 and their prerequisites, 111 and 141, and three ICS courses at the 300 level and above with a grade of C (not C-) or better.

Graduate Study

The department offers the MS degree in computer science, the MLISc degree in library and information science (see the "Library and Information Science" section within the Colleges of Arts and Sciences for more information), and the PhD degree in computer science. The department is one of four academic programs that cooperate in an interdisciplinary doctoral program in communication and information sciences (see the "Communication and Information Sciences" section within the Colleges of Arts and Sciences for more information).

Applicants for the MS and the PhD in computer science are required to take the GRE General Test. Applicants from foreign countries must be academically qualified, proficient in English (TOEFL or IETLS with scores above the minimum required by Graduate Division, with the additional requirement that TOEFL scores be 580/237/92 or above for admission to the MS program, and 600/250/100 or above for admission to the PhD program, where scores are listed as paper/computer/internet), and sufficiently financially supported.

The department offers three forms of financial aid: teaching assistantships, research assistantships, and tuition waivers. The department offers a limited number of assistantships each semester, most of which are teaching assistantships. Teaching and research assistants work approximately 20 hours per week under the supervision of a faculty member and receive a stipend as well as a tuition waiver. Teaching assistants support instruction and research assistants support extramurally funded research projects. Teaching assistantships are awarded to those applicants who can best support the instructional program. Similarly, research assistantships are awarded to those applicants who can best assist faculty with their research projects. Applicants accepted for admission may be eligible for partial financial aid in the form of a tuition waiver from Graduate Division and foreign applicants from Pacific or Asian countries may be eligible for Pacific-Asian Scholarships. Prior to submitting a tuition waiver application form, foreign applicants must submit TOEFL/IETLS scores and documentation of financial support for expenses other than tuition to Graduate Division Student Services. To apply for any of these forms of support, students should submit the ICS Graduate Assistantship Application along with three letters of recommendation using the Graduate Assistantship Evaluation Form. Because we can offer assistance to only a small fraction of applicants, we highly encourage students to also seek other forms of support, such as the East-West Center or other scholarships or forms of employment.

Master's Degree

The master's program is intended for students planning to specialize in computer science or to apply computer science to another field. Applicants who do not possess an undergraduate degree in computer science from an accredited institution will need to complete equivalent course work.

Requirements

Plan A (thesis) and Plan B (non-thesis) are available. A minimum of 31 credit hours is required under both plans. A minimum B average must be maintained in all courses.

Plan A (Thesis) Requirements

1. At least six ICS graduate courses, i.e. courses with numbers between ICS 600 and ICS 692, with the exception of ICS 690. At least one course must be taken from each of four areas of concentration in the program to ensure breadth of knowledge. 3 credits of ICS 700 may be substituted for one of these six courses;
2. Two additional elective 600-level courses must be taken either from the ICS department or some related discipline (such as LIS, EE, MIS, etc.) on a topic related to computer science. Elective courses must have prior approval from the ICS graduate chair as to the suitability prior to enrollment in the courses;
3. Up to two of the graduate courses may be replaced by regular ICS 400-level courses (not ICS 499), taken after enrolling in the ICS graduate program. ICS 400-level courses do not count towards the area requirement with the exception of ICS 423.
4. Thesis research taken as 6 credits of ICS 700 is required for the degree. These credits are typically taken close to or during the final semester in the program (an additional 3 credits of ICS 700 may be taken as a replacement for one of the two additional elective 600-level courses described in point 2 above); and
5. ICS 690 (taken for CR/NC) for one semester.

Plan B (Non-thesis) Requirements

1. At least six ICS graduate courses, i.e. courses with numbers between ICS 600 and ICS 691, with the exception of ICS 690. At least one course must be taken from each of four areas of concentration in the program to ensure breadth of knowledge;
2. Two additional elective 600-level courses must be taken either from the ICS department or some related discipline (such as LIS, EE, MIS, etc.) on a topic related to computer science. Elective courses must have prior approval from the ICS graduate chair as to the suitability prior to enrollment in the courses;
3. Up to two of the graduate courses may be replaced by regular ICS 400-level courses (not ICS 499), taken after enrolling in the ICS graduate program. ICS 400-level courses do not count towards the area requirement with the exception of ICS 423;
4. A final project ending with a required written report, taken as ICS 699 (a maximum of six credits is counted toward the degree) under the supervision of a faculty member; and
5. ICS 690 (taken for CR/NC) for one semester.

The administrative procedures for the program include the following rules:

1. The student must meet with the graduate program chair during the first semester;

2. Upon completion of at least 12 credit hours of courses applicable to the degree, students are encouraged to propose a degree plan by selecting Plan A (Thesis) or Plan B (Non-Thesis) options;
3. Plan A students are encouraged to choose a thesis topic and committee upon completion of 18 credit hours of applicable courses; and
4. All requests for changes in degree plan must be submitted in writing by the student and approved by the graduate program chair before the diploma application is filed.

PhD in Computer Science

The department offers a PhD in computer science that prepares students for creative research, teaching, and service. There are two programs leading to the PhD degree, one designed for the applicant entering with bachelor's degrees, and the other for those who already have master's degrees. Students may begin their program either in the fall or spring semesters.

Applicants with bachelor's degrees must first satisfy the admission and degree requirements of the master's degree in computer science. Advantages to this route are (1) students are admitted at an early stage to the PhD program; (2) they will, in practice, usually take a year LESS to obtain their PhD since the MS portion of the program will prepare them for their qualifying examination; and (3) students who have completed the MS requirements will have the option of obtaining a master's degree even if they do not continue with the PhD program.

Applicants with master's degrees in areas other than computer science may be admitted to the program, but will be required to fulfill their program deficiencies with additional course work.

Requirements for students to complete the PhD program are:

1. Passing a qualifying examination demonstrating core competency in computer science no later than the end of the first year of their PhD studies;
2. Preparing a portfolio showing research readiness by the end of the second year of their PhD studies;
3. Defend their PhD proposal;
4. Final defense of PhD dissertation.

In addition, students must continue to pass a seminar course(s), ICS 690, during the "PhD portion" of their program. After passing the oral examination covering their general preparation for the research involved, students must write a dissertation that must be approved by the doctoral committee.

Interdisciplinary Doctoral Degree Program

The ICS department participates in an interdisciplinary program in Communication and Information Sciences (CIS) that integrates computer science, library science, communication and management information systems. Due to the broad knowledge base required to support the program, it draws on a variety of majors such as behavioral science, economics, engineering, and political science. The computer science program is one of four academic programs (COM, ICS, ITM, and LIS) that support this degree. See the "Interdisciplinary Program" section for more information on this program.

Library and Information Science

College of Natural Sciences
Hamilton Library, Room 002
2550 McCarthy Mall
Honolulu, HI 96822
Tel: (808) 956-7321
Fax: (808) 956-5835
Email: lisinfo@hawaii.edu
Web: www.hawaii.edu/lis/

Faculty

- *R. Gazan, PhD (Chair)—social aspects of information technology
- *N. Asato, PhD—Asian studies librarianship and history
- *V. Irvin, EdD—reference, public libraries, youth services, literacy practices, practitioner inquiry
- *T. Sutherland, PhD—digital cultures, community and cultural informatics
- *A. Wertheimer, PhD—history of information and archival administration

Adjunct Faculty

- M. Chohey, MLS—cataloging, Hamilton Library
- S. Dawrs, MLIS—librarian, Hamilton Library
- D. Dunn, MLIS—preservation educational specialist, Conservation, Hamilton Library Treatment, Hamilton Library
- N. Fujii-Babb, MLS—librarian, Salt Lake/Moanalua Public Library, retired
- J. Kamiya, MLISc—young adult librarian, Mānoa Public Library
- C. Kellett, MLIS—systems librarian, Library Information Technology, Hamilton Library
- E. Kleiber, MLIS, MAS—librarian, Hamilton Library
- D. Minatodani, MLIS—librarian, Hawaiian Collection, Hamilton Library
- M-B. Ogawa, MLISc, MEd, PhD—Information and Computer Sciences, UH Mānoa
- R. Paseng, MA, MLIS—Southeast Asia specialist, Hamilton Library
- J. Quirante, MLISc—Head Archivist, 'Ulu 'Ulu, Henry Ku'ualoha Giugni Moving Image Archive of Hawai'i
- L. Roy, PhD, MLS—Professor, University of Texas
- K. Shim, MLISc—librarian, Hamilton Library
- G. Sinclair, MLIS—librarian, Government Documents, Hamilton Library
- M. Trafford, MLS—Medical Library, Tripler Army Medical Center

The Academic Program

Founded in 1965, the Library and Information Science (LIS) Program prepares professionals for work in libraries, archives, 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; and
3. To share its resources by extending services to the UH 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 1964, 1980, 1990, 1996, 2000, 2009, and 2016. 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

Of the 39 credits needed for the MLISc degree, 21 are core requirements. Students are required to take one course from a list of course options corresponding to each of the six LIS Program student learning outcomes (SLOs), totaling 18 credits:

SLO1 Services

- LIS 601 Introduction to Reference and Information Services

SLO2 Professions

- LIS 610 Foundations of the Information Professions
- LIS 654 Archival Ethics and Profession

SLO3 Resources

- LIS 602 Resource Discovery
- LIS 605 Metadata Creation for Information Organization
- LIS 615 Collection Management
- LIS 645 Asian Research Materials and Methods
- LIS 651 Archival Arrangement and Description

SLO4 Technologies

- LIS 661 Informatics
- LIS 665 Digital Instruction
- LIS 672 Technology for Libraries and Information Centers

SLO5 Cultures

- LIS 630 Community Engagement
- LIS 631 Introduction to Hawai'i and Pacific Librarianship
- LIS 634 Multicultural Resources for Diverse User Groups
- LIS 662 Asian Informatics

SLO6 Management

- LIS 614 Navigating Information Organizations
- LIS 650 Management of Libraries and Information Centers
- LIS 658 Archival and Special Collections Management

Students are also required to complete a 3-credit seminar sequence during their entering and exiting semesters:

- LIS 691 Masters Seminar I (1 credit; entering semester)
- LIS 692 Masters Seminar II (2 credits; exiting semester)

Plan A (Thesis)

The normal requirement for the MLISc degree under the thesis option is a minimum of 39 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. The student must also take 6 credit hours in LIS 700 Thesis Research and 3 credit hours in an approved research methods course.

To advance to candidacy and become eligible to enroll in LIS 700 Thesis Research, students must complete at least 15 credits of course work, and defend a thesis proposal in a private meeting with their thesis committee. While it is strongly sug-

gested that all committee members physically attend the thesis proposal defense meeting, remote participation is permitted. Upon approval of the committee, students advance to candidacy, conduct their research, and present their results at a public defense.

Plan B (Non-thesis)

The normal requirement for the MLISc degree under the non-thesis option is a minimum of 39 credit hours of approved graduate study. At least 30 credits must be taken in LIS courses or in a combination of LIS and approved ICS courses. Up to 9 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 Graduate Division.

The maximum course load is 15 credit hours per term. Therefore, 39 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 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 19 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.

Culminating Experience

All Plan B students are required to create and present a reflective portfolio consisting of artifacts and evidence from approved course assignments and other professional experiences, demonstrating mastery of the six program SLOs. The portfolio is introduced in the first semester as part of LIS 691 Masters Seminar I, supported in coursework and regular advising sessions throughout the program, and compiled, presented and assessed in LIS 692 Masters Seminar II, taken in the semester the student expects to graduate.

Distance Education

The MLISc program uses different formats for course delivery. It offers a few courses each year online. Students on neighbor islands may also use Adobe Connect (Halawai) to participate synchronously in select courses taught at UH Mānoa. In addition, several courses are offered asynchronously throughout the year.

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), learning design and technology (MEd), Hawaiian Language (MA), Hawaiian 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, communications, library and information 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: communications, information technology management, information and computer sciences, and library and information science.

For information on admission and requirements, refer to the "Communication and Information Sciences" in the Interdisciplinary Programs section.

School Library Media Specialist Licensure

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 Council for Accreditation of Teacher Education (NCATE) is used in conducting periodic reviews of the program.

A student who enters the LIS program to earn this certification must also complete 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) is offered to students who complete a coherent program of specialized study and research beyond the Master of Library and Information Science (MLISc). Students work with an academic advisor to build an individualized program of study that matches the student's professional interests. At the end of the CALIS program, students write and present a capstone paper.

Marine Biology

For the BS in Marine Biology, see Department of Biology. For MS and PhD degrees in Marine Biology, see the "Interdisciplinary Programs" section of the *Catalog* for more information.

Mathematics

College of Natural Sciences
Keller 401-A
2565 McCarthy Mall
Honolulu, HI 96822
Tel: (808) 956-4679
Fax: (808) 956-9139
Web: www.math.hawaii.edu

Faculty

- *R. Freese, PhD (Chair)—lattice theory, general algebra
- *M. Chyba, PhD—control theory
- *K. Dovermann, PhD—algebraic topology
- *E. Guentner, PhD—geometrical functional analysis
- *P. Guerzhoy, PhD—number theory
- *R. Haas, PhD—combinatorics
- *A. Hadari, PhD—geometric group theory
- *T. Hangelbroek, PhD—approximation theory
- *R. Harron, PhD—algebraic number theory
- *M. Jovovic, PhD—operator theory, function theory
- *B. Kjos-Hanssen, PhD—computability, logic, probability
- *M. Manes, PhD—number theory
- *Y. Mileyko, PhD—applied topology, mathematical biology
- *D. Myers, PhD—mathematical logic
- *S. Post, PhD—mathematical physics, integrate systems
- *D. Ross, PhD—logic, probability
- *W. Smith, PhD—analysis, function theory
- *D. Takagi, PhD—applied math, fluid dynamics
- *G. Wilkens, PhD—differential geometry, control theory
- *R. Willett, PhD—noncommutative and coarse geometry
- *L. Wilson, PhD—singularity theory
- *M. Younsi, PhD—complex analysis

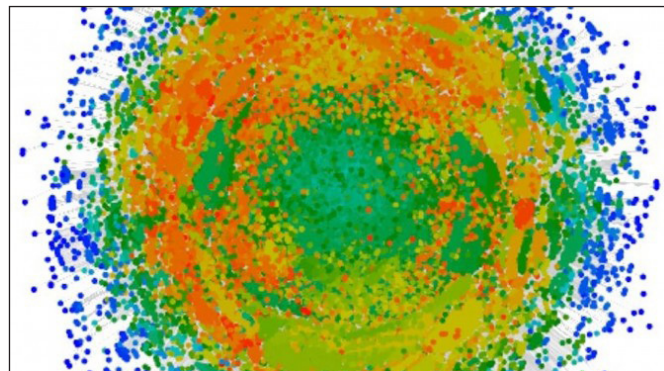
Degrees Offered: Undergraduate Certificate in Mathematical Biology, BA (including minor) in mathematics, BS in mathematics, MA in mathematics, PhD in mathematics

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, topology, 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 advisors 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 MATH 244, or MATH 253A, and must complete 21 credit hours in mathematics courses numbered between 300 to 479, which must include:

- MATH 311 or MATH 307
- MATH 321
- MATH 331
- 3 credit hours in a writing-intensive mathematics course
- 6 credit hours in courses numbered above 400
- Students must also complete MATH 480
- Only courses in which a student earns a grade of C (not 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 advisor each spring semester prior to fall registration

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS Degree

Requirements

Students must complete PHYS 170/170L and PHYS 272/272L, as well as MATH 244 or MATH 253A. Students must also complete 24 credit hours in mathematics courses numbered above 300 to 479 and 15 credit hours in additional mathematics courses numbered above 300 to 479 or appropriate non-introductory courses in related fields including:

- MATH 311 or MATH 307
- MATH 321
- MATH 331
- 6 credit hours in writing-intensive mathematics courses
- 6 credit hours in courses numbered above 400
- Students must also complete MATH 480
- Only courses in which a student earns a grade of C (not 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 advisor each spring semester prior to fall registration

Students must demonstrate an understanding of algorithms and logic, as well as precision of thinking.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

Students must complete:

- MATH 243 or 253A
- 12 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

All required courses must be completed with a grade of C or better. Courses used to fulfill core or major requirements cannot be counted for the minor. Exceptions are (a) Engineering students may count their Engineering mathematics electives and technical elective (if taken in mathematics) and MATH 302 or 307 towards a minor in mathematics; (b) BA Physics, BS Physics, and BS Astrophysics students may count their MATH 307 or 311 major requirement towards a minor in mathematics.

If MATH 243 is a requirement for your major but you did not take MATH 253A, you must complete MATH 244, and complete 12 credits in mathematics courses numbered above 300 that include 3 credit hours in writing-intensive mathematics courses and 6 credit hours in courses 400 and above (excluding MATH 480). If both MATH 243 and MATH 244 are requirements for your major, or if you took MATH 253A for your major requirement, you must complete 15 credits in mathematics courses numbered above 300 that include 3 credit hours in writing-intensive mathematics courses and 6 credit hours in courses 400 and above (excluding MATH 480). The requirements include work at the senior level and allow the choice of specific courses which best complement work in the student's major field.

Students who are interested in minoring in mathematics are urged to consult a departmental advisor early in their academic career. Prior to graduation (at least one semester in advance), a Certification of Academic Minor form should be completed in consultation with a departmental advisor.

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 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

Most MA students will select Plan B, which requires the student to complete 30 credit hours of courses in the Department of Mathematics numbered 400-699, subject to the following conditions: at least nine credit hours must come from 601, 611, 621, and 631; and at least six credits must come from 603 or 607, 625, 644, 654 or 655 or 657, and 661. All courses counting towards the 30 credit requirement must be passed with a grade of B- or better, at most six credits can be numbered 400-499, and at most six credits can be numbered 649(Alpha) or 699. With the written approval of the graduate chair, credit towards this requirement may be given for additional courses numbered 649(Alpha) or 699, or for graduate-level courses taken in another department.

Masters candidates must form a two member committee. The student is required to write and defend a paper on a research topic approved by their committee and the graduate chair. The defense will consist of a one hour public presentation on the chosen topic, followed by an oral exam. The department does not have a thesis option (Plan A), and only an exceptional student may be admitted to Plan C at the discretion of the graduate chair.

Doctoral Degree

Requirements

All new students in the PhD program shall complete 30 credit hours of courses in the Department of Mathematics numbered 600-699. These are subject to a distribution requirement which requires the student to demonstrate facility in three of the following five areas: algebra, analysis, applied mathematics, foundations, and topology. All courses counting towards this requirement must be passed with a grade of B- or better, and at most six credits may be in courses numbered 649(Alpha) or 699. With the written approval of the graduate chair, credit towards this requirement may be given for equivalent courses taken in another mathematics department, or for courses taken at UH Mānoa while in the master's program, or for additional courses numbered 649(Alpha) or 699, or for graduate-level courses taken in another department.

To be admitted to PhD candidacy, the student must pass two written qualifying exams and a comprehensive exam. Qualifying exams are offered in the following areas: algebra; analysis; topology; and applied mathematics. The comprehensive exam is a written or oral examination in a field chosen by the student with the approval of the graduate chair.

The most important requirement for a PhD degree is the successful defense of a doctoral dissertation involving original mathematical research.

Microbiology

College of Natural Sciences
Snyder 207
2538 McCarthy Mall
Honolulu, HI 96822
Tel: (808) 956-8553
Fax: (808) 956-5339
Web: www.hawaii.edu/microbiology/

Faculty

- *S. P. Donachie, PhD (Chair)—marine microbiology, coral microbiology, microbial diversity, and taxonomy
- *J. T. Douglas, PhD—medical microbiology and infectious diseases
- *T. T. Hoang, PhD—bacterial genetics, physiology, and molecular pathogenesis
- *S. Prisc, PhD—molecular pathogenesis of *Mycobacterium tuberculosis*, alternative ribosomal proteins, protein phosphorylation
- B. J. Smagghe—cancer therapeutics, stem cell reagents, protein engineering

Cooperating Graduate Faculty

M. Bankowski, PhD
S. N. Bennett, PhD
D. Borthakur, PhD
S. P. Chang, PhD
M. Kirs, PhD
Y. Lu, PhD
F. D. Miller, PhD
V. R. Nerurkar, PhD
M. S. Rappe, PhD
S. E. Seifried, PhD
B. A. Yoza, PhD

Affiliate Graduate Faculty

H. Turner, PhD
C. Whelen, PhD

Degrees Offered: BA (including minor) in microbiology, BS in microbiology, BS in molecular cell biology, 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 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 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

Majors should visit manoa.hawaii.edu/biology/advising or contact bioadvise@hawaii.edu to meet with an advisor.

Undergraduate Study

Students must earn a grade of C (not C-) or higher in each course applied to the major, including required courses in CHEM, BIOL, PHYS, and MATH.

BA in Microbiology

Requirements

Students must complete the following:

- 18 credit hours in microbiology, including required courses:
 - MICR 351/351L
 - Three courses from MICR 361, 401, 431, 461, 463, 470, 475, 485, and 490, plus 4 credits of associated laboratories
- The following required related courses:
 - BIOL 171, 172, 275 plus labs
 - CHEM 161/161L and 162/162L; or 181A/181L
 - CHEM 272/272L and 273
 - MATH 215 or 241
 - PHYS 151/151L or 170/170L, and 152/152L or 272/272L
- 9 credits of approved major electives

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS in Microbiology

Requirements

Students must complete the following:

- 23 credit hours in microbiology, including required courses:
 - MICR 351/351L, 431, 461, 475; and
 - one course from MICR 361, 401, 463, 470, 485, or 490, plus 6 credits of 400-level MICR lab courses
- The following required related courses:
 - BIOL 171, 172, 275 plus labs
 - BIOC 441 or MBBE 402
 - CHEM 161/161L and 162/162L or 181A/181L
 - CHEM 272/272L and 273
 - MATH 215 and 216 or 241 and 242
 - PHYS 151/151L or 170/170L, and 152/152L or 272/272L
- 6 credit hours of approved major electives

BS in Molecular Cell Biology

The BS degree in Molecular Cell Biology (MCB) is designed to prepare students for careers in fields that require advanced knowledge of molecular biology, in particular those that relate to human health and welfare. Examples of such fields include, but are not limited to, medicine, pharmacology, pathology, genetic testing and counseling, biotechnology, nanotechnology, teaching, and basic research.

Requirements

Students must complete the following:

- 23 credits hours including required courses:
 - BIOL 375/375L, 407, 408/408L
 - MBBE 402 or BIOC 441
 - MCB 314, 461, 472
- The following required related courses:
 - BIOL 171/171L, 172/172L, 275/275L
 - CHEM 161/161L and 162/162L or 181A/181L
 - CHEM 272/272L and 273
 - PHYS 151/151L and 152/152L, or 170/170L and 272/272L
 - MATH 215 and 216 or 241 and 242
- 10 credits of approved major electives, a minimum of 1 credit of an approved elective laboratory

Major electives should be chosen with the assistance and approval of an advisor in Edmondson Hall 216, and in the department, to provide a well integrated and coherent program. Prospective majors should consult the microbiology/molecular cell biology advisors promptly, so as to design a curriculum that satisfies the major requirements.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor in Microbiology

Requirements

Students must complete 15 credits of 300- and 400-level MICR courses, of which five credits must be MICR 351/351L.

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; marine microbiology; 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. Graduate students in microbiology may join two interdisciplinary graduate specializations: the Ecology, Evolution, and Conservation Biology (EECB) Program, and the Marine Biology (MB) Program.

Applicants for advanced degree programs in the department must supplement the forms and transcripts required by Graduate Division with three letters of recommendation and the official scores from the GRE General Test. 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 advisor or advising committee. The following courses may be repeated: MICR 625, 632, 652, 671, 680, 681, 690, 699, 700, 795, and 800. However,

repeated courses other than MICR 699, 700, 795, and 800 may only be used for credit once per degree. MICR 690 is a required course. Course deficiencies shall be made up before admission to candidacy.

Both the MS and the PhD are research degrees requiring a research project, a thesis or dissertation, and an oral defense. Prospective graduate students are encouraged to contact faculty or cooperating graduate faculty to determine whether there might be a laboratory that is conducting research of interest and to determine which laboratories are taking new students (see the department website at www.hawaii.edu/microbiology to find areas of research and faculty contact information).

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

Plan A Minimum Requirements - 30 credit hours

- 2 units of directed research (MICR 699);
- 1 credit of seminar (MICR 690);
- 6 credit hours of thesis (MICR 700);
- additional 12 credit hours of course work at the 600 level or higher; plus
- 9 credit hours at the 400 level or higher
- **Note:** 3 credit maximum of MICR 695 may be applied towards the MS Plan A degree.

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.

Course work requirements for a PhD are the same as those for the MS degree (with MICR 800 replacing MICR 700). However, consideration will be given to those who already possess an MS in Microbiology or closely related field.

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. Experience in teaching in a laboratory course is considered a desirable 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.

Physics

College of Natural Sciences
Watanabe 416
2505 Correa Road
Honolulu, HI 96822
Tel: (808) 956-7087
Fax: (808) 956-7107
Email: physics@hawaii.edu
Web: www.phys.hawaii.edu/

Faculty

*P. K. Lam, PhD (Chair)—condensed matter, theory
*V. Bindi, PhD—particle astrophysics
*T. E. Browder, PhD—elementary particles, experiment
*P. Gorham, PhD—elementary particles, experiment
*J. Kumar, PhD—elementary particles, theory
*J. G. Learned, PhD—particle astrophysics
*D. Marfatia, PhD—elementary particle (theory)
*J. Maricic, PhD—particle astrophysics
*S. Matsuno, PhD—particle astrophysics
M. A. Nassir, MS—astronomy
K. Nishimura, PhD—elementary particles, experiment
*K. Sattler, PhD—condensed matter, experiment
*E. B. Szarmes, PhD—free electron laser physics
*X. R. Tata, PhD—elementary particles, theory
*S. Vahsen, PhD—elementary particles, experiment
*G. Varner, PhD—elementary particles, experiment
*C. Vause III, PhD—condensed matter, theory
*P. von Doetinchem, PhD—particle astrophysics

Emeritus Faculty

R. J. Cence, PhD—elementary particles, experiment
P. P. Crooker, PhD—condensed matter, experiment
J. R. Gaines, PhD—condensed matter, experiment
F. A. Harris, PhD—elementary particles, experiment
C. F. Hayes, PhD—condensed matter, experiment
S. L. Olsen, PhD—elementary particles, experiment
S. Pakvasa, PhD—elementary particles, theory
M. W. Peters, PhD—elementary particles, experiment
W. Pong, PhD—solid state, experiment
S. F. Tuan, PhD—elementary particles, theory

Retired Faculty in Residence

M. D. Jones, PhD—elementary particles, experiment

Affiliate Graduate Faculty

A. Barger, PhD—cosmology, observational
S. Dye, PhD—particle astrophysics
R. Milincic, PhD—particle astrophysics
R. Morse, PhD—particle astrophysics
R. Mussa, PhD—elementary particles, experiment
W. Simmons, PhD—elementary particles, theory
J. Yepez, PhD—quantum information dynamics studies in quantum computation

Cooperating Graduate Faculty

K. Bennett, PhD—high-field magnetic resonance imaging
J. Kuhn, PhD—solar astrophysics
A. McDonald, PhD—particle astrophysics
V. A. Stenger, PhD—neuroscience, magnetic resonance research
S. Still, PhD—theoretical biophysics, physics of information processing; nonequilibrium thermodynamics; information theory; econophysics

Degrees Offered: BA (including minor) in physics, BS in physics, BS in astrophysics, 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, quantum theory, atomic and nuclear phenomena, condensed matter, and elementary particles. Physics is widely regarded as the most fundamental of all the sciences. UH Mānoa offers both the Bachelor of Arts and Bachelor of Science degrees in physics. Faculty members who teach physics courses are at the forefront of research in physics both in experiment and in theory. In the field of elementary particles, faculty members currently perform experiments in Hawai'i, the mainland U.S., France, Japan, and Antarctica to study neutrinos and high-energy gamma rays coming from the stars. Others are involved in experiments at the BEPC II accelerator in China and at the KEKB accelerator in Japan, studying particle production and decay and the violation of particle/anti-particle symmetry. Faculty members are also involved in the space-based AMS experiment and on the development of techniques for dark matter searches. The particle theory group is involved in the identification of new physics that addresses new questions in particle physics and cosmology that are beyond the scope of the Standard Model, and the development of strategies that distinguish this new physics from the Standard Model phenomena. In condensed-matter physics, they investigate nano-materials and use a scanning tunneling microscope to take pictures of individual atoms. A free electron laser is operating in the physics building. This device allows scientists to carry out forefront research in fundamental and applied physics. Often, undergraduate physics majors work on these projects along with graduate students and the faculty.

Undergraduate Study

Advising

Academic advising is mandatory for all undergraduate physics majors. Contact the department office for assignment to an advisor. Note that in order to complete the program in 4 years, a physics student must begin the study of calculus in either the first or the second semester of the freshman year.

BA in Physics

The BA Physics degree is designed specifically for those students who wish to supplement the core study of physics with courses in interdisciplinary fields. As a fundamental science with applications in many fields, physics strengthens the background of students who have wider interests that lie outside of physics, in fields such as biology, health sciences, environmental studies, oceanography, geology, computer sciences, and social sciences.

Requirements

Students must complete the following courses with grades of C (not C-) or better:

- PHYS 170/170L, 272/272L, 274/274L, 310, 350, 400, 480
- One course in advanced laboratory or applied techniques: Computational/Numerical Methods (PHYS 305 or MATH 407), or Electronics (PHYS 475 or EE 211), or Advanced Physics Lab (PHYS 480L)

- CHEM 161/161L or 171/171L or 181A/181L
- MATH 241, 242, 243, and 244; or MATH 251A, 252A, and 253A
- MATH 307 or 311
- Minimum of 15 credits of an approved Interdisciplinary Concentration (IC) course program:
 - Courses must be chosen to form a coherent theme related to physics
 - Minimum of 12 credits must be non-introductory courses at the 200-level or above
 - Proposed IC courses (and any modifications) must be approved by physics department chair or his/her designee
 - Approval shall be granted only after the student has passed (or is currently enrolled in) PHYS 274, 274L, and MATH 243 or 253A

For more details, including examples of previously approved Interdisciplinary Concentration course programs, see the website: www.phys.hawaii.edu.

Upon approval of a physics department advisor, MATH 215 and 216 may be substituted for MATH 241 and 242, and PHYS 170 through 272L may be satisfied by PHYS 151 through 152L.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

BS in Physics

Requirements

Students must complete 46 credit hours in physics courses, including:

- PHYS 170/170L, 272/272L, 274/274L, 310, 311, 350, 400, 430, 450, 480, 480L, and 481
- One course from PHYS 440, 460, or 490
- Two courses from PHYS 305, 475, or 481L
- CHEM 161/161L and 162/162L or 171/171L or 181A/181L
- MATH 241, 242, 243, 244, and 311 or 307 (MATH 251A, 252A, 253A, may be substituted for MATH 241, 242, 243, 244. MATH 215, 216, may be substituted for MATH 241, 242, with consent from physics advisor.)
- Grade of C (not C-) or better in above courses

Upon approval of a physics department advisor and chair, the PHYS 170 through 272L requirements may be satisfied by PHYS 151 through 152L; and requirements for PHYS 305 (or 475 or 481L), 440 (or 460 or 490), 450, 480, and 480L, may be modified to accommodate a special emphasis or interdisciplinary program that is appropriate for the major in physics.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor in Physics

Requirements

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

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

BA (and Minor) in Astronomy

For more information on the BA degree and Minor in Astronomy, see ASTR program on page 130.

BS (and Minor) in Astrophysics

For more information on the BS degree and Minor in Astrophysics, see ASTR program on page 130.

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 particle physics, nanophysics, and free electron laser physics.

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 colloquium.

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 (PHYS 700); 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, which may be selected from PHYS 699 for a maximum of 9 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 written qualifying examination completes the Plan B requirements.

For the MS Plan C, there is no credit hour requirement but a minimum residency requirement must be satisfied. MS Plan C is intended for students who had completed equivalent course requirements at another institution. 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.

Students should refer to the Graduate Division section for any additional requirements.

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

Students in the PhD program must perform satisfactorily on a written qualifying examination followed by an advancement-to-candidacy oral examination. A scholarly dissertation must be written, and a final oral examination in defense of the dissertation completes the requirements for the PhD.

A student is allowed two attempts to pass the written qualifying examination within the student's first six semesters as a regular classified graduate student. The student's first attempt must be within the student's first four semesters as a regular classified graduate student. Students who fail twice cannot continue in the graduate program.

Although course work is not a formal requirement for the PhD, students are responsible for the material covered in graduate courses in classical mechanics, electrodynamics and quantum mechanics, and in undergraduate courses in thermodynamics and statistical mechanics, on which the written qualifying examination is based. Students should also consult with their thesis advisors about enrolling in courses that are relevant to their dissertation research.

Students should refer to the Graduate Division section for any additional requirements.

Zoology

For information on the undergraduate and graduate degrees in zoology, see the Department of Biology (page 132).

College of Social Sciences

Administration

Hawai'i Hall 310
2500 Campus Road
Honolulu, HI 96822
Tel: (808) 956-6570
Fax: (808) 956-2340
Web: socialsciences.hawaii.edu/

Dean: Denise E. Konan
Interim Associate Dean: Ross A. Sutherland

Departments, schools, and programs: Anthropology, Communications, Economics, Ethnic Studies, Geography, Journalism, Peace Studies, Political Science, Psychology, Public Administration, Public Policy Center, Social Science Research Institute, Sociology, Urban and Regional Planning, Women's Studies

Advising

Within the context of a liberal arts education, the College of Social Sciences assists students in clarifying their life and career goals, developing meaningful educational plans, and preparing for productive lives, enlightened citizenship, and life-long learning. Students are expected to be active partners in the advising process by initiating contact with their advisors and by coming to advising sessions prepared.

Students at UH Mānoa have exceptional freedom in crafting their college experience. Students are able to explore connections between fields, engage in co-curricular activities, and develop unique combinations of majors, minors, and certificates. In addition to meeting all mandatory advising initiatives required by their major departments, declared Arts and Sciences majors meet with their advisors throughout their career at UH Mānoa for clarification of degree requirements, individual concerns, and resolution of complex academic issues.

Advising Office

College of Social Sciences (ACCESS)

Dean Hall 2
Honolulu, HI 96822
Tel: (808) 956-0661
Fax: (808) 956-7498
Email: csadv@hawaii.edu
Web: www.socialsciences.hawaii.edu/access/index.cfm

Degrees, Minors and Certificates

Bachelor's Degrees: Bachelor of Arts (BA), Bachelor of Science (BS)

Master's Degrees: Master of Arts (MA), Master of Public Administration (MPA), Master of Urban and Regional Planning (MURP)

Doctoral Degrees: Doctor of Philosophy (PhD)

College Certificates

International Cultural Studies

The International Cultural Studies Graduate Certificate Program (ICSGCP) is to promote a critical inter-disciplinary understanding of culture at the University of Hawai'i, in the East-West Center, and in the local community. Through the Certificate Program, and other courses that ICSGCP offers, such as in the Honors Program, students will receive theoretical

and practical training in order to be able to interpret cultural products and practices in diverse media and to research into the creation, dissemination, and reception of these products and practices. Through its Speaker Series, co-sponsorship of campus seminars, organized conferences, and other occasional activities, ICSGCP will also provide a forum for presentations on the theory and practice of cultural studies. Through these activities the program also seeks to enhance communication and collaboration between disciplines and departments in the university and East-West Center. ICSGCP focuses particularly, though not exclusively, on cultural and cross-cultural processes in Asia and the Pacific.

For more information, visit manoa.hawaii.edu/internationalculture/.

Telecommunications and Information Resource Management

The Telecommunications and Information Resource Management (TIRM) Graduate Certificate Program is offered by the]Graduate Division, the College of Social Sciences (CSS), UHM Outreach College, the School of Communications, and the Telecommunications and Social Informatics Research Program (TASI) of the Social Science Research Institute (SSRI).

For more information, visit www.ssri.hawaii.edu/ and the Department of Communications.

Honor Societies

Honor societies at UH Mānoa in the College of Social Sciences include Alpha Kappa Delta (sociology), Golden Key National Honour Society (undergraduate), Kappa Tau Alpha (journalism), Lambda Delta (freshmen), Mortar Board (seniors), Omicron Delta Epsilon (economics), Phi Beta Kappa (liberal arts and sciences), Phi Eta Sigma (freshmen), Phi Kappa Phi (general scholarship), Pi Sigma Alpha (political science), and Psi Chi (psychology).

Anthropology

College of Social Sciences
Saunders Hall 346
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-8415
Fax: (808) 956-4893
Email: anthprog@hawaii.edu
Web: www.anthropology.hawaii.edu

Faculty

- *C. E. Peterson, PhD (Chair)—archaeology, comparative study, early complex societies, regional settlement patterns, household archaeology, quantitative methods; China
- *J. Brunson, PhD (Graduate Chair)—medical anthropology, fertility and reproduction, maternal health, new medical technologies, structural and interpersonal violence, gender, family; Nepal
- *J. M. Bayman, PhD (Undergraduate Advisor)—archaeology, craft economies; North America, U.S. Southwest, Hawai'i
- *C. J. Bae, PhD—biological anthropology, paleoanthropology, vertebrate taphonomy, Out of Africa I, modern human origins; China, Korea, Japan
- *A. Golub, PhD—cultural anthropology, kinship and identity, governance, indigenous land tenure, mining and natural resources,

- common and intellectual property, semiotic technologies, Papua New Guinea, Melanesia, massively multiplayer online video games
- *J. Padwe, PhD—environmental anthropology; agro-ecology; war and the environment; ethnicity; Southeast Asia (Cambodia), South America (Paraguay, Bolivia)
- *S. Quintus, PhD—archaeology; agricultural economics, historical ecology; landscape archaeology; geoarchaeology; settlement patterns; quantitative methods; Oceania
- *B. V. Rolett, PhD—archaeology; Pacific Islands, Southeast China
- *E. J. Saethre, PhD—medical anthropology, indigenous health, HIV/AIDS, biomedical interventions; Aboriginal Australia, South Africa
- *A. M. Sakaguchi, PhD—medical anthropology, public health, medical malpractice, globalization and its impact on emerging and re-emerging diseases, health disparities, health care disparities, Japanese literature and history
- *M. Stark, PhD—archaeology ecology, early village economics, ceramics, ethnoarchaeology; Southeast Asia, U.S. Southwest
- *T. P. K. Tengan, PhD—cultural anthropology, indigenous theory and methodology, colonialism, nationalism, identity, gender, cultural politics; Pacific, Hawai'i
- *C. Yano, PhD—cultural anthropology, popular culture, ethnomusicology, cultural nationalism, emotions; Japan, Japanese Americans

Cooperating Graduate Faculty

- C. Beaulé, PhD—Andean/Latin American archaeology, household organization, origins of complexity, Colonialism
- D. Brown, PhD—physical anthropology, medical anthropology; Polynesia
- R. Cann, PhD—physical anthropology, anthropological genetics, human populations
- W. Chapman, PhD—historic preservation, historical archaeology, history of anthropology
- C. Clayton, PhD—cultural anthropology; sovereignty and colonialism; nationalisms and transnationalisms; history, memory and place-making; China and East Asia
- E. Drechsel, PhD—historical sociolinguistics, ethnohistory, North American Indians; North America
- M. Hamnett, PhD—applied policy research, economic development, research management; Oceania
- S. Kikiloi, PhD—Hawaiian resource management, indigenous knowledge, traditional society, genealogies, cultural revitalization, and community empowerment
- R. Labrador, PhD—cultural anthropology, identity, immigration political economy, globalization and diaspora; Hawai'i/Pacific, Philippines, Filipina/American and Asia Pacific America
- G. G. Maskarinec, PhD—anthropology of language (Nepalese oral texts), western biomedical clinical medicine, medical education and indigenous medical systems of S. Asia; religions (belief systems, ritual and performance)
- A. Mawyer, PhD—language and culture, landscapes, spatial cognition, French Polynesia, French nuclear testing
- P. Mills, PhD—archaeology, culture contact, lithic analysis, ethnohistory; Polynesia, North Pacific, North America
- W. Nishimoto, PhD—oral history, ethnographic interviewing; Hawai'i
- J. Y. Okamura, PhD—ethnicity and ethnic relations, Asian American studies; Philippines, Hawai'i
- Y. A. Park, PhD—media, social movements; refugee; South Korea; North Korea
- M. Sharma, PhD—political economy, development, class formation and gender relations, radical feminist theory; India

Affiliate Graduate Faculty

- J. S. Athens, PhD—evolutionary and agricultural ecology, origin of agriculture, development of complex societies, tropical paleoenvironmental (Ecuador, Oceania), archaeology of Ecuador, Micronesia, and Hawai'i, CRM issues, management and administration
- C. Berrey, PhD—archaeology, complex societies, social inequality, settlement demography, interaction studies, comparative and multiscalar analysis, quantitative and spatial analysis; Central America, South America, and Mesoamerica
- J. E. Byrd, PhD—statistical approaches to forensic evidence; forensic anthropology
- E. Cochran, PhD—evolutionary theory, cultural transmission, archaeological science, Oceania, Fiji, ceramics
- S. Collins, PhD—archaeology, human and faunal osteology, historic preservation compliance and practice; Hawai'i and the Pacific
- T. Dye, PhD—archaeology; Hawai'i and the Pacific
- J. Fox, PhD—land use, forest resources and management, GIS and spatial information technology; South Asia, Southeast Asia
- R. Gould, PhD—ethnoarchaeology, hunter-gatherer ecology, maritime archaeology forensic archaeology, Australian Aborigines
- R. Ikehara-Quebral, PhD—skeletal biology and morphometry, intentional cranial and dental modification, health and social status, biocultural adaptation, biodistance and forensic studies
- J. Kahn, PhD—archaeology, lithic technology, household archaeology, monumental architecture and landscapes; Hawai'i; French Polynesia, and the Pacific
- L. Kealhofer, PhD—Southeast Asia and Near East; landscape approaches; paleobotany; land use and environmental change in complex societies; political economy
- C. P. Lipo, PhD—archaeological science; archaeometry; remote sensing
- G. Marten, PhD—population dynamics, ecosystem ecology, animal behavior, statistics, mathematical modeling, population genetics
- A. E. Morrison, PhD—Pacific Island and South American Archaeology, computational modeling, geoarchaeology, remote sensing, geographical information systems, Bayesian chronological modeling, applied zooarchaeology, historic preservation practice, human behavioral ecology
- M. Mulrooney, PhD—Pacific archaeology, Hawaiian archaeology, geographic information systems, chronometric dating analysis, landscape archaeology, exchange and interaction, social complexity, agricultural intensification, ideological legitimization of power, contact and colonialism
- J. A. Peterson, PhD—archaeology, historical ecology, landscapes, historical archaeology; Hawai'i-Pacific, Philippines, American Southwest
- G. Pigliasco, PhD—cultural and legal anthropology, visual anthropology, ritual and performance commodification and tourism; Oceania, Fiji
- J. Silverstein, PhD—archaeology; militarism; the evolution, rise and fall of complex societies; hydraulic constructions; GIS; survey; modern military archaeology in Asia and Europe; urban archaeology; Mesoamerica; and Greco-Roman Egypt
- M. Tomlinson, PhD—cultural and linguistic anthropology, religion and ritual, discourse analysis, Christianity; Fiji, Oceania
- L. Uperesa, PhD—global and transnational sociology and anthropology; migration and mobility; sport; Oceania (Samoa); race and ethnicity, U.S. empire, gender and feminist theory
- D. Y. H. Wu, PhD—cultural anthropology, ethnicity, anthropology of food; China and Chinese diaspora

Adjunct Faculty

- J. Baker, PhD—medical and nutritional anthropology, anthropology of food, ethnopharmacology, science and technology studies; Oceania
- N. I. Cooper, PhD—socio-cultural anthropology, performance, gender, expressive culture, ritual and religion; Southeast Asia, Indonesia, Java, Singapore
- L. Gollin, PhD—medical anthropology, ethnobotany and ethnobiology, local ecological knowledge, cultural resource management, oral histories; Indonesia and Hawai'i
- J. Jin, PhD—zooarchaeology, vertebrate taphonomy, human skeletal biology, forensic anthropology, paleoanthropology; China, Korea
- G. Pigliasco, PhD—cultural and legal anthropology, visual anthropology, ritual and performance commodification and tourism; Oceania, Fiji
- J. Rensel, PhD—socioeconomic history, housing change, migrant communities; Polynesia
- P. J. Ross, MA—quantitative methods, nutritional and medical anthropology, human ecology, medical systems, field methods in cultural anthropology; West Africa

Degrees Offered: BA (including minor) in anthropology, MA in anthropology, PhD in anthropology

The Academic Program

Anthropology (ANTH) is the comparative study of human societies, of the origin and evolution of our species, and of the ways of life of ancient and modern people. It is divided into four main subdisciplines: archaeology, cultural anthropology, linguistic anthropology, and physical anthropology. While physical anthropologists focus upon our biological nature, cultural anthropologists deal with ways of life past and present. Anthropological linguists look at language as a part of human behavior, while archaeologists study the remains of past cultures to reconstruct former lifestyles.

Students of anthropology gain a basic understanding of the cultural basis of human society, and of the origin and development of humanity useful both for understanding the human condition and as a preparation for work in many fields, not just in anthropology. For example, the department offers a uniquely broad range of courses on the cultures of Asia and the Pacific, as well as on aspects of American society, that provide students with a fund of cultural knowledge and insights upon which to build a career in law, medicine, public health, teaching, business, and other professions. While some BA graduates in anthropology find employment in anthropology, normally an MA or PhD is required to work as an anthropologist in a university, museum, or other institution. The department has a long-standing graduate program, which trains students in all aspects of anthropology, focusing especially on Asia and the Pacific. The training emphasizes field research; in any one year students are engaged in such projects as excavating an ancient religious temple on Tahiti, recording ritual life in rural Java, or analyzing the social system of a Japanese factory.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete 37 credit hours, including these required courses:

- ANTH 152, 210, 215, 215L and 490
- Eight 300- and 400-level courses.

Two of the 300- and 400-level courses may be from related disciplines with prior approval of our advisor.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

Students must complete 15 credits of upper division anthropology courses which include one theory course and one methods course. It is highly recommended that students take ANTH 300 (Study of Contemporary Problems) to complete the theory requirement. Alternatively, they may take any 400-level course designated as a theory course by the Department of Anthropology. Students must also take one upper division course designated as a methods course by the Department of Anthropology. Courses will be chosen by the student, in consultation with the undergraduate advisor, to suit the student's needs and interests. Courses must be completed with a grade of C (not C-) or better.

Graduate Study

Intended candidates for the MA or PhD need not have an undergraduate background in anthropology. All applicants must submit to the department GRE General Test scores and three letters of recommendation at the time of application. Lack of previous training in anthropology may result, however, in study to fill gaps in knowledge. All incoming students are required to attend the Anthropology Colloquium Series in the first two semesters. Applications for admission will be considered for the fall semester only. The deadline for submission of applications, including international students, is **January 15** of every year.

The MA program ensures that graduates grasp fundamentals in their elected subfields, while the PhD program provides an opportunity for further specialization.

Master's Degree

Admission to MA candidacy is based upon a candidacy conference with the student and his or her three-person committee held sometime prior to the end of the student's second semester in residence. At that time the student submits in writing, a proposed program of study that the committee must accept before the student is admitted to candidacy.

Requirements

A candidate for the MA must take three out of four core courses (archaeology, linguistic anthropology, physical anthropology, and cultural anthropology). A core course may be repeated once. A student may take additional core courses to fulfill other course requirements.

An MA candidate must also pass two courses in each of the following categories: method or technique, theory or topic, and culture area. If a candidate needs a course from one of the three categories in his or her program of study and that course is not offered by the department on a timely basis, he or she may petition the graduate chair to substitute a course from outside the department, provided petition is made prior to registration for the course in question. A candidate is required to earn 30 credit hours. A minimum of 18 credit hours must be taken in the department. Graduate students must maintain at least a B (3.0) average. All courses taken for degree credit must be taken for a letter grade.

Plan A

- 24 credit hours of course work
- Thesis (6 credit hours)
- Minimum of 12 credits in graduate level courses numbered 600 and above

Plan B

- 30 credit hours
- Three papers on anthropological topics, one of which shall be a research proposal to the committee as evidence of scholarly ability
- Minimum of 18 credits in graduate level courses numbered 600 and above

MA Track in Applied Archaeology

Please consult departmental and graduate college guidelines for application instructions. Applicants to our Applied Archaeology MA program should explicitly note in their statement of purpose and other correspondence that they are applying to the MA Track in Applied Archaeology, which is a Plan B program. Students who are admitted to the applied program will be assigned an interim advisor upon their acceptance. By the end of the second semester, a student must select a committee of three anthropology faculty, one of whom will serve as her or his committee chair. A student must complete a report on original research, or three publishable papers.

Students who wish to enter the doctoral program, upon completion of the MA Track in Applied Archaeology, must re-apply for admission to the anthropology program.

MA Track in Applied Cultural Anthropology

Please consult departmental and graduate college guidelines for application instructions. Applicants to our Applied Archaeology or Applied Cultural Anthropology MA (Plan B) programs should explicitly note in their statement of purpose and other correspondence which track they are applying to. Students who are admitted to either program will be assigned an interim advisor upon their acceptance. By the end of the second semester, a student must select a committee of three anthropology faculty, one of whom will serve as her or his committee chair. A student must complete a report on original research, or three publishable papers.

Students who wish to enter the doctoral program, upon completion of the MA Track in Applied Archaeology or the MA track in Applied Cultural Anthropology, must re-apply for admission to the anthropology program.

Doctoral Degree

A student completing the requirements for the MA may request admission to the PhD program by filling out a Petition for Admission to a Doctorate in Same Discipline (found on the Graduate Division website) and submitting the form to the departmental Academic Specialist. This form will be forwarded to Graduate Division based upon the approval of the graduate chair.

Before the graduate chair can formalize his recommendation, a meeting must be convened consisting of all anthropology faculty members with whom the student has taken graduate-level courses. They will evaluate the MA thesis or three papers and review the quality of previous graduate work. The faculty will then make their recommendations to the graduate chair to admit or not to admit the student to the doctoral program.

Admission to the PhD program requires a two-thirds majority of favorable versus unfavorable recommendations from the Anthropology faculty members. The student will receive written notification from the Graduate Dean.

Requirements

PhD candidates must fulfill the requirements for an MA degree in anthropology as a prerequisite. Requirements for obtaining a PhD include submitting an acceptable program plan at a candidacy conference, passing a comprehensive examination, formulating an acceptable dissertation proposal, writing an acceptable dissertation, and successfully defending this dissertation.

A student entering the PhD program with an MA degree from another department of anthropology must pass the core course in his or her area of specialization with a grade of B (3.0 GPA) or better. This course may be challenged by examination in lieu of taking it for credit. All students are required to take graduate courses (other than reading courses) from at least four different members of the anthropology department.

After admission to the PhD program, the student will form a five-member PhD committee. More members may be added if deemed desirable and consistent with a candidate's interest. At least one person must be a graduate faculty member of another department, but the majority of members must be from the Department of Anthropology. Substitutions may be made at any time if a member of the committee is unavailable.

All students entering the PhD program, including those obtaining an MA from the department, are strongly advised to hold a candidacy conference and gain written approval of their five-member committee for the projected program of study by the second semester.

Approximately one semester prior to the comprehensive examination, the student shall submit a detailed description of the areas to be covered, complete with bibliography. The candidate is expected to have read the items contained in the bibliography and be prepared to discuss them in some depth. It is the responsibility of each committee member to suggest additional readings for the bibliography and to suggest any other changes in the proposed agreement. After all committee members have been duly consulted, the student will prepare a final description to be signed by all concerned, including the student, and to be filed with the graduate chair.

The comprehensive examination shall be administered in two parts: (a) a written examination, and (b) an oral exam, at which the student will be given the opportunity to clarify and amplify answers to the written component. The written exam will consist of one essay question submitted by each member of the student's committee. It will be closed-book; students will not be permitted to use notes or other aids. An allotment of three hours per question will be given. Scheduling will be flexible, but the total exam must be taken within a two week period.

The oral examination is expected to be scheduled not less than one week and no more than two weeks after the written examination. All members of the committee must be present at the examination. At the oral exam the student will be asked to explain and/or defend answers to the written component. Two hours are to be allotted for this exercise.

If a student fails the comprehensive examination, he or she may be allowed to repeat it. If this examination is failed a second time, the student will be dropped from the graduate

program. The committee will provide each student with a written statement detailing the reasons for a negative decision.

After successfully completing the comprehensive examination, the student is required to submit a research proposal for review by the degree committee. A meeting of the committee will be scheduled within two weeks of submission of a final draft of the proposal; the committee will determine whether or not the student is adequately prepared for the fieldwork proposed. A candidate whose field research proposal is approved and who has completed all other requirements is eligible to receive a university ABD certificate.

A student conducting dissertation research among people who do not speak the student's native language will be required, before leaving for the field, to show evidence of oral competence in the most useful field language or training in linguistic field techniques.

Following the student's submission of a final draft of the dissertation, an oral defense will be scheduled. It is the student's responsibility to see that each member of the committee has a copy of the complete final draft of the dissertation at least four weeks before the scheduled date of the oral defense. All members must be present at the oral defense. Procedures for determining final acceptance of the dissertation and awarding the PhD degree are set forth by Graduate Division. A candidate must complete all the requirements within seven years after admission to the doctoral program. A student unable to meet this deadline may request an extension by written petition to the graduate chair describing reasons for the delay. If approved, the request will be sent to the graduate dean for a final decision.

Communication

School of Communications
College of Social Sciences
Crawford 320
2550 Campus Road
Honolulu, HI 96822
Tel: (808) 956-8715
Fax: (808) 956-5396
Email: comm@hawaii.edu
Web: www.communications.hawaii.edu

Faculty

G. Kato, MA (Chair)—broadcast news, law, reporting

*J. Winter, PhD (Graduate Chair)—emerging communication technology and policy

*A. Auman, PhD (Undergraduate Chair, Journalism)—journalism, media ethics

*K. Bergstrom, PhD—digital cultures, game studies

*W. Buente, PhD (Undergraduate Chair, Communication)—information and communication technologies

*P. Buskirk, MFA—multimedia, visual media

*J. Gorbach, PhD—multimedia journalism, media history

*J. Y. Kim, PhD—mass communication

*H. Kramer, PhD—intercultural communication

*M. Moody, MFA—video and film production

*R. Neo, PhD—social media, political persuasion

*B. Oppegaard, PhD—multimedia journalism

*S. E. Schimmel, MFA—documentary storytelling, environmental filmmaking

Cooperating Graduate Faculty

J. C. Ady, PhD—organizational communication
 T. Brislin, PhD—mass communication, ethics
 C. Ho, PhD—communication technologies
 D. Lassner, PhD—telecommunication, public relations
 N. Okamura, PhD—telecommunication
 M. Shapiro, PhD—political science

Affiliate Graduate Faculty

F. Dalisay, PhD—mass communication
 K. Kawamoto, PhD—digital media, health communication
 R. Taylor, EdD, JD—telecommunications law and policy

Degrees Offered: BA in communication, MA in communication, PhD in communication and information sciences (interdisciplinary), Graduate Certificate in Telecommunications Information Resource Management

The Academic Program

Communication (COM) study provides undergraduate and graduate students an academic climate consistent with the mission of the College of Social Sciences. The program focuses on active learning and inquiry in fundamental communication processes with specific emphasis on media arts (digital cinema and multimedia), communication in communities (local, global, organizational, and intercultural), and information and communication technologies (ICTs) as preparation for fruitful careers, enlightened citizenship, and lifelong learning.

In addition to the faculty and staff, resources include both a state-of-the-art media laboratory and computer-communication laboratories. The internship program facilitates the merging of academic knowledge with applied experience in students' fields of interest.

Affiliations

The East-West Center, Pacific Telecommunications Council, Telecommunications and Social Informatics Research Program (TASI), and the many international conferences dealing with Asian/Pacific affairs provide a stimulating environment for international and intercultural communication.

Advising

Each undergraduate major is assigned a faculty advisor. In addition, an undergraduate chair provides a general point of contact for aspiring and declared majors. The graduate program parallels the undergraduate advising structure. However, once a student is admitted to candidacy, the student chooses a permanent advisor for the remainder of his or her program.

Undergraduate Study

The undergraduate program offers courses that provide students with a sound understanding of fundamental communication processes in contexts ranging from small groups to formal organizations, the community, and society at large. The program also provides students the opportunity to select courses that allow them to specialize in one or more of three areas of concentration: media arts, communication and communities, and ICTs and policy.

Bachelor's Degree

Requirements

Students must complete 33 credit hours of communication courses, including the following:

- Introduction to Communication (COM 201)
- three foundation courses (COM 310, 320, and 330)
- one capstone course (COM 476, 477, 478, or 479)

To declare a major in communication, students must be enrolled in, or have completed with a B (3.0) or better in COM 201, Introduction to Communication, and have completed at least 12 credit hours with a 2.5 GPA. Upon declaration of their major, students are assigned a personal faculty advisor to assist them in their progress through the program. Students select the remaining number of credit hours from courses that will support their personal and career interests. Students are also responsible for meeting the prerequisite requirements for at least one of the capstone courses in order to graduate in a timely manner. Students must earn a C (2.0) or better in every course counted toward the major degree requirements.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Graduate Study

Master's Degree

The School of Communications offers a graduate program leading to the MA degree in communication. The program areas of specialization reflect the expertise of our graduate faculty in intercultural communication, global communication, information and communication technologies, social media, public relations, and communication policy and planning. Both individual faculty members and the program as a whole work within sociocultural and sociotechnical perspectives. The goal of our program in terms of student learning is to help our students build and exchange knowledge in areas relevant to the broad field of communication and to our specific areas of specialization.

Qualified applicants are admitted to the program in the fall semester only. Applicants are not required to have an undergraduate communication degree. All applicants must fulfill the Graduate Division's admission requirements. Applicants to the program must submit to the school a statement of academic objectives and the planned role of our program in helping meet those objectives. Applicants must also arrange for three letters of recommendation to be sent to the school. These letters should be written by persons who are familiar with the student's academic accomplishments. Letters from former professors are preferred. Students applying from non-English-speaking countries must have a minimum TOEFL score of 600 (paper-based) or 250 (computer-based). Applicants whose academic objectives match our program specializations will be admitted as classified students on a space-available basis.

Each classified student admitted into our program is assigned an interim advisor who assists the student in the initial planning of his or her degree program. The student may, at any time, change that advisor by informing the program staff of the change. Once the student has selected a thesis or practicum committee chair that faculty member becomes his or her permanent advisor. The student remains, however, primarily responsible to ascertain that all program requirements are met in a timely fashion.

Each student must complete a minimum of 33 credits with at least a 3.0 grade point average. These credits are to be distributed by taking:

- Both foundation courses 611 Communication Theories and 612 Communication Inquiry (6 credits).

- Two core courses (6 credits) from our specializations in Organizational and Intercultural Communication (623 and 643), Telecommunication and New Media (633 and 634), or Global Communication and Journalism (644).
- One seminar 691 (3 credits) (repeatable up to 6 credits).
- One capstone activity (6 credits) selected from 700 (Plan A-Thesis) or 695 (Plan B-Practicum).
- The remaining 12 credits are selected from: additional core courses, advanced courses 646 and 660; courses from the school's Graduate Certificate Program in Telecommunication and Information Resource Management (TIRM) 680, 681, 682, 683, 684; Directed Research 699; 400-level augmented undergraduate courses, or graduate courses outside the program (both the latter require approval of committee chair; maximum 6 credits).

Each student is expected to take at least one 3-credit course or seminar each semester. All substitutions, exceptions, and/or courses external to the program must be approved by the thesis or practicum committee chair and noted in the student's official records. If students are not enrolled for courses during a semester they must apply for an official leave of absence. In pursuit of their academic goals students often earn more than the minimum 33 credits. The program can be compressed into 15 months or stretched out over 60 months. Typically, however, students complete the program in 18 to 24 months.

On completing 611 and achieving a 3.0 grade average in all completed course work, each classified student is eligible for admission to candidacy allowing him or her to formally identify a degree plan from the two options available. These options are to complete either a thesis (Plan A) or practicum (Plan B) as his or her capstone activity. At the same time the student selects the chair and members of the thesis or practicum committee. That committee is responsible for supervising and evaluating the student's thesis or practicum activity. The committee must be comprised of at least three members of the graduate faculty from the university with at least two of those members, including the chair, from our program. Both the committee members and the topic of the activity must be approved by Graduate Division and research to be conducted approved by the university's Institutional Review Board (IRB). At the completion of the student's program, he or she must take a two-hour oral exam on their knowledge of the field and defense of their thesis or practicum report.

For further information please visit our website at www.communications.hawaii.edu/communication-ma.

Doctoral Degree in Communication and Information Sciences

The School of Communications is one of the academic programs that participates in an interdisciplinary doctoral program in Communication and Information Sciences (CIS). See the "Interdisciplinary Program" section for more information on that program.

Economics

College of Social Sciences
Saunders Hall 542
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-8496
Fax: (808) 956-4347
Email: econ@hawaii.edu
Web: www.economics.hawaii.edu

Faculty

- *T. Halliday, PhD (Chair)—health economics, economic development, econometrics
- *C. Bonham, PhD—applied macroeconomics, monetary theory
- *P. Fuleky, PhD—time series econometrics, economic forecasting
- *B. Gangnes, PhD—international macroeconomics, econometric modeling
- *T. Greaney, PhD—international economics, industrial organization
- *R. Juarez, PhD—microeconomic theory, game theory
- *D. E. Konan, PhD—international trade
- *S. H. Lee, PhD—population economics, labor economics
- *I. Love, PhD—development economics, finance
- *L. Lusher, PhD—economics of education, public economics
- *J. Lynham, PhD—environmental and resource economics, experimental economics, marine ecology, behavioral economics
- *A. Mason, PhD—population economics, macroeconomics
- *T. Molina, PhD—health economics, development economics
- *S. Rhee, PhD—macroeconomics, labor economics
- *M. Roberts, PhD—environmental and resource economics, agricultural economics
- *K. V. Sherstyuk, PhD—experimental economics, game theory
- *N. Tarui, PhD—environmental and resource economics, applied microeconomics, applied game theory
- *L. Wang, PhD—monetary economics, macroeconomics, search and matching theory
- *X. Wang, PhD—macroeconomics, monetary economics, econometrics, applied microeconomics, labor economics

Cooperating Graduate Faculty

- K. Burnett, PhD—environmental and resource economics
- S. G. Rhee, PhD—Asia-Pacific financial markets
- T. B. Vu, PhD—development economics, international economics

Affiliate Graduate Faculty

- L. Cho, PhD—population economics
- L. Endress, PhD—growth theory
- F. Fesharaki, PhD—energy economics
- P. Garrod, PhD (Emeritus)—marketing and production economics
- B. Kaiser, PhD—environmental economics, microeconomics
- P. S. Leung, PhD—production economics, quantitative methods
- I. Noy, PhD—international finance, disaster economics

Degrees Offered: BA (including minor) in economics; BA in economics with a quantitative economics concentration; MA in economics; PhD in economics, Graduate Certificate in Ocean Policy

The Academic Program

Economics (ECON) is the social science that deals with the allocation and use of resources under conditions of scarcity and uncertainty. It examines this subject matter at the micro level (the consumer, the household, the firm, and the industry) and

the macro level (the region, the labor force, the government, the nation, and the world). Courses in economic theory and econometrics provide statistical and mathematical tools necessary for modeling research questions, data collection and analysis, and evaluation and testing of hypotheses. Economics students learn a body of knowledge that is essential to understanding local and global economies as well as contemporary public policy issues. Undergraduate courses cover critical issues, including climate change, ocean resources, energy economics, property rights, aging and wealth transfers, experimental economics, foreign investment, econometric analysis, labor markets, health economics, law and economics, network economics, the economics of China and Japan, monetary economics, and microeconomic theory.

A BA in economics is excellent preparation for demanding analytical and policy positions in the public and private sectors; it also provides strong preparation for graduate work in law, business, public policy, public health, as well as economics.

Economics at UH Mānoa is consciously directed toward policy challenges in the Asia-Pacific region, as well as Hawai'i. Geographic and subject matter interests of students and faculty contribute to a regional specialization in accord with UH's overall mission.

Exchange Programs

The Department of Economics participates in academic and educational exchanges with Nankai University, Tianjin, China; Hitotsubashi University, Tokyo, Japan; Waseda University, Tokyo, Japan; Kobe University, Kobe, Japan; Nihon University, Tokyo, Japan; Yonsei University, Seoul, South Korea; and Thammasat University, Bangkok, Thailand.

Advising

Advising is mandatory for all graduate and undergraduate economics majors. Contact the department office for specific information.

Undergraduate Study

Bachelor's Degree

The BA in economics provides students with an intensive knowledge of the theory and practice of economics, with an emphasis on the analysis of contemporary policy challenges of Hawai'i and the U.S. in the Asia-Pacific region. Majors study a wide range of current economic policy issues and learn powerful theoretical and empirical methods for analyzing these issues. They also develop reasoning and communication skills that are useful across disciplines. As a result, the BA program has been successful in preparing graduates for advanced study in economics, business, law, and other social sciences, as well as challenging careers in business management, technical analysis, policy evaluation, and education. The Quantitative Economics concentration requires calculus and a certain number of more mathematical or computational economics courses. This concentration will better prepare students for more technical careers or for graduate study. The Economics Honors Track provides our most highly motivated majors with the opportunity to conduct advanced study and research in close contact with a faculty advisor from the department. Students can join the Economics Honors Track any time after they are accepted into the UH Mānoa Honors Program and have an Economics GPA of 3.3. Students have access to a free tutoring program in introductory microeconomics and macroeconomics courses; a

student-run economics club; internships; co-op work arrangements; study abroad programs in Tokyo, Japan and Bangkok, Thailand; and research opportunities with economics faculty.

Requirements

Majors must complete 24 credit hours of upper division courses including ECON 300, 301, and 321. At least six credit hours must be earned by completing Upper Division II ECON courses, and students must earn a C (not C-) or better in all courses designated as counting toward the major.

Students enrolled in the Quantitative Economics concentration must complete the above requirements, but must include at least three quantitative-focused economics courses, and take two additional mathematics courses, specifically calculus classes. Among economics courses, students must take ECON 420, 425, and 427 or 429. Students are required to take either the MATH 215-216 sequence or the MATH 241-242 sequence to meet the calculus requirement. Overall, this is a much more mathematics and quantitative-skill focused package.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

Students must complete 15 credit hours of approved upper division courses, including ECON 300 and 301.

Graduate Study

The UH Mānoa Department of Economics offers one of the world's leading graduate programs, providing theoretical, empirical, and historical foundations for the study of economic policies across the globe. The graduate program offers an MA and PhD degrees. Graduate alumni teach and research in universities, work for federal and state agencies, international organizations and in the private banking and consulting sectors.

The MA program prepares students for policy analysis in government, international agencies, and the private sector, emphasizing application of theory to economic decision-making. The PhD program provides state-of-the-art theoretical and empirical training for high level academic, government, and private-sector careers.

Entering graduate students are expected to have a bachelor's degree, not necessarily in economics, and to have completed courses in intermediate microeconomic and macroeconomic theory, elementary statistics, and a mathematics background that includes at least two 3-credit semester courses in calculus. For the PhD program, it is recommended to have completed two additional courses prior to entry in any of the following subjects: advanced calculus, linear algebra, differential equations, real analysis, or related areas. Students with deficiencies must make them up prior to entering the program or within the first year of study. GRE General Test scores and two letters of recommendation must be submitted by all applicants. TOEFL scores are required for applicants from foreign countries where English is not the primary means of communication.

Master's Degree

An MA student must be in residence for at least two semesters, and all work must be completed within seven years of admission. A student following normal progress should be able to earn the MA degree within two years.

Requirements

A student must earn 30 credit hours in economics, including at least 21 hours of 600- or 700-level courses. Up to 9 credit hours of 400-level courses may apply to the 30 credit hour requirement. Graduate credit will not be granted for 300-level courses. A student must have a B average (3.0 GPA) for all courses completed at UH Mānoa applied toward the degree, and a B average for all 600-level and 700-level courses.

The MA requires completion of the following:

- A four-course common core comprising ECON 606, 607, 627, and 628, with a B average;
- A two-course area of concentration; and
- An individual research project, constituting the capstone experience for the degree.

The MA program builds on rigorous economic theory and econometrics classes from the PhD program, making MA students exceptionally well trained.

As a capstone experience for the degree, the individual project allows students to apply the theory learned in classes towards a problem in which they have a particular interest. The project helps students to develop critical thinking skills and use a variety of economics tools and models. A student may also choose to write a master's thesis in lieu of the individual research project. Students en-route to the PhD and who complete the PhD core may substitute a passing grade on either of the PhD qualifying exams for the individual research project requirement for a master's degree.

A student who completes the MA degree may apply to the PhD program. By taking appropriate courses, a student should be able to earn both MA and PhD degrees within five years.

Doctoral Degree

A PhD student must be in residence for at least three semesters and complete all requirements within seven years of admission to the graduate program. A student following normal progress should be able to earn the PhD degree within five years.

Requirements

The PhD in economics requires successful completion of the following:

- seven core courses comprising ECON 606, 607, 608, 609, 627, 628, and 629 with a grade of B- or better in each course;
- qualifying examinations in microeconomic theory and macroeconomic theory;
- seven 600-level and 700-level courses in economics (including ECON 730) beyond the core;
- two fields;
- a third-year research paper;
- an oral comprehensive exam, administered jointly with the defense of the dissertation proposal;
- a final oral exam, including defense of the final dissertation; and
- submission of the final dissertation manuscript to Graduate Division.

Normal progress requires students to take and pass both theory qualifying exams at the end of the first two semesters of study, and to complete all core courses in the first three semesters of enrollment. Students failing a qualifying examination may retake it only once.

Students choose two fields, each consisting of two courses, from among the following five fields offered by the department:

1. Economic development (ECON 610 and 611)
2. International economics (two of ECON 660, 661, 662, and 664)
3. Public economics (ECON 650 and 651)
4. Resource and environmental economics (ECON 637 and 638)
5. Human resources (two of ECON 670, 672, and 674)

Some field courses are offered annually, others less frequently. Students may petition to substitute a field in another discipline or another field in economics for one of the five fields listed above.

The third-year research paper is a transition experience between PhD course work and independent dissertation research. A successful paper will demonstrate a depth of knowledge within an area of specialization and the ability to implement the research methods needed for dissertation-level research. The deadline for submitting your paper is May 1 of your third year of graduate studies and the deadline for resubmission is August 1. Students who do not meet these deadlines will be placed on academic probation in the fall semester of their fourth year of studies.

The comprehensive examination—of which the written qualifying examinations are a part—will include a broad probing of the candidate's general economic knowledge. The oral part of the PhD comprehensive examination will be administered jointly with the defense of the dissertation proposal, before a dissertation committee chosen by the student and approved by the graduate chair and Graduate Division. A student who fails the comprehensive examination may repeat it once. A student who fails a second time is dismissed from the program. Students who pass the oral exam are advanced to candidacy for the PhD.

The final examination, which is oral, covers the candidate's defense of the final dissertation draft. It is administered orally and is open to the public. Candidates failing the final examination may be allowed to repeat it once upon petition approved by the graduate faculty concerned and the dean of Graduate Division. Those failing it twice are dismissed from the program.

Finally, a dissertation accepted by the dissertation committee is submitted to Graduate Division. The final dissertation must also conform to UH Mānoa standards in content and format.

Graduate Ocean Policy Certificate

Governance and stewardship of the oceans requires an interdisciplinary approach grounded in both theory and empirical study of the human-marine environment. The Graduate Ocean Policy Certificate is designed as a concurrent program for classified graduate students and law students in good standing. Community professionals and practitioners who meet minimum admissions requirements are also eligible to build their skills in fisheries economics, coastal conflict resolution, maritime boundaries, and ecosystem-based management of marine resources. An advisor assists each student in custom-designing a 15-credit program that draws on marine-related courses at UH Mānoa in environmental and resource economics, geography, law, history, marine science, public policy, conflict resolution, and planning. A major paper and internship project are required. For further information and applications, see the department's web page at www.economics.hawaii.edu/gopc/.

Ethnic Studies

College of Social Sciences
2560 Campus Road, George Hall 301
Honolulu, HI 96822
Tel: (808) 956-8086
Fax: (808) 956-9494
Email: esdept@hawaii.edu
Web: www.ethnicstudies.hawaii.edu

Faculty

- M. Das Gupta, PhD (Chair)—South Asians in America, race and gender politics, U.S. immigration policies
I. G. Aoude, PhD—Hawai'i political economy, Middle East politics, social movements in Hawai'i and the South Pacific
E. Caldwell, PhD—African American studies, the Black diaspora in East Asia, comparative Black-Asian relations, mixed race studies, militarism, empire, and visual media culture
B. Chung, PhD—Chinese diaspora, transnationalism, Chinese Americans, popular culture and music
N. Kent, PhD—political economy in Hawai'i and the Pacific, American ethnic relationships
R. Labrador, PhD—Filipino culture, history and politics in Hawai'i and the U.S., culture, race, ethnicity, class, diaspora
D. McGregor, PhD—Hawaiian history, social movements in Hawai'i and the Pacific
L. Mei-Singh, PhD—land and militarization, the relationship of race and indigeneity to histories of war, fences and self-determination, the nation-state, racial capitalism, and the Pacific
J. Y. Okamura, PhD—race and ethnicity, minority access to higher education, ethnic relations in Hawai'i, Japanese in Hawai'i, Filipinos in Hawai'i, Asian Americans
T. Tengan, PhD—identity, gender, indigenous theory and methodology, Hawai'i and the Pacific

Affiliate Faculty

- E-R. Cachola, PhD—information studies (militarism in the Pacific/Asia/U.S., settler colonialism, decolonization)
A. Castanha, PhD—political science (indigenous cultures)
J. Darrah, PhD—sociology (race and ethnicity, urban sociology)
S. P. Haglund, PhD—political science (Latin American studies, Indigenous studies, international and domestic public policy)
R. Hsu, PhD—English (Asian American and Asian diaspora literary and cultural studies, race and ethnicity)
M. Kato, PhD—political science (hip hop, ecological governance and traditional knowledge, community development)
W. Kauai, PhD—political science (race, law, and the political history of Hawai'i)
L. Minerbi, PhD—urban planning (island planning, ahupua'a management, community land use planning)
W. Nishimoto, PhD—education (oral history) (retired)
L. Petranek, PhD—political science (political economy)
U. Hasager, PhD—anthropology (Director of Civic Engagement for the College of Social Sciences)
C. Quemuél, PhD—education administration (Filipina/o Americans, Asian Americans, women, inclusion and diversity in higher education, student affairs in higher education, domestic violence and sexual violence)
J. Rosa, PhD—history (20th-century Hawai'i, Asians and Pacific Islanders in the U.S.)

Degree and Certificate Offered: Certificate in Ethnic Studies, BA in ethnic studies

The Academic Program

The Department of Ethnic Studies (ES) is an interdisciplinary program with emphasis on undergraduate education. Initiated in 1970, ethnic studies combines traditional and contemporary methodologies with new perspectives on issues of race, ethnicity, and class. The focus is Hawai'i with its rich legacy of multiethnic heritages, but the research, teaching, and service components also involve the U.S. as a whole and comparative studies of societies around the globe.

Ethnic studies provides introductory and advanced courses on theories and practices of ethnicity, race, class, and gender. The program also offers courses on the history and experiences of specific groups, including African Americans and Native Americans. Among groups in Hawai'i, Chinese, Filipinos, Hawaiians, and Japanese are subjects of separate courses. There are also courses dealing with critical topics such as ethnic identity, land tenure, social movements, and labor history.

Students may earn a BA or a Certificate in Ethnic Studies. Graduates have gone on to successful careers in education, social work, law, public service, labor and community organizing, and other fields that require an understanding of diverse people and their backgrounds.

Undergraduate Study

Bachelor's Degree

Requirements

Students must complete 30 credit hours, including:

- 3 credit hours in ES 101
- 12 credit hours on the history and social dynamics of various major ethnic groups from ES 221, 305, 306, 318, 330, 331, 333, 338, 339, 365, 373, 443, and 486
- 12 credit hours on the history, theories and problems of ethnic groups & ethnicity, frameworks for social, economic and political change from ES 213, 214, 301, 308, 310, 320, 340, 350, 360, 370, 372, 375, 381, 390, 391, 392, 395, 410, 418, 420, 422, 425, 440, 455, 456, 460, 480, 492, 493, 495, and 496
- 3 credit hours in ES 380
- Minimum "C" grade (not "C-") in all ethnic studies courses

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Certificate

Requirements

Students must complete 18 credit hours, including:

- 3 credits in ES 101 (ES 301 may be substituted)
- 6 credit hours on the history and social dynamics of various major ethnic groups from ES 221, 305, 306, 318, 330, 331, 333, 338, 339, 365, 373, 443, and 486
- 9 credit hours on the history, theories and problems of ethnic groups & ethnicity, frameworks for social, economic and political change from ES 213, 214, 301, 310, 320, 340, 350, 360, 370, 372, 375, 380, 381, 390, 392, 395, 399, 410, 418, 420, 440, 455, 456, 460, 480, 492, 493, 495, and 496
- A 3.0 in ethnic studies courses
- Minimum "C" grade (not "C-") in all ethnic studies courses

Geography

College of Social Sciences
Saunders Hall 445
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-8465
Fax: (808) 956-3512
Email: uhmgeog@hawaii.edu
Web: www.geography.hawaii.edu

Faculty

- *H. Jiang, PhD (Chair)—cultural geography, environment, perception of nature, China
- *D. Beilman, PhD—biogeography, long-term ecology, terrestrial carbon accumulation, climate change
- *Q. Chen, PhD—remote sensing, geographic information systems, geostatistics, spatially-explicit modeling
- *T. W. Giambelluca, PhD—climatology, hydrology
- *R. Jones, PhD—political geography, globalization, borders, sovereign state system, nationalism, South Asia
- L. C. Kelley, PhD—remote sensing, political ecology, land use
- *C. Mora, PhD—interlinks between biodiversity patterns, processes, threats and human welfare
- *M. Mostafanezhad, PhD—cultural politics of tourism, politics of consumption, Thailand
- *Y. Qiang, PhD—GIScience, visual analytics, geocomputation, human dynamics
- *A. Rieser, JD, LL.M.—marine environmental governance; marine science and policy; political geography of the oceans; ocean policy and climate change
- *K. Suryanata, PhD—political ecology, agricultural geography, natural resource management, Third World
- *R. A. Sutherland, PhD (Associate Dean)—geomorphology, soil erosion, water quality
- *B. Szuster, PhD—coastal resource management, environmental impacts assessment, marine recreation, Thailand

Emeritus Faculty

- S. Chang, PhD—geography of China
- M. Chapman, PhD—population geography, Pacific studies
- R. Fuchs, PhD—climate change and adaptation, Asian cities
- G. Fuller, PhD—population growth, geography of fertility
- N. Lewis, PhD—medical geography
- B. Murton, PhD—human geography, indigenous studies
- M. Ridgley, PhD—resource management
- L. Wester, PhD—biogeography, Southeast Asia
- E. Wingert, PhD—cartography

Adjunct Faculty

- Eisinger, Douglas, PhD—atmospheric pollution
- Gomez, Basil, PhD—geomorphology
- Merlin, Mark, PhD—biogeography, natural history of Hawai'i

Cooperating Graduate Faculty

- E. Franklin, PhD—marine ecology, coral reefs, fish and fisheries, computational and quantitative methods, invasive species
- M. D. Merlin, PhD—biogeography, natural history of Hawai'i

Affiliate Graduate Faculty

- H. Diaz, PhD—global climate research, atmospheric conditions
- J. Fox, PhD—social forestry, resources, Southeast Asia
- A. Ziegler, PhD—water resources, hydro-ecological processes

Degrees Offered: BA (including minor) in geography, MA in geography, PhD in geography

The Academic Program

Geography (GEOG) provides a broad and flexible academic program that explores the human and environmental systems that shape the surface of the Earth. The discipline investigates the interaction of culture, society, ecology and physical environments that characterize particular places and studies how these relationships vary across space. The undergraduate program at UH Mānoa focuses on three interlocking subdisciplines: human geography, environmental geography, and geographic technologies. Human geography investigates the cultural, economic, and political processes that shape human experiences on the Earth; the relationship between the environment, society, and culture; and the nature of place in the Asia-Pacific region. Environmental geography engages in a systematic study of the Earth's physical environment (atmosphere, biosphere, hydrosphere, and lithosphere) and considers the challenges associated with natural resource management and global environmental change. Geographic technologies include the study of cartography, geographic information systems (GIS), and remote sensing science.

Students who study geography obtain a holistic understanding of the world and a set of methodological tools that can be applied to a wide range of domestic and international career opportunities. Geographers are involved in environmental planning, natural resource management and social policy development with all levels of government, private firms, non-profit organizations, educational institutions, and international agencies. Hawai'i's unique historical, socio-cultural and environmental context also provides a fascinating setting for geographical investigations into the wider Asia-Pacific region.

Undergraduate Study

Bachelor's Degree

Requirements

The geography major requires at least 31 credit hours including:

Core Required Courses (19 credit hours)

- GEOG 101, 101L, 151 or 102, 104, 325, 380, 493

Elective Upper Division Specialization Courses (12 credit hours)

At least 12 credit hours (6 credits at the 400 level) drawn from the following list of courses. Students are encouraged to focus on courses within environmental geography, human geography, or geospatial technology, or to develop a combination of courses to fit their interest.

- Environmental Geography: GEOG 300, 302, 303, 305, 309, 310, 400, 401, 402, 403, 404, 405, 408, 409, 410, 411, 412, 413, 414, 415
- Human Geography: GEOG 320, 322, 324, 330, 335, 421, 422, 423, 424, 425, 426, 432, 435, 436, 453
- Geospatial Technology: GEOG 370, 376, 388, 389, 470, 472, 476, 489
- Asia-Pacific Region: GEOG 340, 352, 353, 355, 356, 365, 366, 368
- Directed Studies (with approval and under the supervision of faculty): GEOG 399, 468, 490, 492, 499

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

The minor in geography requires 15 credits of upper division course work in geography, which should include at least one course in each of the three areas: human geography, environmental geography, and geotechnology.

Graduate Study

The department offers programs of graduate study and research leading to the MA and PhD degrees. Faculty interests and supporting strengths of UH Mānoa provide advantages for study of the following general topics: (a) environmental studies and policies; (b) resource management and systems; (c) conservation, urbanization, and regional development; (d) cartography, remote sensing, and geographic information systems; and (e) Pacific and Asian regional problems.

Applicants are expected to have a broad-based undergraduate education encompassing basic courses in the physical sciences, social sciences, and humanities. They should have a firm grasp of the fundamentals of environmental and human geography and of basic cartographic and quantitative techniques. Intended candidates for the MA or PhD need not have an undergraduate major in geography; students from related fields are welcome, but any subject-area weakness must be remedied by course work.

Holders of graduate degrees in geography are employed in research and administrative positions in county, state, federal, and international agencies; research positions in private business, especially consulting firms; and teaching positions in secondary schools, community colleges, colleges, and universities.

Master's Degree

Applicants for admission to the MA program in geography must provide two transcripts, GRE scores (General Test only), completed application forms (available from the department, Graduate Division, and the Web), and three letters of reference.

Requirements

The department offers a Plan A (thesis) program. In consultation with an advisory committee, the candidate plans a coherent program of study drawn from departmental offerings and pertinent courses from other UH Mānoa departments and programs. Each MA student must complete a minimum 30-credit program, including:

- 7 credit hours of core classes (GEOG 692, 695, 696)
- 12 credit hours in the chosen field of specialization
- 3 credit hours in advanced research skills
- 8 credit hours in GEOG 700 Thesis Research

Doctoral Degree

The PhD program is highly selective, and admission is based upon demonstrated competence in previous work and promise of research ability. In addition to the materials required for MA admission, PhD applicants must submit representative samples of research writing and a comprehensive statement of professional goals and objectives. Students who have completed MA degrees in fields other than geography may be considered for admission to the PhD program. If admitted, however, they must undertake any remedial course work recommended by the department.

Requirements

The PhD program consists of advanced courses and research seminars in the department, independent reading and research, and work in related disciplines. Each candidate will be expected to have taken the core program required for MA candidates or its equivalent. In addition, the following are common elements of all geography PhD programs:

1. Attendance and participation, while in residence, in the geography colloquium;
2. Familiarity with the general development of geographic thought (GEOG 695);
3. Minimum of 15 credit hours in graduate courses in a departmental field of specialization (course work taken at the MA/MS level may be used in partial fulfillment of this requirement);
4. Minimum of 6 credit hours in research methods or techniques (statistics, cartography, remote sensing, GIS, quantitative or qualitative methods, computer applications, field methods, experimental methods, laboratory techniques or bibliographic techniques);
5. Passing of written and oral comprehensive examinations; and
6. Submission and defense of a satisfactory dissertation.

Journalism

School of Communications
College of Social Sciences
Crawford 320
2550 Campus Road
Honolulu, HI 96822
Tel: (808) 956-8881
Fax: (808) 956-5396
Email: jour@hawaii.edu
Web: www.communications.hawaii.edu/journalism

Faculty

- *A. Auman, PhD—multimedia reporting, editing, media ethics, publication design, race, ethnicity, gender and media
- *J. Gorbach, PhD—multimedia journalism, media history
- G. Y. Kato, MA—broadcast news, law, reporting
- *B. Oppegaard, PhD—multimedia journalism

Degree Offered: BA in journalism

The Academic Program

Journalism (JOUR) education develops students' critical thinking skills and ability to gather, analyze, and organize information and to communicate it clearly, effectively, and responsibly using multiple media platforms such as print, broadcast, online, and other new media. Journalism education embraces the social, cultural, and historic contexts of reporting on public and social institutions as well as on individuals and groups. It stresses the importance of a free, vigorous, and responsible press to the maintenance of an informed citizenry in order to exercise the rights of self-governance in a democracy.

The journalism degree program is professional in its orientation. Admission to the major requires a minimum 2.0 GPA after completion of JOUR 150, 200, and 250 with a grade of C or better. Majors should follow the recommended course sequencing. All students wishing to enroll in JOUR 200 and above must have earned a C or better in ENG 100. All stu-

dents must take either ICS 101, 110, 111, or LTEC 112 before enrolling in JOUR 470 and above.

Students are encouraged to work for campus media such as *Ka Leo O Hawai'i* or KTUH-FM news and to participate in an extensive program of professional internships and the UH Mānoa chapter of the Society of Professional Journalists (SPJ).

Advising

Advising is mandatory for all journalism majors.

Undergraduate Study

Bachelor's Degree

Requirements

- Admission to the major is restricted to students that have completed JOUR 150, 200, and 250 with a C or better.
- 36 credit hours minimum in journalism courses.
- Students are required to take LTEC 112 or ICS 101, or 110 or 111 or equivalent before taking 400-level courses.
- All students enrolled in journalism classes requiring off-campus assignments must sign a UH Waiver Form—Assumption of Risk and Release.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Required Courses

- JOUR 150, 250, 300, 330, 365, 460, 470, 471, 480, and 481 each 3 credits
- 3 credits of electives or internship

Peace Studies

College of Social Sciences
Spark M. Matsunaga Institute for Peace and Conflict Resolution
Saunders Hall 523 and 723
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-6433
MIPCR Fax: (808) 956-9121
Email: uhip@hawaii.edu
Web: www.peaceinstitute.hawaii.edu

Faculty

- *M. Soetero-Ng, PhD (Director, Matsunaga Institute for Peace and Conflict Resolution)—peace studies
- *C. Petersen, JD (Chair, Graduate Certificate in Conflict Resolution)—international human rights, equality and non-discrimination, women and the law
- *B. Barnes, JD, LLM—conflict resolution
- *B. Hallett, PhD—peace studies

Cooperating Faculty

- *I. Aoude, PhD—ethnic studies
- *J. Barkai, JD—law
- K. Bennett, JD, MSW—child welfare policy and law, mediation, family and divorce law
- J. Campos, PhD—political science, terrorism studies
- D. Chandler, PhD (Emeritus)—sociology, conflict resolution
- *S. Chandler, PhD—public policy/child welfare
- M. Coffman, PhD—environmental economics, planning
- *D. Foley, PhD—deliberative dialogs, conflict resolution

- *A. Hubbard, PhD—conflict and relational management
- *K. Lowry, PhD (Emeritus)—ADR, coastal management, community planning
- L. Minerbi, PhD—urban and regional planning
- A. Rieser, LLM—geography, law, marine conservation
- *R. Robinson, PhD—management
- *L. Sponsel, PhD (Emeritus)—anthropology
- *C. Stephenson, PhD—political science

Degree and Certificates Offered: Certificate in Peace Studies, BA in interdisciplinary studies (peace and conflict studies), Graduate Certificate in Conflict Resolution

The Academic Program

The Matsunaga Institute for Peace and Conflict Resolution is a multi-disciplinary community of scholars, students, and practitioners who through academic programs and outreach promote cross-cultural understanding and collaborative problem-solving. Residing within the Public Policy Center (PPC), the institute emphasizes critical thinking and collaboration to groom future leaders to address contemporary and complex issues in Hawai'i, the Asia-Pacific region, and the world.

Peace Studies broadens students' perspectives and strengthens critical thinking on issues of war and peace, justice and human rights, and governance. Conflict resolution processes such as facilitation, mediation, and negotiation are necessary in organizational, community, and civic relations, and build important interpersonal skills that are vital to good leadership. Students develop a theoretical foundation to advance scholarship in peace studies, including human rights and advocacy, leadership and governance, policy analysis, and communications, while they learn and hone practical conflict management skills to develop as professionals in their chosen field.

Students may enroll in Peace and Conflict Education (PACE) courses, either as an intellectual endeavor or to enhance personal and professional skills. Students who understand the causes of conflict and the methods for resolving conflicts will be better equipped for a wide range of careers in the fields of education, law, human resource management, industrial relations, government, foreign service, security, urban and regional planning, sociology, and social work, to name a few.

For students who wish to obtain an academic qualification in peace and conflict resolution, the institute offers three programs:

1. The Peace and Conflict Resolution major for undergraduates (a flexible inter-disciplinary program offered in cooperation with the Interdisciplinary Studies BA program);
2. The Certificate in Peace Studies (open to undergraduate students and equivalent to a "minor"); and
3. The Graduate Certificate in Conflict Resolution (open to graduate students seeking the certificate only or concurrently with another graduate-level degree program).

Inherently interdisciplinary and international in perspectives; the institute is committed to building on Hawai'i's cultural heritage and island values of aloha, mutual aid and respect, and sense of community. The institute is dedicated to honoring the memory of U.S. Senator Spark M. Matsunaga and implementing his hope that; "every student enrolled in Hawai'i's public university system will be exposed to peace studies."

Undergraduate Study

Bachelor's Degree in Peace and Conflict Resolution

In collaboration with the Interdisciplinary Studies program, the Matsunaga Institute for Peace and Conflict Resolution offers a flexible, student designed BA in Peace and Conflict Resolution (36 credit hours).

The core of the program consists of three courses that are meant to give students the basic skills and knowledge of conflict resolution and the opportunity to put these skills into practice. Students are then free to design an academic program that aligns with their interests, needs, and goals. Students work closely with faculty advisors from the Matsunaga Institute and Interdisciplinary Studies to develop a coherent, multidisciplinary course of study. This gives students the flexibility to concentrate on a specific area of interest or to take a broader approach to peace and conflict studies.

Additional information is available at www.peaceinstitute.hawaii.edu and from Interdisciplinary Studies in the Office of Undergraduate Education.

Requirements

- PACE 310 Survey Peace and Conflict Studies (3)
- Either PACE 429 Negotiation (3) or PACE 447 Mediation Skills: UH Basic (3)
- PACE 495 Practicum and Internship (or a faculty approved substitute) (3)

The remaining credit hours, to meet the major's minimum requirement of 36 credit hours, can be drawn from courses offered by the Matsunaga Institute (designated as PACE courses) as well as courses offered by other departments. Although a list of suggested electives is set forth below, students may also propose other courses, provided that they can achieve a coherent program of study that meets the requirements of the Interdisciplinary Studies program. An overall GPA of 2.5, with no grade below a C, is required in the major course work.

Certificate in Peace Studies

The Certificate in Peace Studies (15 credit hours) is equivalent to a minor. The certificate exposes students to the fundamentals of peace and conflict resolution while they learn methods to remedy social injustice and manage and resolve conflict. These skills are highly valued by employers in a wide range of professional fields, making the certificate a valuable complement to many popular majors. Students enrolled in a degree-granting program may obtain the Certificate in Peace Studies. Some students may wish to focus primarily on peace studies as a personal, intellectual endeavor. Others may seek a career in an area relevant to peace studies and will use the certificate to enhance their credentials and expertise.

To receive a Certificate in Peace Studies, students are required to take PACE 310, 429 or 447, and 495 (or a faculty approved substitute) and six additional credit hours selected in consultation with the student's certificate advisor. A GPA of 2.5, with no grade below a C, is required in certificate courses.

Suggested optional courses for the major in Peace and Conflict Resolution and for the Certificate in Peace Studies include:

- PACE 315 Personal Peace: Stories of Hope
- PACE 345/ANTH 345 Aggression, War, and Peace
- PACE 373/POLS 396 Nonviolent Political Alternatives
- PACE 399 Directed Reading
- PACE 410 History of Peace Movements
- PACE 412 Gandhi, King, and Nonviolence

- PACE 413 Terrorism
- PACE 420 Introduction to Human Rights
- PACE 430 Leadership for Social Change
- PACE 436/GEOG 436 Geography of Peace and War
- PACE 450 Protest Under Occupation
- PACE 460 Indigenous Nonviolent Action in the Asia-Pacific
- PACE 468 Introduction to Facilitating Organizational Change
- PACE 470 Advocating for Children: Rights & Welfare
- PACE 477 Culture and Conflict Resolution
- PACE 478 International Law and Disputes
- PACE 480 Managing Human Conflict
- PACE 485* Topics in Peace and Conflict Resolution
- PACE 489 Hiroshima & Peace (summer only)
- ANTH 423 Social and Cultural Change
- BIOL 310 Environmental Issues
- COM 340 Intercultural Communication
- COMG 455 Conflict Management
- ECON 414 Global Economic Crisis and Recovery
- GEOG 435 Political Geography of Oceans
- HDFS 350 Leadership and Group Process
- POLS 319 International Organization
- POLS 375 Constitutional Law I: Institutional Power
- POLS 394 Co-ops, Communes, Collectives
- SOC 433 Analysis in Law and Social Change
- SOC 446/WS 446 Gender Violence Over the Lifecycle
- WS 304 Women, War, and the Military

Options for Introductory Courses

- PACE 247 Survey of Conflict Management
- PHIL 280 The Meaning of War
- POLS 201 Problems of War and Peace

*There may be more than one section of this course offered, each focusing on different specialized topics in the field. The course is repeatable one time.

Graduate Study

Certificate in Conflict Resolution

In cooperation with other departments in the university, the Matsunaga Institute for Peace offers a fifteen-credit Graduate Certificate in Conflict Resolution (GCCR). The GCCR allows graduate students and working professionals to study the theory and practice of conflict resolution and to develop skills that are valued in a wide range of professions. This interdisciplinary program focuses on constructive communication and the importance of resolving conflicts in an ethical and culturally sensitive manner. All students in the GCCR study the theory and practice of conflict resolution and have the opportunity to study negotiation, mediation, and facilitation, which are essential for dispute resolution and leadership in a wide range of professions, including business, education, human resource management, law, politics, public administration, social work, and urban planning. Students also have the opportunity to develop mediation and facilitation skills and to study the systems for resolving conflicts in different fields and contexts, including: education, environmental law and policy, human rights, and international conflicts. The GCCR can be pursued as a separate academic program or earned concurrently with a JD, MA, MPA, MS, MEd, MBA, MPH, MSW, PhD, or other graduate degrees. Unclassified students, as well as degree students, are eligible for admission.

Admission

Students can be admitted to the GCCR in the fall or spring semester. In addition to satisfying the admission standards for graduate education at UH Mānoa (see: manoa.hawaii.edu/graduate/content/admissions-standards), applicants to the GCCR should submit the following documents directly to the Matsunaga Institute for Peace: (1) a completed student information form (available at: www.peaceinstitute.hawaii.edu/academic-programs/_downloads/GCCR-application-checklist.pdf); (2) two letters of reference, and (3) a one-page statement explaining your interest and/or background in conflict resolution and what you hope to gain from the GCCR. International students must have a 600 (paper), 250 (computer), and 100 (internet) TOEFL score to be admitted.

Requirements for Completing the GCCR

All students are required to complete fifteen (15) credits from an approved list of courses, including at least one foundational course in Negotiation (which can be satisfied through successful completion of one of the following courses: PACE 629/PLAN 629 Advanced Negotiation; LAW 508/CEE 614 Negotiation and Alternative Dispute Resolution; MGT 660 Negotiation; or a substitute course in negotiation that is approved by the Graduate Chair). Prior to completing the Graduate Certificate, each student must also complete a “culminating project” under the supervision of the advisor or the Graduate Chair. This culminating project may be fulfilled either by successful completion of a Capstone Paper undertaken as part of PACE 699 (Directed Reading and Research) or through successful completion of a practicum project undertaken as part of PACE 695 (Conflict Resolution Practicum). The credits earned in PACE 699 and PACE 695 will count towards the 15-credits required for the Graduate Certificate.

Students will choose their remaining credits from the following list of approved courses. Successful completion of the GCCR requires an average grade point of 3.0 in courses taken for a letter grade. Every course counted towards the GCCR must be taken for a letter grade unless the course is only offered on a Credit/No Credit basis. A student may apply to the Graduate Chair for approval to substitute a course that is not on this list, providing that the course has substantial conflict resolution content and will enrich the student’s course of study.

Approved Courses

- PACE 647 Mediation: Theory and Practice (3 credits)
- PACE 650 Dispute Resolution System Design (3 credits)
- PACE 652/EDEA 652 Conflict Management for Educators (3 credits)
- PACE 660 Family Mediation (3 credits)
- PACE 668 Facilitation: Facilitating Community and Organizational Change (3 credits)
- PACE 690 Topics: Conflict Theory (variable credits)
- PACE 695 Conflict Resolution Practicum (variable credits)
- PACE 699 Directed Reading and Research (variable credits)
- PACE 790 Advanced Topics: Conflict Theory (3 credits)
- PLAN 627 Negotiation & Mediation in Planning (3 credits)
- PLAN 661 Collaboration Between Sectors (3 credits)
- POLS 633 International Conflict Resolution (3 credits)
- POLS 635(E) International Organization (3 credits)
- LAW 529 Peacemaking (variable credits)
- LAW 547/WS 647/PACE 637 Gender: Law and Conflicts (variable credits)
- LAW 590(M) Mediation Clinic (variable credits)



In addition to the courses listed above, students may apply to the Graduate Chair to count up to two of the following 400-level courses towards the GCCR.

- PACE 420 Introduction to Human Rights: International and Comparative Perspectives (3 credits)
- PACE 429 Negotiation (3 credits)
- PACE 447 Mediation Skills: UH Basic (3 credits)
- PACE 468 Introduction to Facilitating Organizational Change (3 credits)
- PACE 477 Culture and Conflict Resolution (3 credits)
- PACE 478 International Law and Disputes (3 credits)
- PACE 480 Managing Human Conflict (3 credits)
- COMG 455 Conflict Management (3 credits)

Political Science

College of Social Sciences
Saunders Hall 640
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-8357
Fax: (808) 956-6877
Email: polisci@hawaii.edu
Web: www.politicalscience.hawaii.edu

Faculty

- *K. Ferguson, PhD (Chair)—feminist theory and methods; political theory
- *K. Heyer, PhD (Graduate Chair)—law and society, disability politics, comparative law, social movement and civil rights
- *E. Kimura, PhD (Undergraduate Chair)—comparative politics, political change, Southeast Asia
- *R. Chadwick, PhD—international relations, global modeling, methodology
- *P. Flowers, PhD—Japanese politics, international law, international relations
- *J. Goldberg-Hiller, PhD—law and society, law and philosophy, sexuality politics, indigenous politics
- *J. N. Goodyear-Ka’opua, PhD—Hawaiian politics, Indigenous politics, politics of education and culture
- *J. Grove, PhD—critical war studies, complexity theory and system theory
- *N. S. Grove, PhD—international relations, gender and sexuality, political theory, media, Middle East politics

- *D. Halbert, PhD—public policy, political futures, law and politics, and politics of intellectual property
- *M. Henningsen, PhD—European politics, genocide/Holocaust, political philosophy, political theory
- *S. Krishna, PhD—comparative politics, international political economy, South Asian Studies, and postcolonial studies
- *C. Moore, PhD—American politics, public policy, politics of bureaucracy, institutional change
- *L. Nitz, PhD—American government; methodology; political economy; public policy; research methods; topics in political theory
- *M. J. Shapiro, PhD—American politics; interpretive methods; politics of culture; media and popular culture; political theory; public policy
- *N. Silva, PhD—Hawaiian politics, indigenous politics
- *N. Soguk, PhD—international relations theory, comparative politics; international organization; international migration and diasporas, human rights, Middle East
- *C. M. Stephenson, PhD—international relations; international organization; international environmental politics; international security; peace studies, conflict resolution
- S. Wiebe, PhD—political ecology, environmental justice, decolonial and sustainable futures, interpretive research methods, community-engagement
- *M. Yang, PhD—comparative politics, political economy of development, East Asia
- *K. Zhou, PhD—comparative politics; Chinese & Asian politics; women and development, and public policy

Affiliate Graduate Faculty

- J. Dator, PhD—futures studies, media, Asian politics
- W. Dissanayake, PhD—Asian cinema, film theory
- F. Farhi, PhD—Middle East politics, comparative politics
- B. Kerkvliet, PhD—Southeast Asian politics
- J. Wilson, PhD—political philosophy, American politics

Cooperating Graduate Faculty

- L. Basham—Native Hawaiian and Indigenous politics
- K. O. Kane, PhD—philosophy and theory, pedagogy, film and media studies, women's studies
- S. Kikiloi, PhD—Hawaiian studies, societal development, Indigenous resource management, archaeology, ethnohistory
- C. R. Lawrence—anti-discrimination law, educational law and policy, Constitutional law
- M. MacKenzie, JD—Native Hawaiian rights, advanced legal studies in Native Hawaiian law
- B. McDougal, PhD—contemporary Hawaiian, Pacific, and Indigenous literatures

Degrees Offered: Undergraduate Certificate in Law and Society, BA (including minor) 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 Asian politics, comparative politics, futures studies, indigenous politics, international relations, law and society, policy analysis, and political theory. 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 30 credit hours, including:

- a prerequisite introductory course at the 100 or 200 level
- 12 credit hours from courses distributed as follows: POLS 335; either POLS 301 or 302; either POLS 305 or 315; and one of either POLS 375, 376, or 385
- POLS 390 (Political Inquiry and Analysis)
- 9 credit hours from other 300 level courses, including 3x5 courses
- 3-6 credit hours from 400 level courses

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Minor

Requirements

Students must complete 18 total credit hours. 15 credit hours from the 300 level or above, including one course from POLS 305, 315, 335, 375 or 385.

Students should choose one of the 100 or 200 level political science courses, since a 100 or 200 level course is prerequisite for 300 level courses.

Undergraduate Certificate in Law and Society

Requirements

15 credits will be required to be completed with a GPA of 2.5 or above.

- POLS 374/SOC 374
- 9 credits must be upper division (300-400 level)
- 6 credits from either AMST 365, AMST/WS 436/POLS 368, ECON 476, HWST 495, 496, HIST 475, PHIL 318, POLS 375, 376, SOC 231, 333, 432, or SOC 435/WS 435
- Students are also required to submit a portfolio containing three essays.

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 theory, indigenous politics, and public policy.

Further information regarding the requirements for all three programs is available at www.politicalscience.hawaii.edu.

The application deadline is **early January** for admission in the fall semester. No Spring semester admissions are taken.

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 600, 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

The department has several teaching assistantships, research assistantships, and scholarships that are awarded to deserving qualified students.

Undergraduate

- Thomas Hamilton Memorial Scholarship—\$600 for a student with outstanding scholarship and all-around performance who has completed at least two courses in political theory.

Graduate

- Norman Meller Award—\$1,500 for fall semester to a graduate student with an outstanding academic record.
- Harry J. Friedman Memorial Scholarship—\$700 for outstanding work in comparative politics.
- Jorge Fernandes Memorial Fellowship and Award—for spring semester to aid an outstanding graduate student to support the completion of his/her dissertation.
- Glendon Schubert and James Neal Schubert Political Science Endowed Scholarship—for spring to a graduate student who specializes in public law, law and society.

Psychology

College of Social Sciences
Sakamaki C-400
2530 Dole Street
Honolulu, HI 96822
Tel: (808) 956-8414
Fax: (808) 956-4700
Email: psych@hawaii.edu
Web: www.psychology.hawaii.edu

Faculty

- *C. K. Baker, PhD (Chair)—community, intervention development and evaluation, domestic violence, teen dating violence
- *J. Barile, PhD—community, neighborhood environments, health equity, quality of life and well-being
- *D. Cicero, PhD—clinical, experimental psychopathology, psychosis, risk for schizophrenia
- *P. A. Couvillon, PhD—behavioral neuroscience, animal learning, cognition
- *F. J. Floyd, PhD—clinical, family and couple relationships, developmental disabilities, sexual minority growth
- *E. H. Hatfield, PhD—social, emotions, social-psychophysiology
- *K. Hayashi, PhD—quantitative psychology and psychometrics
- *L. A. James, PhD—social-personality, library skills, psycholinguistics
- *J. Latner, PhD—understanding and treatment of obesity and eating disorders
- *A. Masuda, PhD—clinical, acceptance and commitment therapy, diversity, contextual behavioral science
- *A. E. Maynard, PhD—developmental, cultural, siblings and socialization, cognitive change
- *C. W. Mueller, PhD—child clinical, social, HIV, and health
- *B. J. Nakamura, PhD—clinical, youth anxiety, dissemination of evidence-based practices
- *K. Pauker, PhD—social intergroup relations, stereotyping, social perception
- *J. Sasaki, PhD—ethnic, religious, and biological diversity in social cognition and social behavior
- *S. C. Sinnett, PhD—cognitive, mechanisms of attention and perception
- *G. Solman, PhD—cognitive/behavioral neuroscience, eye-movements, search and memory, embodied cognition
- *L. K. Takahashi, PhD—behavioral neuroscience
- *K. M. Vitousek, PhD—clinical, cognitive behavioral approaches, eating disorders, caloric restriction for longevity
- *Y. Xu, PhD—children's social development and culture

Cooperating Graduate Faculty

D. Bhawuk, PhD—culture and community
S. Helm, PhD—community and culture psychology
E. S. Hishinuma, PhD—health, cross-cultural
J. K. Kaholokula, PhD—Native Hawaiian Health
V. Kameoka, PhD—culture and mental health
A. Pack, PhD—human and animal cognition
L. A. Yamauchi, PhD—educational psychology

Affiliate Graduate Faculty

P. W. Dowrick, PhD (Emeritus)—video research
D. Landis, PhD—psychology
P. E. Nachtigall, PhD (Emeritus)—marine mammal behavior

Degrees and Certificate Offered: BA in psychology, BS 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 and scholars. 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 interdisciplinary 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.

UH 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 (APA accredited); community and cultural psychology; developmental psychology; experimental psychopathology; social-personality; and cognition.

Undergraduate Study

Bachelor's Degree

Pre-major BA and BS Degree Requirements

Students must complete one course in methodology (PSY 212) and one course in statistics (PSY 225 or SOCS 225) with a minimum grade of C (not C-) and attend one major meeting. In addition, a minimum overall entry GPA of 2.5 in all PSY UH Mānoa course work (including PSY 100 and any transfer PSY courses) is required to declare psychology as a major.

BA Degree Requirements (minimum 36 credits, 15 earned at UH Mānoa)

In addition to completion of PSY 212 and PSY 225 or SOCS 225, students must complete 30 credit hours, including:

- 15 credits at the upper division level (300 level and above)
- One course from three of these four psychology foundation areas:
 - Experimental (PSY X2X courses), e.g., PSY 220, 322, 324
 - Psychobiology (PSY X3X courses), e.g., PSY 230, 331, 333
 - Developmental (PSY X4X courses), e.g., PSY 240, 341, 342
 - Social or Personality (PSY X5X or PSY X6X courses), e.g., PSY 250, 260, 352
- 3 credit hours in the advanced topic series (PSY 4X9, many 4X9 courses are designated as Writing Intensive), excluding PSY 499)

A minimum exit GPA of 2.0 in psychology must be maintained for graduation. PSY 100 is a prerequisite to all other courses except PSY 170 and may be counted toward the major and the diversification social sciences (DS) core requirement. No more than a combined total of 15 credits of practicum (PSY 407), teaching (PSY 408), and directed research (PSY 499) may

be counted for the major; no more than 9 credit hours in PSY 499 may be counted. Only 3 credit hours in PSY 499 can be used to fulfill the requirement of 15 credit hours at the upper division level. Nevertheless, students intending to do graduate work are encouraged to enroll in PSY 499 and in PSY 408 or 478.

BS Degree Requirements (minimum 42 credits, 21 earned at UH Mānoa)

In addition to completion of PSY 212 and PSY 225 or SOCS 225, students must complete one year of Biology* and 18 credits at the 300 and above level, including:

- one additional PSY 4X9 advanced focus (W, O, etc.) seminar (3 credits)
- two semesters of directed research PSY 499 (6 credits)
- one 3-credit course in Statistics, e.g., PSY 419, 610, or 611 is highly recommended in their senior year
- BIOL 171/171L (4 credits)
- and either BIOL 172/172L (4 credits) or PSY 331 or 336 (3 credits)

A minimum exit GPA of 2.5 in psychology must be maintained for graduation.

New majors should seek assistance from the Undergraduate Advising Office in Sakamaki D409 (psychadv@hawaii.edu) or consult with Scott C. Sinnett, Chair of Undergraduate Studies (ssinnett@hawaii.edu), as soon as possible for advising. Additional information can be found at www.psychology.hawaii.edu.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

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 7 concentrations in which students can receive specialized training: behavioral neuroscience; clinical studies; community and cultural psychology; developmental psychology; experimental psychopathology; social-psychology; 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, 2530 Dole Street, Honolulu, HI 96822; (b) by faxing your request to (808) 956-4700; (c) by sending an email communication to the Chair of Graduate Studies (gradpsy@hawaii.edu); or (d) by accessing the department's website at www.psychology.hawaii.edu.

Applications are considered only for the fall semester. Applicants should normally 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, 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 GRE scores (past applicants admitted as graduate students in the department tend to score at or above the 600 level (old format GRE) or the 310 level (new format GRE) on the various sub-domains of the GRE), and preferably one to two years of research experience.

One can apply online at apply.hawaii.edu/ or obtain materials relevant to the application process at www.manoa.hawaii.edu/graduate/. Completed applications must be received by Graduate Division no later than **December 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 30 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 department webpage. 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.

Doctoral Degree

Students must complete their master's degree (from UH Mānoa or another accredited institution of higher learning) prior to entering the doctoral program in psychology at UH Mānoa. Specific course work and other relevant departmental and concentration specific classes are required for the doctoral degree. Students must pass comprehensive examinations before proceeding to the dissertation.

Certificate Program in Clinical Psychology (Respecialization)

The Clinical Studies Respecialization Program provides clinical training for individuals holding a PhD in a basic area of psychology from a regionally accredited university (or foreign equivalent). Individuals who are already licensed in psychology or who hold an applied degree (e.g., EdD, PsyD) are not appropriate for this program. Upon satisfactory completion of core clinical courses, practica, and internship, the Respecialization student receives a certificate from Graduate Division and is competitive for clinical research and teaching positions as well as eligible to sit for licensure in most states. The Clinical Studies Program is APA-approved and follows a scientist-practitioner, broadly-behavioral, dual specialty approach to training in which it is encouraged of all graduate and respecialization students to integrate the literatures of a basic area of psychology with related clinical phenomena.

For further details of this certificate, please see www.psychology.hawaii.edu/concentrations/clinical-psychology.html.

Public Administration

College of Social Sciences
Saunders Hall 631
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-8260
Fax: (808) 956-9571
Email: pubadmin@hawaii.edu
Web: www.puba.hawaii.edu

Faculty

- *M. Johansen, PhD (Director)—public management
- *J. Ady, PhD—communication studies
- *S. Chandler, PhD—social work
- *C. Grandy, PhD—economics
- *D. Lee, PhD—public affairs
- *D. Nixon, PhD—political science
- *H. Yu, PhD—public administration and public policy

Degree and Certificate Offered: MPA, Graduate Certificate in Public Administration

The Academic Program

The Public Administration Program (PUBA) offers students a comprehensive foundation in public administration that is designed to build leadership in public service in Hawai'i, the mainland U.S., and the Asia-Pacific region. Located in the College of Social Sciences, it offers a 39-credit master's degree and a 15-credit certificate. The program's format emphasizes interdisciplinary learning, collaborative teaching, and a learning community experience that is designed to help students gain the knowledge, skills, and values that are important for public service leadership. The classes create 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 in the public and nonprofit sectors. The program emphasizes teamwork and collaboration so students can practice effectively in a multicultural and global society. PUBA also offers a certificate in public administration with either a track in public leadership or nonprofit management. It offers a part-time program, full time, and 18-month program to suit student needs.

Financial support for the degree and the certificate is available through the Herman S. Doi Fellowship and the D. W. Wood Pacific Island Health Administration Scholarship. For further information, contact the program office in Saunders Hall 631 or call (808) 956-8260. Applicants may also apply to the East-West Center.

Graduate Study

Master's Degree

The master's degree consists of 8 required courses (24 credits hours); two electives (6 credits), a 120 hour practicum experience, and a capstone. The capstone must be taken as the final requirement in the program and serves as the culminating experience of the Masters degree.

Admissions are in the fall only.

The required courses are interdisciplinary and integrate a series of perspectives and skills important to effective work in public service. These courses include content in effective communication in the public sector; public ethics and leadership; budgeting; policy processes, analysis and implementation; organizational change, public personnel management, research design and methods; and the role of culture in public service.

The electives allow each student to design a program of study built around a theme of their personal and professional interests. Elective courses are selected by the student in consultation with the student's faculty advisor.

The Plan A thesis option requires the student to take at least one additional graduate level research methods or statistics course.

The practicum is designed to place individuals in a setting where they compare organizational structures and processes; study leadership styles, sources of power, and communication strategies; differentiate between types of clients and sources of funding; discuss measures of organizational success; and develop specific skills. The location of the practicum varies according to the student's past work experience and learning goals. In some cases a practicum placement in one organization may be modified to become work on a project in another part of the

organization. Students are encouraged to undertake a practicum that will stretch and extend their knowledge and skills. The practicum must be completed before or concurrently with the final capstone seminar.

The capstone requirement consists of a 3-credit capstone planning class, taken during the semester preceding that in which graduation will occur. All students must also enroll in a 3-credit capstone seminar during their final semester. The capstone is a group analysis of a public issue of importance in Hawai'i, the mainland, or the Asia-Pacific region. This is usually done in the fall and spring semesters of the student's last year in the program but may also be completed as a summer-fall option for students in the accelerated 18-month program.

Four required courses, Introduction to Public Administration, Effective Communication in Public Administration, Research Methods, and Organizations: Theory and Change must be taken before enrolling in Capstone Planning. Three required courses, Introduction to Public Administration, Organizations: Theory and Change, and Leadership and Ethics must be taken before enrolling in the Practicum.

The program welcomes a diversity of professional and educational backgrounds and sees these as contributing to the learning environment. Classes are taught in the evenings to accommodate the schedules of students working full-time.

Requirements

MPA candidates must complete 24 credit hours of core requirements, 6 credit hours of electives, 3 credit hours of practicum, and 6 credit hours of capstone. The student must earn at least a grade of B in the practicum and in both capstone courses to graduate and must maintain a B average in all other classes.

Other

Up to nine graduate credits may be counted toward the degree with approval. Call the PUBA program office for additional information.

The Certificate in Public Administration

The program offers two certificate tracks: (1) public service leadership, and (2) nonprofit management. Each is 15 credits.

Courses in both tracks are compatible with work schedules. The nonprofit management track may be taken in conjunction with the Master of Public Administration (MPA) degree. The classes in both of these tracks may be counted toward the MPA degree, with some restrictions. Students wishing to move from one of the certificates into the MPA must apply for and be formally accepted into the master's program.

The Certificate in Public Administration

The track in public service leadership consists of 15 credits. Four required courses, (Introduction to Public Administration, Organizations, Effective Communication in Public Administration and Leadership and Ethics) are also required courses for the MPA. Certificate students may then choose an elective course selected from any course taught in PUBA.

The Nonprofit Management Track

The track in nonprofit management is made up of two 3-credit required courses (Nonprofit Management, Nonprofit Practices and Tools) that provide an overview of issues in the field; 6 credits of electives; and a 3-credit practicum. Students take two electives: at least one elective must be a PUBA course. The student in consultation with his or her advisor selects these courses.

Public Policy Center

College of Social Sciences
Saunders Hall 723
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-4237
Email: cdmoore@hawaii.edu
Web: www.publicpolicycenter.hawaii.edu

Faculty

- *C. Moore, PhD (Director)—public policy, American politics, politics of bureaucracy, institutional change
- *S. Chandler, PhD (Associate Director)—policy analysis, child welfare, collaborative management, public administration
- S. Moriwiki, PhD—energy policy, sustainability, community development

Cooperating Graduate Faculty

The Public Policy Center has 53 affiliate faculty representing all of the departments within the College of Social Sciences. See our website for their names and contact information, as well as their fields of interest, research, and areas of teaching.

The Academic Program

The mission of the Public Policy Center is to enhance the quality of community life throughout Hawai'i, the U.S., and the Asia-Pacific region. This mission is achieved through an interdisciplinary approach to teaching, research, service, and application. The center provides opportunities for students to expand their knowledge and gain experience in public policy. Its premise is that public policy analyses are critical to sound public policy decision-making and that teaching and scholarly work are intertwined and should be continually linked to the community beneficiaries. Public policy is a discipline that seeks to solve public problems through the design, analysis, and advocacy of well thought out, evidence-based research. In all levels of government and globally, public needs and limited resources require policy choices that are economically efficient, socially and technically effective, politically and administratively responsive. Such choices exist across a broad range of critical issues, including health, education, the environment, energy, economic development, social welfare policy, and community resilience. Students with experience and knowledge about public policy offer their community essential and meaningful skills and tools needed to analyze, design, and evaluate public policy choices. Students trained with these skills are attractive to employers in the public, nonprofit, and business sectors.

Courses in Public Policy

Students can select courses from a wide range of fields in addition to those offered by the Public Policy Center, including: political science, economics, public administration, urban and regional planning, peace studies and conflict resolution.

Related Courses

- PPC 301 Governing, Politics, and Public Policy (3)
- PPC 330 Survey of Public Policy and Analysis (3)*
- PPC 695 Topics in Public Policy (3)*
 - (1) Introduction to Public Policy and Analysis*
- POLS 670 Introduction to Public Policy (3)
- PLAN 603 Urban Economics (3)

*Taught online

For more information

Please visit our website at www.publicpolicycenter.hawaii.edu or call Colin Moore at (808) 956-4237 or email him at cdmoore@hawaii.edu.

Sociology

College of Social Sciences
Saunders Hall 247
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-7693
Fax: (808) 956-3707
Email: socdept@hawaii.edu
Web: www.sociology.hawaii.edu

Faculty

- *P. G. Steinhoff, PhD (Chair)—collective behavior/social movements, comparative sociology (Japan), political sociology
- *W. Zhang, PhD (Graduate Chair)—medical sociology, social epidemiology, research methods
- *S. K. Chai, PhD—social theory, economic development, comparative sociology (Asia)
- *J. Darrah-Okike, PhD—urban sociology, race/ethnicity, housing policy, sociological theory
- *K. Irwin, PhD—criminology, deviance and social control, qualitative methodology
- *D. T. Johnson, PhD—criminology, comparative sociology (Japan), law and society
- B. Joyce, PhD (undergraduate advisor)—social psychology, self-concept and self-actualization, socialization over the life course, gender socialization
- *A. H. Kimura, PhD—science and technology studies, agrifood studies, environmental sociology, gender, social movements, comparative sociology (Asia)
- *Y. J. Lee, PhD—quantitative methodology, demography, gender stratification, aging and health
- *L. Lin, PhD—economic and organizational sociology, professions, education, medical sociology, comparative sociology (China)
- *K. Mossakowski, PhD—medical sociology, stress and mental health, life course and aging, social psychology, social epidemiology, race/ethnicity
- *N. Sharma, PhD—race/ethnic/minority relations, theory/migration and immigration
- *M. Steger, PhD—globalization, social theory, social change, political sociology, economy and society, sociology of religion

Cooperating Graduate Faculty

- M. Brown—UH Hilo criminology, gender and women's issues
- M. Chesney-Lind, PhD—criminology, gender and women's issues
- M. Delucchi, PhD—sociology of education
- J. Yahirun, PhD—intergenerational relationships, aging

Affiliate Graduate Faculty

- D. Chandler, PhD—sociology; conflict resolution
- J. Chinen, PhD—women and work, race, class and gender, race and ethnic relations
- A. Pobutsky, PhD—medical sociology, epidemiology
- E. Wegner, PhD—medical sociology, aging

Degrees Offered: BA (including minor) 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, medical sociology and aging, criminology, 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; the study of crime, law, and deviance; 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:

- three 400-level courses
- 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.

For further information on the Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

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
- SOC 100 or a 200-level course is a prerequisite for all 300-level courses; SOC 300 is a prerequisite for all 400-level courses
- To fulfill major or minor requirements, courses must be passed with a grade of C (not 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. The following are brief descriptions and do not list all procedures and requirements; the department provides a complete

statement of its graduate degree program on its website at www.sociology.hawaii.edu. All requirements specified by the Graduate Division and general university regulations also apply.

Applicants for graduate study in the department must specify whether they wish to enter the MA or PhD program. University transcripts, a Statement of Objectives, letters of recommendation, and GRE General Test scores are required of all applicants. The TOEFL or IELTS test is required for applicants who are not native speakers of English. A sample of written work is also required of applicants to the PhD program and recommended for applicants to the MA program. An undergraduate major in sociology is not required for admission, but makeup course work may be required in some cases. Applications will be accepted for either fall term or spring term admission. The application deadlines for admission are **January 15** (international students) and **February 1** (domestic students) for the fall semester and **August 1** (international) and **September 1** (domestic) for the spring semester. Please see the department website for more information and links to appropriate graduate education pages.

Master's Degree

The department offers an MA Plan A (thesis) program.

Plan A (Thesis) Requirements

The MA curriculum in sociology (Plan A) should prepare students for positions involving expertise in social research. In addition, preparatory training is provided to those who are aspiring to a doctoral degree but feel they need more preparation. However, an MA candidate cannot assume that satisfactory completion of this curriculum will 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 and methods and statistics, as well as their application to the study of various substantive aspects of society.

A minimum of 30 credit hours of sociology-related course work is required for this program, as well as the successful completion of an MA thesis. All candidates are required to take at least one course each in the core areas of sociological theory, research methodology, and social statistics at the 400 level or higher, as well as five substantive courses, of which four must be at the 600 level or higher. In addition, students must take 6 credits of Thesis Research (SOC 700). The thesis is a substantial research project that shows a student's ability to produce original substantive and intellectual work. All courses credited toward the 30 credit hour minimum required for the MA degree must be passed with a grade of B or better.

The first semester's work is planned in consultation with the graduate chair and a temporary advisor appointed by the graduate chair. During the first semester, under the guidance of the temporary advisor, the student prepares a statement outlining a study plan that reflects his or her special interests and meets the credit requirements of the program. By the end of the second semester, the student should form a thesis committee of three or more faculty members, generally drawn primarily from the department.

The thesis committee assists the student in deciding upon a thesis topic. The student then writes a thesis proposal, which must be approved by the committee. Under the supervision of the committee, the student carries out the proposed research and writes the MA thesis. When the committee feels the student is ready, the student submits the final draft of the thesis, and

the committee conducts a final oral examination. Both the oral examination and the written paper must meet the committee's approval for an MA to be awarded.

Plan B (Non-thesis) Requirements

A Plan B (non-thesis) MA is offered only in special circumstances. Students are only admitted to the Plan A MA program.

Doctoral Degree

This is an academically-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 PhD program is designed to give the student systematic exposure to sociological theories, methods, and statistics, as well as their application to a number of substantive areas of sociology. It also provides the opportunity to develop special, high-level competence within an area of research, and the training to publish and present this research in professional settings.

The first phase of the PhD program provides basic training in theory, methods, and research. The requirement in this phase is to complete five required courses in theory, methods, and statistics, as well as 15 additional course credits consisting of substantive courses and up to three credits of SOC 699. All courses that count towards PhD requirements must be at the 600 level or higher and passed with a grade of B or above. The minimum total number of course credits necessary for graduation is 33, but most PhD students take more than the minimum in order to gain adequate knowledge. Completing non-course requirements (QR, comprehensive exam, dissertation) generally takes more time than course requirements. Please consult the department website for more details regarding each of the stages in the PhD program.

By the third semester, the student should form a guidance committee consisting of at least three faculty members, typically drawn primarily from within the department. By approximately the fourth semester, the student submits one of their best course papers for their qualifying review. The paper is judged by a specially constituted qualifying review panel. The qualifying review must be passed before proceeding onto Phase II of the PhD program.

The second phase provides advanced training in areas of concentration and dissertation research. The requirement in this phase is to take three additional credits of substantive courses at the 600 level or above. In addition, the student is required to take a written and oral comprehensive examination in two areas of concentration, write a dissertation proposal, perform the approved dissertation research, and finish writing and orally defending the dissertation.

Early in the second phase, the student must organize a dissertation committee consisting of at least five members of the graduate faculty, including the official university representative from the Graduate Division's list of eligible university representatives for sociology, in accordance with the Graduate Division policies.

Preferably by the fifth semester, all PhD students must take a comprehensive examination from the dissertation committee. The written examination covers two broadly defined research areas, as determined by the student and the dissertation committee. The student develops a bibliography for each area, and the dissertation committee composes questions from each. After the student has taken the written examination, the dissertation committee evaluates the results and holds a closed oral exami-

nation to determine whether or not the student is prepared to undertake dissertation research.

Following successful completion of the comprehensive examination, the student prepares a dissertation proposal. This proposal describes the theoretical basis and the research strategy to be employed in the study of the dissertation problem. When it has been successfully defended before the doctoral committee, the student proceeds to the research and writing phase of the dissertation. The dissertation should represent a major original scholarly contribution to the field of sociology suitable for publication in the form of a monograph. A PhD is given only after completion of the dissertation text and an oral defense.

Urban and Regional Planning

College of Social Sciences
Saunders Hall 107
2424 Maile Way
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Tel: (808) 956-7381
Fax: (808) 956-6870
Email: idurp@hawaii.edu
Web: manoa.hawaii.edu/durp

Faculty

- *M. Coffman, PhD (Chair)—greenhouse gas reduction strategies, renewable energy planning and policy, low-carbon transportation
- *A. Das, PhD—community participation and empowerment, slum upgrading, decentralization and local governance, role of civil society in development
- *P. Das, PhD—urban development, urban environmental services and governance in South Asia, design and planning of the built environment
- *P. Flachsbarth, PhD—planning methods and models, environmental planning, energy, land use planning, and urban transportation planning
- *D. Foley, PhD—strategies of citizen participation, collaboration, nonprofit planning and management, community building, and community-based planning
- *K. E. Kim, PhD—planning theory, planning methods, infrastructure planning, disaster management and humanitarian assistance, and alternative tourism planning
- *R. Kwok, PhD—urbanization in China, East Asian development, spatial planning and urban design, development and regional economics
- *L. Minerbi, Dott Arch, MUP—comparative urbanism, settlement planning, environmental planning, urban design, community development, planning with indigenous people, and Pacific Islands planning
- *S. Shen, PhD—geographical information systems; climate change adaptation and transportation planning
- *D. Spirandelli, PhD—patterns of urban development, interface between terrestrial and marine ecosystems; community planning for integrated water management and coastal ecosystem services

Cooperating Graduate Faculty

- T. Bhattacharya, PhD—transportation systems, relationship between transportation, land use, social justice, sustainable infrastructure
- D. L. Callies, JD—land use management and control, intergovernmental relations
- W. Chapman, PhD—historic preservation
- L. Cox, PhD—agricultural and resource economics

- J. Darrah-Okike, PhD—urban and political sociology, race and ethnicity, international migration
- D. Eversole, BS—coastal hazard mitigation and climate adaptation
- K. Freitas, PhD—indigenous planning
- M. Gonser, MRP, MLA—community planning, design, resource management, climate change resiliency, natural hazards mitigation
- M. Hamnett, PhD—ocean and coastal resource management, disaster preparedness and mitigation
- B. Houghton, PhD—volcanology, hazards, and society
- A. Kaufman, PhD—fundamentals of landscape design and planting design
- D. Lerner, PhD—environmental physiology of fishes, environmental contaminants' affect on fish growth, physiology, and behavior
- D. McGregor, PhD—Hawaiian history, social movements in Hawai'i and the Pacific
- M. McDonald, PhD—agricultural change, social theory, political geography, Japan
- S. Nakaoka, PhD—race and community development, affordable housing, social work practice
- L. H. Nitz, PhD—public policy and political economics
- D. Nixon, PhD—bureaucratic politics, statistical methodology, public policy, environment and development
- K. Suryanata, PhD—political ecology, agriculture, rural development in Asia
- B. Szuster, PhD—coastal land conservation, impact of human development activities
- R. Uyeno, PhD—tourism, disaster and crisis planning
- S. Yamada, PhD—disaster management and humanitarian assistance

Affiliate Graduate Faculty

- P. Adler, PhD—conflict resolution, mediation, facilitation
- J. Campbell, PhD—public health, epidemiology
- T. Dinell, MPA (Emeritus)—planning theory, citizen participation, social policy, professional practice, and conflict resolution
- C. Douglass, PhD—urbanization in Asia, rural-urban linkages, spatial planning theory, and community-level planning
- S. Gon, PhD—resource management practice
- G. Lowry, PhD (Emeritus)—alternative dispute resolution, coastal management, planning theory, and community-level planning
- J. Spencer, PhD—political economy and regional development, urban labor markets, environmental management, community development, and urban services
- R. Tam, PhD—transportation

Degree and Certificates Offered: MURP, PhD, Certificate in Planning Studies, Professional Certificate in Urban and Regional Planning and Graduate Certificate in Disaster Management and Humanitarian Assistance

The Academic Program

Urban and regional planning is a dynamic field that requires innovative solutions from committed and thoughtful individuals. Historically, it emerged out of the convergence of two concerns: (1) the provision of urban infrastructure; and (2) the initiation of social reform. Today the underlying focus on community well-being continues, and urban and regional planning has broadened to include the development, implementation, and evaluation of a wide range of policies. Specifically, urban and regional planners are concerned with:

1. The use of land in the city, suburbs, and rural areas; particularly with the transition from one use to another
2. potentially adverse impacts of human activities on a limited physical environment and the possible mitigation of those impacts

3. the design of the city and the surrounding region to facilitate the engagement in the activities that people need and desire
4. 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, benefits and costs among people
7. the anticipation of change and its impact on how people do and can live
8. the participation of citizens in planning processes which affect their future
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 (DURP):

1. 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
2. emphasizes extensive community involvement
3. engages in research that focuses on the application of planning methodologies and implementation of planning endeavors
4. recognizes the close relationship between urban and regional planning and politics
5. acknowledges the difficulty of resolving the value differences that lie at the heart of most planning problems
6. appreciates both the importance and the elusiveness of critical concepts, such as "the public interest" to urban and regional planning.

UH Mānoa Master of Urban and Regional Planning (MURP) graduates, of whom there are about 534, hold planning and related positions in a variety of public agencies, academic institutions, nonprofit organizations, and private firms in Hawai'i, on the continental U.S., 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 UH Mānoa. 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 develop-

ment, 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.

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 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.

Student Learning Outcomes

Upon completion of the PhD/MURP degree, students should be able to:

1. Explain major planning paradigms and their applications
2. Articulate processes leading to urbanization and rationales for planned interventions
3. Apply planning methods to organize, analyze, interpret and present information
4. Critically and creatively develop planning inquiries or processes to foster solutions-orientated decision-making
5. Effectively collaborate as a planning team to work with a and/or stakeholder to assess and address a relevant planning problem to create a plan or professional report
6. Effectively present oral and written work (as a plan, professional report, or research paper) in a coherent, persuasive and professional manner
7. Reflect upon the ethical implications of the choices planners make as professionals

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

On the continental U.S., graduates are city and county planners, program analysts in federal agencies (e.g., Office of Ocean and Coastal 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, 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 but not limited to Hawai'i, Asia, and the Pacific Basin. All students complete the core sequence: public policy and planning theory, planning methods, urban economics, environmental planning and policy, land use policies and programs, site planning, and a six-credit hour practicum. The remainder of the academic program, including additional methods courses, is individually designed with concentration in a specialized area of the student's own choosing (with the consent of his or her advisor). Grades of B or better are required in PLAN 600, 601, 603, 620, 640, 678, and an overall average of B or better must be maintained 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 (capstone paper) programs are available. All students are required to pass a final, which includes a successful defense of the thesis or capstone paper on the selected area of concentration, and meet the program standards for graduation.

Doctoral Degree

The doctoral program provides training in advanced research in urban and regional planning. Graduates are expected to pursue academic appointments at institutions of higher education and to achieve higher levels of professional practice in the public and private sectors.

Admission Requirements

Admission to the PhD program requires a master's degree in planning. In exceptional circumstances candidates with either an advanced research background or exceptional professional experience, but who do not have an MA degree may be admitted. Admission may be granted with the understanding that some background courses or examinations may be required. Consideration for admission requires a GPA of at least a 3.5 in previous graduate work. Applicants are also required to submit Graduate Record Examination (GRE) scores for verbal, math, and analytic sections. Non-native speakers of English are also required to submit the TOEFL; a minimum score of 600 is required. Applicants are also expected to submit evidence of advanced work such as a sole-authored research report or plan.

Degree Requirements

Each PhD degree student is required to complete at least fifteen credits in advanced courses (in addition to any remedial courses designated at the time of admission):

- Advanced Methods (3 credits)
- Advanced Seminar in Planning (3 credits)

In addition to these two courses, PhD candidates are required to take six credits in an allied field (to be selected in consultation with the student's advisor). Students are also required to take at least one three-credit course in research design or proposal writing.

Prior to starting the dissertation, PhD candidates will sit for a comprehensive examination in planning theory and planning methods. Students will be required to form a PhD committee

drawn primarily, although not exclusively from the department, to guide the student through the qualifying examination and the dissertation research. Under the direction of its chair, the committee will devise a qualifying examination covering both core topics in urban and regional planning and the student's substantive area of research. Upon successful completion of the qualifying examination, students will be required to present their dissertation proposal to a department colloquium. When the student has successfully completed the examinations and presented the dissertation proposal the student will advance to candidacy. Each student is required to conduct original research and write and present a defense of a doctoral dissertation based on the dissertation proposal. The dissertation research will be guided by the student's committee. Upon completion, the student will defend the dissertation before the committee. If successful, the candidate will be recommended for award of the PhD in Urban and Regional Planning by UH Mānoa.

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, 601, and 603, or 605. Each candidate selects a field of interest in which he or she takes two courses including PLAN 610, 620, 630, or 640. The specific courses are selected in consultation with the candidate's faculty advisor.

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.

Graduate Certificate in Disaster Management and Humanitarian Assistance (DMHA)

UH Mānoa provides a logical location for an Asia Pacific disaster risk reduction research and institutional capacity-building program. The program responds to the compelling need to improve hazard and disaster mitigation and response in the face of increasingly frequent and severe disaster events. The Asia Pacific region suffers the greatest impact of disaster events worldwide, and Hawai'i shares many of these same vulnerabilities. By interacting with hazard and disaster researchers at UH Mānoa and Hawai'i's existing dynamic community of disaster management organizations, students learn how to help build disaster resilient communities.

The Graduate Certificate Program in DMHA is housed in the Department of Urban and Regional Planning and is open to all graduate students. Our interdisciplinary students come from the physical and natural sciences, engineering, geography, public administration, social work, political science, and other disciplines. Some are pursuing professional degrees in law, medicine, architecture, or public health. Our students tend to be highly motivated to apply their respective disciplinary backgrounds to the problems of reducing the impacts of disaster on people and communities.

Graduate students are required to take at least three of the DMHA core courses for a base of nine units. Additional six units are selected with advisement from courses related to hazards and disaster management and response. A one unit capstone completes the requirement. Many departments offer courses which can complement the core course sequence in a coherent, rigorous, and pedagogically valid way. Contact the program director or program coordinator for more information.

Women's Studies

College of Social Sciences
722 Saunders Hall
2424 Maile Way
Honolulu, HI 96822
Tel: (808) 956-7464
Fax: (808) 956-9616
Web: www.womenstudies.hawaii.edu

Faculty

- *M. Chesney-Lind, PhD (Chair)—criminology, sociology of gender
- P-B. K. Bovard, MA, AdWS—undergraduate advisor
- *M. Das Gupta, PhD—feminist theory and methods, immigration, race relations in the U.S.
- *K. Ferguson, PhD—feminist theory and methods, political theory
- *S. Hippensteele, PhD, JD—psychology, law, civil rights, dispute resolution
- *M. Koikari, PhD—sociology, Asia-Pacific studies
- *A. Saraswati, PhD—feminist media and new media studies, race, globalization, and cultural studies of emotion

Affiliate Faculty

- H. Aikau—political science
- B. Andaya—Asian Studies
- B. Aquino—political science
- C. Bacchilega—English
- C. Browne—social work
- J. Brunson—anthropology
- E. Colwill—American studies
- N. Cooper—anthropology
- V. Dalmiya—philosophy
- L. Despain—English
- P. Flowers—political science
- C. Franklin—English
- M. Ghosh—librarian
- J. Goldberg-Hiller—political science
- N. Goodyear-Ka'opua—political science
- M. Hara—English
- K. Heyer—political science
- R. Hsu—English
- K. Irwin—sociology
- K. Kane—Center for Teaching Excellence
- A. Kimura—sociology
- M. Kita—sociology
- V. Lanzona—history
- N. Lewis—East-West Center and geography
- L. Lyons—English
- N. Mokuau—social work
- C. Petersen—Spark M. Matsunaga Institute for Peace and William S. Richardson School of Law
- K. Phillips—English
- S. Rai—Study Abroad Program
- A. Reilly—fashion, design and merchandising
- K. Reynolds—Japanese
- M. Romaniello—history
- L. Santiago—Indo-Pacific languages and literatures
- M. Sharma—Asian studies
- N. Silva—political science
- C. Sinavaiana—English
- M. Stark—anthropology
- P. Steinhoff—sociology
- T. K. Tengan—ethnic studies, anthropology
- H. Trask—Hawaiian studies
- V. Wayne—English
- C. Yano—anthropology
- M. Yoshihara—American studies
- A. Yap—Study Abroad Program
- M. Yue—Chinese literature

Degree and Certificates Offered: Certificate in women's studies, BA in women's studies, Graduate Certificate in Advanced Women's Studies

The Academic Program

The Department of Women's Studies offers an interdisciplinary transnational feminist approach to the study of women and gender issues. The purpose of the department is to provide a rigorous and integrated academic experience for students interested in feminist research and teaching, giving them a coherent program of study in contemporary scholarship with special emphasis on Asia-Pacific and Hawai'i. With a faculty trained in a variety of fields, the program investigates gender as it intersects with race, class, sexuality, and other vectors of power in shaping

the study of history, psychology, anthropology, economics, sociology, political science, philosophy, literature, language, art, drama, education, law, medicine, and biology.

Women and men from all colleges at UH Mānoa take women's studies courses because of their intellectual rigor, political insight, and interdisciplinary ties to other fields of study. Many courses are cross-listed with other departments. Women's studies is a uniquely powerful avenue of self-understanding as well as a means of connecting research on women and gender to other academic fields of inquiry. Those who understand the workings of gender in personal lives and social orders can better pursue a variety of careers and life goals. Women's studies offers a unique opportunity to study racial, economic, ethnic, sexual, regional, and global matters of interest among women in Hawai'i and around the world, past, present, and future.

Undergraduate Study

Bachelor's Degree

Women's studies offers two tracks for majors: either a student-designed special concentration within the field of women's studies, or a general focus on the broad field of women's studies. Students work in close consultation with faculty to design and develop the academic experience that best fits their interests, goals, and needs. The aim of both tracks is to promote a coherent program of study in contemporary interdisciplinary scholarship in feminist and gender studies. A key purpose of the major is to provide an integrated academic experience for students interested in transnational feminist scholarship and gender issues, while offering flexibility and freedom in planning the degree.

Student Learning Outcomes

1. Demonstrated ability to engage in critical and interdisciplinary thinking, analysis, and problem solving through effective written and oral communication.
2. Evidence of ability to integrate key concepts in Women's Studies, including the social construction of gender; intersectionalities among gender, sexuality, race, class, and other vectors of power and identity; social stratification; and how these issues manifest in a Pacific-Asia context in written and oral work.
3. Demonstrated ability to connect the classroom with "real world" feminist issues through active engagement in citizenship and civic participation.

Requirements

Although students are strongly encouraged to seek department academic advising promptly when considering a major in women's studies, a summary of undergraduate program information is also available at www.womenstudies.hawaii.edu. General and special women's studies degree requirements are as follows:

General Women's Studies Degree Focus

Students must complete thirty (30) credit hours of total course work, with a grade of C (not C-) or better, including:

1. Feminist Theory (WS 439/POLS 339);
2. Feminist Methods and Research (WS 440);
3. At least 3 courses from among the WS courses focusing on gender, race and ethnicity in transnational perspective;
4. A minimum of 9 total credit hours from 300 level WS courses (any 300 level course taken in #3 counts toward this total);

5. A minimum of 9 credit hours from 400 level WS courses (WS 439, 440, and any 400 level courses from #3 count toward this total);
6. Additional course work as necessary to complete 30 total hours of course work.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Special Women's Studies Degree Focus

Students must complete 30 credit hours of total course work, including:

1. Feminist Theory (WS 439/POLS 339);
2. Feminist Methods and Research (WS 440);
3. At least 3 courses from among the WS courses focusing on gender, race and ethnicity in transnational perspective;
4. A minimum of 6 total credit hours from 300 level WS courses (any 300 level course taken in #3 counts toward this total);
5. Up to 15 outside credits at 300 and 400 level, subject to approval by women's studies' advisor;
6. Additional course work as necessary to complete 30 total hours of course work.

For information on a Bachelor Degree Program Sheet, go to www.manoa.hawaii.edu/ovcaa/programsheets/.

Advising

Students who plan to pursue a women's studies major should meet with the women's studies undergraduate program advisor (currently Penny-Bee Kapilialoha Bovard) for help in choosing classes, defining their area of interest, creating and developing proposals, and finding the faculty advisor most suited to their areas of interest.

The Undergraduate Certificate

The Certificate in Women's Studies is designed to encourage all undergraduates to acquire a more thorough background in contemporary interdisciplinary scholarship in feminist and gender studies, and to incorporate feminist perspectives and issues into their major fields of specialization. Through this interdisciplinary option, students from various majors can study the specific achievements of women, examine the many factors that determine the status of women across cultures and through time, and analyze theories and assumptions about women that particularly relate to their majors.

The certificate's practical value includes the enhancement of knowledge that develops students' abilities to think critically and constructively about their world and their lives. Further, it offers a credential that is applicable to a wide range of careers including medicine, law, business, education, counseling, and social work. The certificate can also provide the groundwork for advanced study of gender and feminism and the graduate level application of feminist theories.

All registered students in good academic standing who are working towards a baccalaureate degree other than Women's Studies at UH Mānoa may apply for a Women's Studies Certificate.

Requirements

- Students must complete 15 credits in Women's Studies with a grade of C (not C-) or better.

- The 15 credits must include the following two requirements: a course in Feminist Theory (WS 439/POLS 339), and at least one course in gender, race, and ethnicity in transnational perspectives (list of courses available from the program).
- At least 9 credits must be at the 300 level or higher.

For administrative purposes, any cross-listed course will be counted as a women's studies course regardless of the departmental designation under which students register for the course.

Graduate Study

Women's studies offers a Graduate Certificate in Advanced Women's Studies (AdWS Certificate). This certificate program provides a rigorous, integrated, and relevant educational experience for students whose education and career objectives will be enhanced through creative and scholarly transnational feminist analysis of women's lives and visions. The program guides students to examine the factors that affect the status of women across cultures and through time, analyze theories and assumptions about women in various disciplines, contribute to the reformulation of social knowledge, explore institutionalizing social change that highlights and supports the achievements of women locally and internationally, and understand the usefulness of gender as an analytical tool in many fields.

Graduate studies leading to the AdWS Certificate are focused in four broad areas under the general rubric of gender studies.

- Feminist methods of inquiry and theoretical analyses. Students will explore sex/gender as an analytical category, asking what this category means, what purposes are served by the prevailing binary notions of gender, and how gender is constituted in past, current, and future biological, sociopolitical, cultural, and economic contexts.
- Feminist knowledge. Students will learn about the pervasive impact of gender relations on thoughts, actions, and prevailing constructions of reality. They also will become acquainted with an array of feminist theories and arguments about issues including coalition practices, nationalism and imperialism, and social policy.
- Sex/gender and sociopolitical categories of power and privilege. Students will examine the interaction of sex/gender with race/ethnicity, class, sexuality, and other vectors of power and privilege as relevant to nearly all domains of human experience. They will have opportunities to explore the dynamics of these interactions with emphasis on the evolving multicultural milieu of Hawai'i and the Asia/Pacific region.

Recipients of the AdWS Certificate must be classified gradu-

ate students, and normally will be pursuing graduate degrees in other academic departments. The AdWS Certificate will help students learn to apply feminist methodologies, analysis and problem-solving to their other academic fields, and to integrate the rigors of the scholarship on gender into their chosen professions as a means of enhancing their professional lives and opportunities for advancement.

The department website lists research interests and publications of the members of the women's studies graduate faculty, and describes admissions and program requirements (see www.womenstudies.hawaii.edu). The following sections summarize the admissions and program requirements, but the program website should be consulted for complete details.

Admissions

Students are admitted to the AdWS Certificate program in the fall and spring semesters. Applicants to the AdWS Certificate program must be classified graduate students at UH Mānoa. Candidates are required to submit their current and complete transcripts, three letters of recommendation, and the names of and full contact information for three additional references. Applicants also must submit a 4-5 page essay outlining their personal and professional goals as they relate to the AdWS Certificate program, and identifying potential research and/or community involvement projects they may wish to pursue as part of their AdWS Certificate work.

Requirements

The AdWS Certificate program consists of a minimum of 18 credits, at least 12 of which must be at the 600 level or higher. Nine of these credits must come from the following four WS courses: WS 610 (1 cr), Faculty Seminar Series; WS 613 (3 cr), Feminist Research and Methods of Inquiry; WS 615 (3 cr), Feminist Theory; WS 650 (2 cr), Research in Feminist Studies; Capstone Experience.

Remaining credits will be drawn from a list of courses approved by the women's studies graduate advisor (currently Dr. Ayu Saraswati). All students will work with a specific advisor to develop an AdWS Certificate curriculum based on their academic majors that best supports their academic and professional goals and objectives. Up to 6 credits towards the certificate may be taken in the student's home department provided that department's curriculum includes courses approved by women's studies.

Each student enrolled in the AdWS Certificate program will design, develop, and complete a research and/or community involvement project to culminate in a publishable-quality work or comparable product, and a professional quality seminar presentation given in the student's final semester of the program.